Maternal and Child Health Services Title V Block Grant

Kentucky

FY 2019 Application/ FY 2017 Annual Report

Created on 9/26/2018 at 11:31 PM

Table of Contents

I. General Requirements	**4**
I.A. Letter of Transmittal	4
I.B. Face Sheet	5
I.C. Assurances and Certifications	5
I.D. Table of Contents	5
II. Logic Model	**5**
III. Components of the Application/Annual Report	**6**
III.A. Executive Summary	6
III.A.1. Program Overview	6
III.A.2. How Title V Funds Support State MCH Efforts	10
III.A.3. MCH Success Story	10
III.B. Overview of the State	11
III.C. Needs Assessment	19
FY 2019 Application/FY 2017 Annual Report Update	19
FY 2018 Application/FY 2016 Annual Report Update	23
FY 2017 Application/FY 2015 Annual Report Update	27
Five-Year Needs Assessment Summary (as submitted with the FY 2016 Application/FY 2014 Annual Report)	31
III.D. Financial Narrative	45
III.D.1. Expenditures	47
III.D.2. Budget	49
III.E. Five-Year State Action Plan	52
III.E.1. Five-Year State Action Plan Table	52
III.E.2. State Action Plan Narrative Overview	53
III.E.2.a. State Title V Program Purpose and Design	53
III.E.2.b. Supportive Administrative Systems and Processes	55
III.E.2.b.i. MCH Workforce Development	55
III.E.2.b.ii. Family Partnership	57
III.E.2.b.iii. States Systems Development Initiative and Other MCH Data Capacity Efforts	60
III.E.2.b.iv. Health Care Delivery System	61
III.E.2.c State Action Plan Narrative by Domain	63
Women/Maternal Health	63
Perinatal/Infant Health	77
Child Health	98

Adolescent Health 127

Children with Special Health Care Needs 142

Cross-Cutting/Systems Building 166

III.F. Public Input 180

III.G. Technical Assistance 182

IV. Title V-Medicaid IAA/MOU **184**

V. Supporting Documents **185**

VI. Organizational Chart **186**

VII. Appendix **187**

Form 2 MCH Budget/Expenditure Details 188

Form 3a Budget and Expenditure Details by Types of Individuals Served 195

Form 3b Budget and Expenditure Details by Types of Services 197

Form 4 Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated 200

Form 5a Count of Individuals Served by Title V 204

Form 5b Total Percentage of Populations Served by Title V 206

Form 6 Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX 208

Form 7 State MCH Toll-Free Telephone Line and Other Appropriate Methods Data 210

Form 8 State MCH and CSHCN Directors Contact Information 212

Form 9 List of MCH Priority Needs 215

Form 9 State Priorities-Needs Assessment Year - Application Year 2016 215

Form 10a National Outcome Measures (NOMs) 218

Form 10a National Performance Measures (NPMs) 258

Form 10a State Performance Measures (SPMs) 270

Form 10a Evidence-Based or –Informed Strategy Measures (ESMs) 275

Form 10b State Performance Measure (SPM) Detail Sheets 286

Form 10b State Outcome Measure (SOM) Detail Sheets 291

Form 10c Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets 292

Form 11 Other State Data 303

I. General Requirements

I.A. Letter of Transmittal

CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH

Matthew G. Bevin
Governor

275 East Main Street, HS2W-A
Frankfort, KY 40621
502-564-2154
Fax: 502-564-5766
www.chfs.ky.gov/dph

Adam M. Meier
Secretary

Jeffrey D. Howard, Jr., MD
Commissioner

July 14, 2018

Laura Kavanagh, MPP
Acting Associate Administrator
DHHS/HRSA/Maternal and Child Health Bureau
5600 Fishers Lane
Rockville, Maryland 20857

Re: Kentucky 2019 Maternal and Child Health Block Grant Application/DUNS# 927049767

Dear Ms. Kavanagh:

Please accept the enclosed application from the Kentucky Cabinet for Health and Family Services for the 2019 Maternal and Child Health Block Grant application and the 2018 Annual Report in response to HRSA Program Announcement 19-072.

The purpose of the grant is to fund support services administered by the Commission for Children with Special Health Care Needs and maternal and child health initiatives administered by the Department for Public Health and local health departments. The grant request is for financial assistance in support of these efforts.

If you have any questions regarding this application, please direct them to Dr. Henrietta Bada, Title V Director, at 502-564-4830 or Henrietta.Bada@ky.gov.

Sincerely,

Connie Gayle White MD

Connie Gayle White, MD, MS, FACOG
Senior Deputy Commissioner

I.B. Face Sheet

The Face Sheet (Form SF424) is submitted electronically in the HRSA Electronic Handbooks (EHBs).

I.C. Assurances and Certifications

The State certifies assurances and certifications, as specified in Appendix F of the 2018 Title V Application/Annual Report Guidance, are maintained on file in the States' MCH program central office, and will be able to provide them at HRSA's request.

I.D. Table of Contents

This report follows the outline of the Table of Contents provided in the *"Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms,"* OMB NO: 0915-0172; Expires: December 31, 2020.

II. Logic Model

Please refer to figure 4 in the "Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms," OMB No: 0915-0172; Expires: December 31, 2020.

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

The Kentucky (KY) Title V Program is committed to assuring the health and well-being of Kentucky's maternal and child health (MCH) populations. As defined in section 501(a)(1) of the Title V legislation, the purpose of the MCH Services Block Grant Program is to enable each state to:

- Provide and assure mothers and children have access to quality MCH services
- Reduce infant mortality and the incidence of preventable diseases and handicapping conditions among children, which will:
    - Decrease the need for inpatient and long-term care services
    - Increase the number of children who receive preventive and primary care services to include appropriate immunization
    - Promote the health of mothers and infants by assuring prenatal, delivery, and postpartum care for low income, at-risk pregnant women
- Provide rehabilitation services for blind and disabled individuals under the age of 16 receiving benefits under Title XVI, to the extent medical assistance for such services are not provided under Title XIX
- Provide and promote family-centered, community-based, coordinated care for children with special health care needs (CSHCN) and facilitate the development of community-based systems of services for such children and their families

The KY Title V Program develops and supports the public health infrastructure and enabling services to meet these objectives. Title V Programs include a Maternal and Child Health (MCH) program and the Children with Special Health Care Needs (CSHCN) agency. By statute in KY, 34.9% of the federal Title V grant goes to the Commission for Children with Special Health Care Needs (CCSHCN). Title V programmatic priorities are revised every 5 years based on a federally required statewide needs assessment and includes NPMs in each of the 6 population health domains.

As part of Governor Bevin's Red Tape Reduction Act, the CCSHCN will be renamed as the Office for Children with Special Health Care Needs. This name change is not reflected in the current annual report because the change will occur after submission of the FY2019 Grant Application and 2017 Annual Report.

Women/Maternal Health Domain

The priority need for KY in this domain is maternal morbidity. Compared to the national average, KY has a higher percentage of cesarean section deliveries. KY has selected *NPM #2: Percent of cesarean deliveries among low-risk first births* as the measure for this domain. This aligns with our previous work on Early Elective Delivery (EED) through Healthy Babies Are Worth the Wait (HBWW). By continuing to partner with the Kentucky Hospital Association and the March of Dimes, efforts will include increasing the number of hospitals with a hard-stop policy for EEDs. Federally available data has shown a decrease from 31.51% in 2009 to 27.15% in 2016.

The Health Access Nurturing Development Services (HANDS) home visitation program has proven to improve maternal and child outcomes of premature births, low birth weights, child abuse/neglect, pregnancy-induced hypertension, maternal complications and improved adequacy of prenatal care.

The Federal Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program has improved performance measures in screenings, well child visits, depression referrals, education for caregivers, and other benchmarks.

With a rise in maternal deaths, KY is restructuring the maternal mortality review process. In 2016, KY Vital Statistics data from death certificates showed a 33% increase in maternal deaths, from previous years. Over half of these deaths are attributed to accidental deaths from drug overdose, homicide, or suicide. The need to expand reviews to include the manners of death other than pregnancy related reasons is paramount for strategic planning efforts to reduce the number of maternal deaths.

Perinatal/Infant Health Domain

Infant mortality is considered to be the single leading indicator of the overall health and well-being of a population. In

2015, KY's infant mortality rate (IMR) per 1,000 live births was 6.7, compared to 5.9 in the Nation. The rate for 2016 decreased to 6.3. In the 2015 needs assessment, stakeholders identified neonatal abstinence syndrome, prematurity, and unsafe sleep as the priority issues; therefore, infant mortality was chosen as the state priority need. The major evidence-based strategies recommended nationally for addressing infant mortality are regionalized perinatal care, safe sleep initiatives, and breastfeeding. KY will focus on two NPMs for this domain, *NPM #4: A) Percent of infants who are ever breastfed*, *B) Percent of infants breastfed exclusively through 6 months* and *NPM #5: A) Percent of infants placed to sleep on their backs*.

Breastfeeding outcomes impacting perinatal/infant health have improved. Mothers who breastfed their infants at six months of age increased from 25.3% to 35.3% and the women who initiated breastfeeding prior to hospital discharge increased from 52.7% to 70.4% (2005-2016).

MCH developed an educational campaign on safe sleep, which included social media. As a result, messaging was added on the dangers of co-sleeping when impaired, a concern identified by the External Review Panel for Child Fatalities and Near Fatalities. In 2016, the Sudden Unexpected Infant Death (SUID) registry, a CDC funded grant, identified 103 SUID cases taking SUID to the second leading cause of death for KY's infants. Of these SUID cases, 1 in 3 had an unsafe sleep measure and risk factor of Neonatal Abstinence Syndrome, caretaker drug use, care by alternative caretaker, or drug use in the home. To further address this issue, additional information on infant sleep positioning and unsafe sleep will be collected in the Pregnancy Risk Assessment Monitoring System (PRAMS), a CDC funded grant that conducts surveillance of women who have recently had a live birth. The percentage of survey returns was higher than averages reported across other states.

To address ongoing needs about adequacy of care for infants with NAS, MCH is working with local coalitions, local health departments (LHD), and community and state partners to develop a sustainable plan of safe care.

Child Health Domain

Injury is the leading cause of death among KY children over the age of one, and it was a priority in our statewide needs assessment. Child maltreatment was the highest priority. Child passenger safety and teen driving were also concerns raised by the participants. For this domain, KY has selected *NPM #7.1: Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9 and adolescents ages 10-19*. Hospitalizations for child maltreatment will be included. Stakeholders had strong concerns about child maltreatment; therefore, KY developed a State Performance Measure (SPM) specific to child maltreatment: Prevalence of Pediatric Abusive Head Trauma in Medicaid children ages 0-5.

KY is participating in the Child Safety CoIIN, a national collaborative to learn best practices in violence/child maltreatment prevention, child passenger safety, and teen driving. We will continue to work on these projects with the KY Safety Prevention and Alignment Network (KSPAN), the Division of Pediatric Forensic Medicine at the University of Louisville (UL), Prevent Child Abuse Kentucky, the KY Chapter of the American Academy of Pediatrics (AAP), and local health departments (LHDs).

The Child Fatality Review and Prevention program (CFR) has been revitalized, with 92 local review teams being mentored, to build quality reviews and develop interventions for prevention programs. To continue strengthening the quality of SUID reviews, multiple trainings have been provided to state coroners. Promotion of safe sleep and abusive head trauma activities is ongoing with area birthing hospitals. The MCH director and CFR coordinator are members of the Child Fatality and Near Fatality External Review Panel, allowing for referral of review by the External Panel for cases in which suspected abuse or neglect has led to a child's death.

Training on the 5-2-1-0 program (five fruits and vegetables per day, no more than two hours of screen time per day, one hour of physical activity per day, and no sugary beverages) will continue with early childhood educators, LHDs, the CCSHCN, and communities. This program is a family friendly tool for improving nutrition and physical activity. MCH also works on model policies for childcare centers around nutrition and physical activity.

Adolescent Health Domain

The priority need chosen from the needs assessment for this domain is obesity/overweight. According state obesity information, obesity among high school students has increased from 16.5% in 2011 to 20.2% in 2017. For this domain, KY has chosen *NPM #8.1: Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day* and *NPM #8.2: Percent of adolescents, ages 12 through 17, who are physically active at least 60 minutes per day*.

Addressing obesity requires a multi-level approach, and key to both children and adolescents are the policies and activities beginning at birth and spanning to adulthood. MCH is working intensively on obesity prevention in early education centers/child care centers, school settings through the Coordinated School Health (CSH) Program, and through a collaboration with the KY Department of Education (KDE).

Identified in last year's application, an emerging need for this population is a rise in the number of KY teen deaths from suicide with some occurring in children as young as 10 years of age. With 75% of the deaths for children age 15-17 occurring by suicide, active intervention with school districts and communities, through a partnership with DBHDID and MCH, is provided immediately upon notification of the death.

Children and Youth with Special Health Care Needs (CYSHCN) Domain

KY's CYSHCN program is addressing the challenges associated with transitioning from a traditionally direct service model to an assurance role, ensuring statewide systems of care and building infrastructure for public health services. KY's rate of CYSHCN is the highest in the country per the 2016 National Survey of Children's Health. Working with partners, including families, on new initiatives to develop and promote more of an integrated system will ensure that more CYSHCN in KY are able to access services in their communities. Improvement of transition services is a core outcome and continued priority. Nationally recognized best practice tools guide future program development. While data capacity will not directly influence any child-specific outcomes, KY considers that developing the expertise to properly measure and evaluate available data will allow the agency to ensure that progress made to increased data-driven decision-making. CCSHCN, along with partners and experts, initiated a specific and measurable Data Action Plan.

CYSHCN priorities identified through the Needs Assessment process are linked to State Performance Measures (access to care, improved data capacity, and adequate insurance coverage). CCSHCN has leveraged available technical assistance resources and collaboration with partner agencies to plan to strengthen and better integrate the overall system of care. Available data from the National Survey of Children's Health (NSCH) supplements internal data and determines trends among the larger CYSHCN population, reflecting the transformation from a direct services perspective, a shift that will continue into the application year. While the revised NSCH provides a wealth of information, CCSHCN also utilizes in-state data collection efforts for the purposes of developing more targeted efforts to guide program evaluation, needs assessment, and program planning and development.

Cross-Cutting/Systems Building Domain

The Cross Cutting/Systems Building annual report and application year report addresses the topics below. For 2019, these topics will move to one of the primary domains as per grant guidance received.

Substance Abuse:

Substance abuse is influencing all MCH populations in KY. The consequences of this epidemic in women include pregnancy complications, increased risks of relapse, and overdose deaths. For children, consequences include neonatal abstinence syndrome (NAS), infant death from impaired bed sharing, and deaths from abusive head trauma. Rates of NAS have increased more than 20-fold in the last decade in KY. NAS surveillance continues and MCH has completed two NAS annual reports. MCH continues to collaborate with the Department for Behavioral Health, Developmental and Intellectual Disabilities (DBHDID); CCSHC; and the Department for Community Based Services (DCBS) to develop and implement a Plan of Safe Care for infants discharged from the hospital who are substance exposed or diagnosed with NAS. One example, of innovative plan of safe care programming is in the narrative for this domain. KY focused on *SPM #1: Reduce by 5% the rate of NAS among KY resident live births*.

Tobacco:

Smoking during pregnancy in KY is gradually decreasing over time, from 24.1% in 2009 to 18.6% in 2016; however, this is almost double the national rate of 7.2%. MCH promotes activities aimed at smoking cessation among pregnant women and smoke-free policies. Evidence informed strategies for reducing smoking during pregnancy were not successful. Efforts in 2017 focused on reducing the percent of women who smoke during pregnancy and the number of children who live in a household where someone smokes.

Currently, 70 KY school districts or 42.5% are tobacco-free. In the upcoming year, KY will continue the *NPM #14.2: Percent of children who live in a household where someone smokes.* In 2017, smoke-free law protected 32.7% of Kentuckians. With local changes, this has improved to 34.7% of Kentuckians are protected.

Oral Health:

MCH houses the KY Oral Health Program (KOHP) and Public Health State Dental Director. KOHP has made available a training program in pediatric techniques that offers general dentists practical training. Trained public health nurses provide fluoride varnish treatments to children through the fifth grade. Public health dental hygiene programs housed in LHDs have expanded from five teams in the first year to ten teams that serve 34 KY counties. To increase the number of preventive dental visits and measure ongoing progress, KY will use *NPM #13.2: Percent of children, ages 1 through 17, who had a preventive dental visit in the past year.*

Insurance Adequacy:

Public policies have correlated with increasing numbers of those insured and a successful transition to the federal exchange (HealthCare.gov). A federal ruling blocked the Kentucky HEALTH 1115 Medicaid Waiver approved to begin July 1, 2018. The waiver or the ruling did not affect the benefits for pregnant women and children. While this creates uncertainty for KY residents, MCH remains committed to ensuring that MCH populations remain educated about options to meet their needs.

III.A.2. How Title V Funds Support State MCH Efforts

Title V funds are used to support MCH services based upon the priorities identified in the 2015 Title V Needs Assessment which included:

- Maternal Morbidity
- Infant Mortality
- Injury (Child Abuse and Neglect)
- Overweight and Obesity Among Teens
- Oral Health
- Substance Abuse
- Adequate Health Insurance Coverage

In Kentucky, over half (65.1%) of funding is allocated to LHDs to provide direct, enabling, and public health services/system building activities depending on the needs of the local MCH populations. The remaining, 34.9% of funding is provided to the Commission for Children with Special Health Care Needs (CCSHCN).

CCSHCN uses Title V funding for activities to support:

- Transitioning Services
- Access to Care
- Data Capacity

The state assures these funds will be used appropriately through a select list of MCH Evidence Informed Strategies that are focused on the identified priorities. LHDs likewise partner with community stakeholders for matching funds for projects related to the MCH population, and for outreach and support to the community.

The remainder of the MCH allocation is budgeted for public health services and systems. These include surveillance (maternal mortality, child fatality review), regionalized perinatal care, information technology systems for data collection, workforce development and trainings, and technical assistance to local health departments and other agencies for pediatric injury prevention.

III.A.3. MCH Success Story

Community engagement and collaboration defines KY MCH. With an opioid crisis, increasing SUID deaths, child suicides, and a changing healthcare landscape, engagement at a community level is crucial.

Collaboration across departments, agencies, and community is ongoing. These partnerships create opportunities to expand an informed workforce to promote education/outreach, program innovation, and needs assessment/surveillance. This application has examples of a variety of triumphs from these partnerships. These include:

- Legislation change to support and protect MMR to include homicide, suicide, and overdose deaths
- Mentoring CFR teams to improve quality review, prevention activity planning, and implementation
- Access to specialty providers close to home for children with special health care needs
- Hepatitis C screening of pregnant women and their newborns
- Addition of X-ALD screening to the Newborn Screening metabolic panel
- Multi-agency efforts for cohesive safe sleep and abusive head trauma prevention messaging for new parents
- Multidisciplinary approach for community engagement to address NAS/plan of safe care
- Evidence Informed Strategies (MCH packages) guides focus work by LHDs related to KY's needs to address child safety, obesity, oral health, infant mortality, and more

The application sections will articulate and outline some of the challenges and successes of KY MCH to empower communities to improve outcomes impacting mothers and children.

III.B. Overview of the State

Kentucky's Health Care Delivery Environment and the Role of Title V

The Title V agency in Kentucky (KY) is administered by the Division of Maternal and Child Health (DMCH), which is one of seven divisions of the Kentucky Department for Public Health (KDPH) in the Cabinet for Health and Family Services (CHFS), in the state capital, Frankfort, KY. KY operates a decentralized public health system, with independent and district local health departments (LHDs) serving all 120 counties that are accountable to their local board of health. KDPH operates the personnel and financial systems for LHDs and supports their role in state and federally funded programs via allocations, standards of practice, training, and technical assistance. Another CHFS entity, the KY Commission for Children with Special Health Care Needs (CCSHCN), is a sister agency to KDPH and administers the state's Children and Youth with Special Health Care Needs (CYSHCN) program. CCSHCN's central office is located in the state's largest city, Louisville, with eleven regional sites throughout the state (serving all 120 counties) and additional satellite clinics in six locations.

Recent changes in the health care landscape for KY include:

- 2011: Implementation of Managed Care Organizations (MCOs) for Medicaid beneficiaries
- 2014: Implementation of provisions for coverage for mental health and substance abuse services, as required by the Affordable Care Act (ACA) in the Medicaid State Plan utilizing a state based health exchange (KYNECT)
- 2016: Transition to the federal insurance exchange (Healthcare.gov) secondary to cost of maintaining the state-based exchange
- 2017: Section 1115 Medicaid Waiver (KHW) was submitted to the Centers for Medicare and Medicaid Services (CMS) for approval
    - The KHW did not change benefits for pregnant women or children
- 2018: Received approval from CMS for the KHW entitled "Kentucky Helping to Engage and Achieve Long Term Health"
    - June 29, 2018, this was blocked by a federal ruling

The Medicaid program in KY has historically focused on providing health care to subgroups of the lowest income individuals including the elderly, disabled, children, and pregnant women. In 2013, KY chose to expand Medicaid and to extend coverage to individuals with incomes up to 138% of the federal poverty level (FPL). KY's decision to expand Medicaid eligibility had three goals:

- reducing the number of low-income residents who lacked health care,
- improving the health status of Kentuckians – especially low-income residents without prior access to health care coverage
- boosting KYs economy

The enrollment of non-elderly adults in KY Medicaid increased 72.7%, from 376,956 in the first quarter of Medicaid expansion to 650,867 in the third quarter of 2016 (State Health Access Data Assistance Center, 2017). During this same period, there was an increase in births covered by Medicaid expansion, but it was offset by a decline in births in traditional Medicaid (State Health Access Data Assistance Center, 2017). This shift may be the result of women who enrolled in expanded Medicaid and later became pregnant. Although Medicaid expansion did not have a direct impact on Medicaid eligibility for pregnant women (at 185% FPL in KY), it did allow more women to be covered in the preconception and interconception care periods.

In January 2014, KY implemented provisions of the ACA to provide coverage for mental health and substance abuse services. This new State Medicaid Plan amendment utilized a state based health exchange (KYNECT) and opened up the Medicaid provider network to add multiple mental health and substance abuse provider types. Since implementing the ACA requirements, more than 300 new behavioral health providers have enrolled in Medicaid and at least 13,000 individuals with a substance abuse disorder have received related treatment services (Deloitte Development LLC, 2015). This was positive improvement for access to these critical services for MCH populations and addressing the epidemic of substance abuse, a major priority indicated by the MCH needs assessment. In 2015, when the state held needs assessment meetings, focus groups and families expressed difficulties in finding local providers based upon MCO choice and the lack of coverage to access treatment for mental health and substance use disorder. The only mental health or substance abuse treatment paid by Medicaid was through Kentucky's community Mental Health Centers. The KHW includes a Substance Use Disorder (SUD) program to improve quality care and health outcomes for Kentuckians with SUD.

It became evident that the cost of the state run exchange was not sustainable long-term. In 2016, enrollment with MCOs began transitioning to the Healthcare.gov platform, and by November 2017, exclusive enrollment occurred. KY currently contracts with five Managed Care Organizations (MCOs) to provide healthcare services for Kentuckians eligible for Medicaid.

During the 2018 enrollment period, 89,569 people enrolled in coverage; more than a 10% increase over 2017 enrollment, a decrease from 2016 (healthinsurance.org, 2018). The participating insurers decreased from three to only two, with Humana (available only in Jefferson Co.) exiting the exchange. Anthem is available in all KY counties, and CareSource is available in 61 of 120 KY counties.

The Kentucky HEALTH Waiver (KHW) changes KY's traditional Medicaid expansion. The KHW was set to begin on July 1, 2018. The KHW has eligibility requirements that include community engagement for adult beneficiaries age 19-64 (excluding former foster care youth, pregnant women, beneficiaries with acute medical conditions, and the primary caregiver of dependent beneficiaries considered medically frail, beneficiaries diagnosed with an acute medical condition that would prevent them from complying the requirements, and full time students). The KHW includes a Substance Use Disorder (SUD) program to improve quality care and health outcomes for Kentuckians with SUD. The KHW has a waiver for non-emergency medical transportation for certain populations and services, and a waiver of retroactive eligibility for certain beneficiaries. In January 2018, beneficiaries were able to begin earning credit for *My Rewards* Account (MRA) activities for preventive health services. MRA works like a Health Spending Account and beneficiaries may use earned dollars to pay for preventive dental/vision services and some gym/fitness activities. However, on June 29, 2018, a federal ruling blocked this plan. While this creates insecurity for beneficiaries, MCH remains committed to assisting women and children with obtaining the best coverage available to them.

Efforts to expand Medicaid eligibility have been successful. National data indicates that KY experienced the largest decrease of any state in its adult uninsured rate from 2013-2016, dropping from 20.4% to 7.8% (Witters, 2017). The aggressive outreach and marketing efforts, along with support from LHDs, CCSHCN, area development districts, community mental health centers, community action agencies, faith-based organizations, hospitals, clinics and other health care providers, were likely responsible for KY exceeding targeted enrollment for Medicaid expansion (Deloitte Development LLC, 2015). The Title V program has been actively involved in these efforts. The CCSHCN regional offices, the Family to Family Health Information Centers (F2F), and several LHDs have navigators/application counselors on staff (trained to facilitate customers accessing the exchange for enrollment). In other communities, they know the locations to send families for this service. With the KHW, Governor Bevin's administration projects Medicaid enrollment may drop by 90,000-100,000 as a result of the KHW community engagement requirement (healthinsurance.org, 2018).

Title V continues to assist mothers and children with access to care. One action of the prenatal MCH package, chosen by various LHDs, was to ensure referral for Medicaid to assist with presumptive eligibility and assessment of need for other services with linkage to care through HANDS, WIC, and obstetric care, or to local resources for smoking cessation and substance abuse treatment. Another example is LHDs used funding from the bullying/suicide package to contract with child mental health providers and behavioral specialists to perform assessments using the psychological assessment resource tool to identify students with concerns in middle and high school. By bringing the provider to the school, this program has addressed financial barriers and transportation, and it has promoted peer-to-peer mentoring.

In previous years, CCSHCN participated in Kentucky's Health Benefits Exchange and partnered with other organizations implementing ACA as part of the agency's mission as a Title V agency, a way to ensure that all families and CYSHCN have adequate sources of insurance. While the exchange was in existence, CCSHCN-affiliated navigators made approximately 6,300 direct consumer contacts and assisted with the initiation of over 1,000 applications. Since the inception of the national exchange (Healthcare.gov), CCSHCN-affiliated navigators have completed 12-15 hours of training on the exchange and recertify annually.

The 2015 Needs Assessment survey data showed that CCSHCN respondents are less likely than other MCH populations to experience problems obtaining insurance via the exchange. Subsequent CCSHCN surveys have indicated that CCSHCN enrollees are more satisfied with the adequacy of their child's coverage than CYSHCN families sampled through the National Survey of Children's Health (2016). The agency contracts with a trusted nonprofit, Patient Services, Inc., to provide insurance case management and premium assistance solutions for those with eligible conditions, specifically bleeding disorders and cystic fibrosis. As insurance coverage is a cross-cutting issue among MCH populations, and as a disparity of adequacy exists in terms of CYSHCN, CCSHCN is working toward greater (appropriate) coverage by guiding and advocating for CYSHCN on an individual basis and on a state

level, participating in ongoing dialogue with Medicaid and the MCOs to reach solutions for any issues (such as pre-authorization requirements for medical procedures from which CYSHCN may previously have been exempted). CCSHCN has participated in learning collaborative opportunities alongside Medicaid partners, and continues to work with state partners as well as national experts.

State Health Agency Priorities

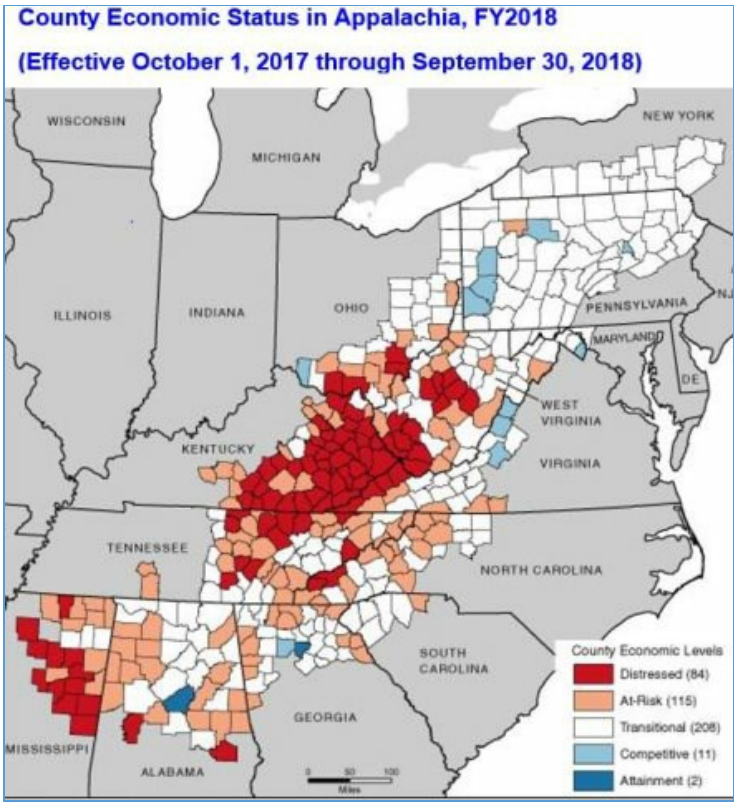
Since being sworn into office, in December 2015, Governor Matthew Bevin maintains that creating a Healthier Kentucky is a priority. Governor Bevin and Kentucky's first lady are supportive of children's issues, and work with local DCBS offices and various programs to benefit foster children.

First Lady, Glenna Bevin, announced her top priority is to help build stronger families including reduction of child abuse and increasing efforts to protect children. The First Lady held the First Annual Hearts to Hands event to empower victims of domestic violence and build self-esteem and confidence. She supports a pilot project, Youth in Transition, to provide support to youth aging out of foster care.

With the rising opioid epidemic, a focus remains on decreasing rates of neonatal abstinence, reduction of Sudden Unexpected Infant Deaths (SUID), and ongoing identification and treatment for pregnant woman with substance use disorder.

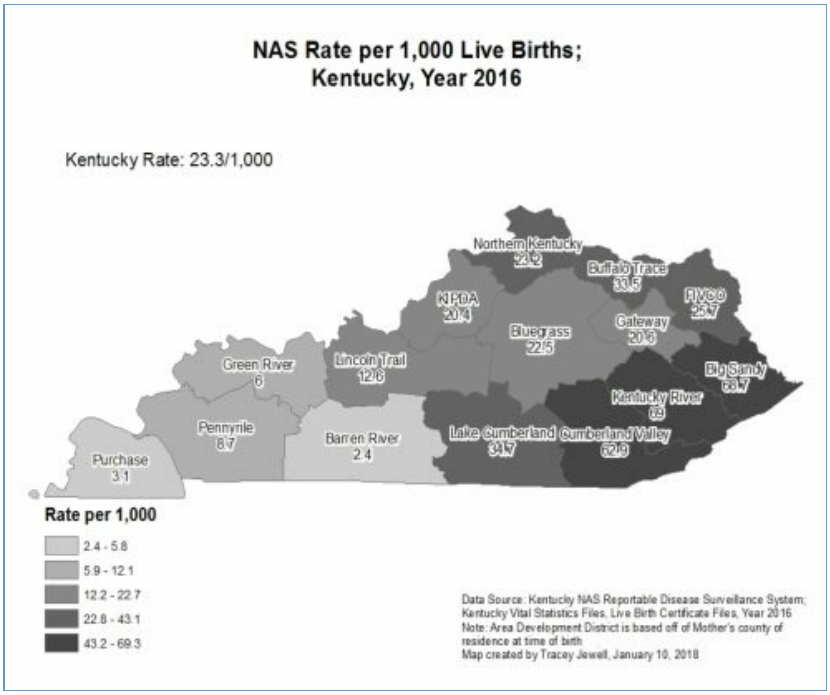
Challenges for Delivery of Services

Healthy People 2020 notes, "Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities." In KY, disparity effects all MCH indicators in areas of racial, ethnic, economic or geographic location, and access to care.

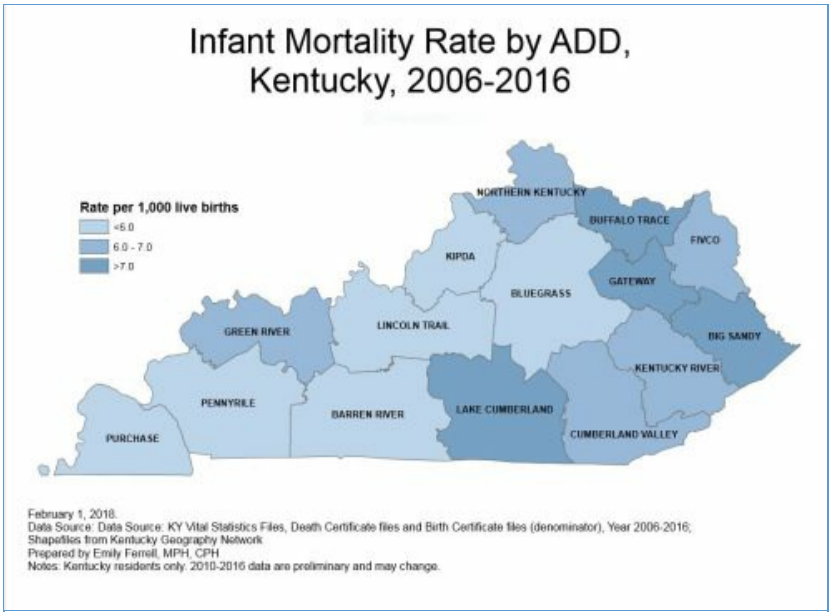


Based on Census data, over 41% of Kentuckians live in rural areas as compared to 19.3% in the US. This affects access to employment, health care, higher education, and other services. Limited access to local providers (especially for specialized care and transportation are barriers imposed by a rural community. Therefore, supporting the need for communities to rely on LHDs for primary care services. In rural areas, residents may need to travel longer distances to obtain specialized health care access at a local university hospital or clinic.

Kentucky's poverty rate is 18.5% with 25.7% of Kentucky's children living below the Federal Poverty Level (US Census Bureau, 2012-2016 American Community Survey 5 year Estimates) and is higher in the rural areas of KY. The Appalachian Regional Commission (ARC) designates counties in the range of Appalachian Mountains according to their economic status. Overall, there are 420 ARC counties across 13 states; 54 of KY's 120 counties are ARC counties. In FY2018, 37 KY counties have an economic status of distressed and 14 others are designated to be at-risk (Appalachian Regional Commission, County Economic Status in Appalachia, FY2018).



In comparison, the ARC map and these KY maps show highest indicators of poor health in area development districts align with economically distressed areas.



The three major urban areas of Louisville, Lexington, and Northern Kentucky have different opportunities and challenges than rural areas of KY. Kentucky has 2 children's hospitals located in Louisville, and Lexington. Shriners Hospital for Children who serves children, regardless of the families' ability to pay, with orthopedic conditions, burns, spinal cord injuries is located in Lexington. KY has the following number of providers to address health program shortage areas (HPSA):

- 75 Primary Care HPSA
- 41 Dental HPSA
- 100 Counties with Mental Health HPSA
- 139 FQHC Sites
- 111 FQHC School Clinics
- 113 Primary Care Centers
- 210 Certified Rural Health Clinics

The US Census Bureau 2017 Population Estimates for KY is 4,454,189. Racial and ethnic diversity changes some with population growth in KY with whites comprising 85% of the population, African Americans 8.3%, Hispanic 3.5%, and the other groups 3.2%. (US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates). KY continues to have concentrations of racial and ethnic populations in specific areas of the state. Health disparities are addressed by place based initiatives such as the Federal Healthy Start program in Louisville, Federally Qualified Health Centers (FQHCs) such as Bluegrass Community Health Center in Lexington that provides a medical home for migrant workers in Central KY, or other FQHCs in the eastern part of KY serving underserved populations with comprehensive services.

Shaping our Appalachian Region (SOAR) is a non-partisan economic development agency instituted in 2013 to "expand job creation, enhance, regional opportunity, innovation, and identity, improve the quality of life, and support all those working to achieve these goals in Eastern Kentucky." SOAR promotes collaboration and innovation (SOAR 2018). Now co-led by Congressman Hal Rogers and Governor Bevin, this initiative has drawn millions of dollars of investments from many state and federal agencies providing funding for a variety of projects in the 54 Appalachian counties to improve access to technology, telehealth initiative in Hazard, KY, food collaborative, farmers market, broadband access, and more. Soar's Healthy Communities Advisory Council has a focus on reduction of physical and economic impact of obesity, diabetes, and substance abuse. In 2014 the SOAR Health Committee completed 16 "listening sessions" across KY resulting in a report on health prioritization areas of concern. These included: Coordinated School Health, Environmental Health, Smoke-Free Initiatives, Substance Abuse, Wellness Initiatives (healthy eating & water first), a regional Health Clearinghouse, Adverse Childhood Experiences (ACEs), Transportation/Access, Children's Oral Health, and Physical Education in Schools. In 2017, SOAR published a blueprint to organize the findings from all SOAR reports into goals and corresponding objectives for coordination of activities. In the SOAR Regional Blueprint, 4 goals were established to meet the health mission. Healthy Communities, Goal 4, in this blueprint, is to reduce the physical and economic impact of obesity, diabetes, and substance abuse. The four objectives for this goal are:

- Implement innovative evidence-based programs to address regional health disparities in access, quality of care, and health outcomes
- Strengthen community partnerships and collaborations with stakeholders to increase focus on health and disease prevention throughout the region
- Reduce the scope and impact of substance abuse and related consequences through education, awareness, prevention, and access to services
- Increase access to healthy, affordable foods and opportunities for physical activity.

These objectives align with the 2015 Title V Needs Assessment identified areas of need. Health disparities to include racial, ethnic, economic and geographic disparities continue to dominate the concerns for KYs MCH population.

Process Description

An extensive needs assessment process, which included multiple levels of inputs, was designed to align the major health efforts at the state level with the Title V Needs Assessment.

KYs Title V 2015 needs assessment process included a review of quantitative data on numerous indicators, consumer surveys that were conducted in LHDs and CCSHCN sites across KY, focus groups with local staff from the LHD and CCSHCN, and stakeholder input. Potential priorities were identified for the five MCH population domains of women/maternal health, perinatal/infant health, child health, adolescent health, and children and youth with special health care needs. The ranking of those topics across the domains was assessed to determine their importance as cross-cutting. Each successive step in our process helped reinforce the issues identified as most important from our consumers and stakeholders. Since the steps in the process all included the MCH and CCSHCN together, a clear picture of the needs of our Title V populations emerged. These were aligned with the new Title V structure and the priorities of the state, as described above.

Through ongoing needs assessments, stakeholder meetings, KDPH accreditation, and data review, the previously identified areas of concerns and emerging concerns remain the focus of work. KY is striving to reduce non-medically indicated cesarean sections, and maternal morbidity has become a topic of discussion amidst stakeholders. As identified in the 2015 needs assessment and noted in the prior update, NAS and substance use continues to require community engagement on all levels to address the growing needs of this population. Hepatitis C cases have increased and are associated with the increasing is associated this substance abuse. This was identified in the consumer survey and was an indicator of things to come. In 2015 the Child Fatality and Near Fatality External Review Panel was established by statute to address the concern prioritized by consumers/stakeholder to address child abuse and neglect prevention efforts.

In the past year, continued efforts to address the rising rate of suicide deaths in the teen population, and ACEs scores in which 59% of Kentuckians report experiencing at least one ACE dominate the landscape of care needs. Review of child deaths by suicide at the local level is done by the team with the state suicide coordinator and the child fatality nurse attending. At the point of notification of a suicide, rapid contact to the community is made to provide linkage to local resources for grief counselling and post suicide intervention with the schools, LHDs and more.

The KY Title V Program continues to conduct assessments of emerging issues and will seek LHD and stakeholder input at statewide MCH needs assessment meetings in the coming year.

State Statutes and Other Regulations that Have Relevance to Title V Program Authority

State statutes and regulations of relevance to KYs Title V program authority are described in this section to provide the basis for MCH programs and their required activities.

The foundational statute for KY MCH is within KY Revised Statute (KRS) 211.180 which gives the CHFS the responsibility and authority to formulate, promote, establish and execute policies, plans and programs relating to all matters of public health. It states that the Cabinet is responsible for “the protection and improvement of the health of expectant mothers, infants, preschool, and school-aged children” and “the protection and improvement of the health of the people through better nutrition.”

KRS 211.180 authorizes MCH to protect and improve the health of expectant mothers. In addition, the legislature since decades ago has provided funding to MCH with the intent that no pregnant woman in KY will go without prenatal care due to lack of ability to pay. Thus KY Administrative Regulation (KAR) 902.4:100 established the public health prenatal program to administer these funds and set the financial eligibility for those in need of prenatal care at 185% and below of the FPL who are not covered by Medicaid or any other funding source. The public health prenatal program serves as a core public health service and is the primary strategy for reducing maternal morbidity and mortality, and infant morbidity and mortality. In addition to the nutrition provisions in KRS 211.180 (above), KRS 211.755 stipulates that a mother may breastfeed her baby or express breast milk in any location, public or private, where the mother is otherwise authorized to be.

Newborn Screening is required and the program is authorized to collect data for inborn errors of metabolism and other hereditary disorders by KRS 214.155 and allows the state to add any conditions to the panel that are recommended by the American College of Medical Genetics. KY currently screens for 54 disorders. In July 2018, screening for X-linked adrenoleukodystrophy will be added to the KY panel. The Metabolic Foods and Formula program is established in KRS 304.17 to provide needed supplements and special foods to children with metabolic disorders as a payor of last resort. Medicaid and insurance companies are required to provide these for their enrolled patient population up to a cap of $25,000. The Early Hearing Detection and Intervention Program screens newborns for hearing loss prior to discharge from Kentucky birthing hospitals. Overseen by CCSHCN, this newborn screening program is established in KRS 211.645, 211.647, and 216.2970.

The Kentucky Birth Surveillance Registry is authorized by KRS 211.651 to obtain data on all children up to the age of five years with congenital anomalies or disabling conditions. Reporting sources include acute care hospitals, outpatient records, and laboratory reporting. KRS 211.192 directs KDPH to make available up-to-date information on spina bifida.

KRS 211.676 requires that NAS cases be reported to KDPH. Facilities in the state must report all cases diagnosed among newborn infants diagnosed at their facility. KRS 211.686 was amended in 2018 to add Maternal Mortality Review to the child fatality review allowing for review of cases of maternal death to establish prevention activities and align with best practice guidelines as defined by the CDC. The legislation for child and maternal mortality protects

against discoverability of review information.

KRS 211.690 established HANDS as a voluntary home visitation for first time, at-risk parents as a primary service delivery strategy in 2000. 902 KAR 4:120 sets the definitions, eligibility criteria and provider qualifications for the HANDS program. HANDS is funded from the Master Tobacco Settlement and in accordance with 907 KAR 3:140 Medicaid. Since 2011, the HANDS program has had federal support from the MIECHV grant.

KRS 200.654 allows MCH, as part of the CHFS, to administer state and federal funds to the First Steps Program (Part C of the Individuals with Disabilities Education Act) to provide early intervention services for infants and toddlers with disabilities and their families. First Step provider qualifications are defined in 902 KAR 30:150.

Multiple statutes pertain to childhood lead poisoning. KRS 211.900 defines at-risk populations. KRS 211.901 addresses the statewide program for the prevention, screening, diagnosis and treatment of lead poisoning. KRS 211.903 specifies the intervals of screening of at-risk children. KRS 211.904 states that the CHFS shall establish an educational program to inform multiple of the dangers, frequency, and sources of lead poisoning and the methods of preventing such poisoning.

In 1996, the Public Health Local Child Fatality Review (CFR) System was established through KRS 211.686 allowing local teams to assist the coroner in determining an accurate manner and cause of death. Grief counseling for families who have lost an infant to Sudden Infant Death Syndrome (SIDS) was initiated through LHDs after the establishment of KRS 213.161.

KRS 199.8945 establishes technical assistance for child care providers through the Healthy Start in Child Care Program. This statute mandates training and education of child care providers in child health and safety to increase awareness and education for parents of children who attend child care.

KRS 211.190 (11) requires CHFS to provide public health services that include water fluoridation programs for the protection of dental health. 902 KAR 115:010 sets forth the requirements for the program. KY has the highest percentage of fluoridated water systems in the country, at 98%. A special licensure category for Public Health Dental Hygienists was established in KRS 313.040, expanding the scope of preventative dental work that hygienists can do in a public health outreach under protocol without requiring the presence of a dentist on site. KRS 156.160 requires that all children entering public school have a dental assessment; while this is the responsibility of the KDE, the MCH State Dental Director provides training and technical assistance.

KRS 156.501 establishes a full time position in the KDE for a school nurse consultant, to develop protocols for health procedures, quality improvement, and health data collection in schools. MCH funds half of this position and collaborates to develop guidance for health management in schools. Most recently legislation has directed protocols be provided for administration of insulin in schools, and naloxone protocols.

Program authority for CYSHCN services derives from KRS 200.460-200.499. The authorizing statute reads in part: that CCSHCN “shall provide through contractual agreement, or otherwise, such services as may be necessary to locate, diagnose, treat, habilitate, or rehabilitate children with disabilities, and may include any necessary auxiliary services.” Remaining statutes address conditions of acceptance for children, payment for care, confidentiality of records, and reporting.

Since the fall of 2016, CCSHCN has been in the process of rewriting our antiquated regulations, the majority of which have not been updated in 30 years. CCSHCN intends to file 4 regulations in the late summer of 2018, delineating policies for application and eligibility, billing and fees, membership to the medical staff, as well as repealing concerning outdated policies and defunct programs. Anticipated effective dates are winter of 2018.

A previous change to CCSHCN’s organizational structure was the addition (by Executive Order) of an Office on Autism, which was attached to CCSHCN for administrative purposes, and which was subsequently removed and attached to the CHFS. However, expansion into the area of Autism Spectrum Disorders (ASD) continues through the assurance gap-filling direct clinical services and partnerships with community organizations providing care. Along with other partners (universities, Kentucky Autism Training Center), CCSHCN held its first ASD clinic in the fall of 2014. Patients are able to see several providers on the same day, and patient satisfaction is high. Clinics include consultation by developmental pediatrics, neurology, and psychiatry; diagnostic clinics also included psychology. Planning and implementation of iCARE – Integrative Collaboration to Improve ASD Referrals and Evaluation – initiated during the reporting period as a method of early intervention and to reduce wait list for ASD diagnostic services. Currently, as part of the iCARE initiative, CCSHCN offers developmental screenings in six of the eleven offices. CCSHCN’s billing ability for multiple MCOs allows the agency to contract with providers, and reduces

waitlists for services in the community. The agency plans to continue to build up infrastructure and envisions partners to take over more of the provision of direct services in the future.

III.C. Needs Assessment

FY 2019 Application/FY 2017 Annual Report Update

III.C. Needs Assessment (FY 2019 Application/FY 2017 Annual Report Update)

Kentucky's state priority needs were determined through the 2015 needs assessment as described in the five-year needs assessment summary. During 2017, needs assessments were ongoing with KY's accreditation process, state oral health strategic planning, and review of MCH programming. Assessments include data review, surveys such as the Behavioral Risk Factor Surveillance System (BRFSS) and PRAMS, advisory board reviews, and regional meetings. Some of these were direct surveys with mothers, grandparents or other caregivers were part of team addressing a specific concern.
The emphasis remains:

- NAS care coordination
- Treatment for women with substance use
- Access to care
- Breastfeeding engagement
- Infant mortality/SUID/child fatality
- Maternal mortality
- ACEs
- Childhood mental health/suicide
- Oral health of children
- Obesity

While consistent with 2015, some measures (child suicide, maternal death) have emerged to be larger concerns.

Organizational Structure

The KY Executive Branch has 11 cabinets, with the Cabinet for Health and Family Services (CHFS) being the largest. The state health agency, KDPH, and CCSHCN are organizationally located within CHFS. Title V is implemented through the Division of Maternal and Child Health within the KDPH.

The foundational statute for KY MCH is within KY Revised Statute (KRS) 211.180, giving CHFS the responsibility and authority to formulate, promote, establish, and execute policies, plans, and programs relating to all matters of public health. LHDs receive the majority of Title V funding to implement MCH Evidence Informed Strategies based upon the priority needs of the MCH population.

As per the mandates and authorizations in state statute, services provided by CCSHCN include:

- Direct care gap-filling clinics for those children with a diagnosis on the agency's eligibility list.
- Audiology services, which include hearing conversation, testing, hearing aid fittings, and programming for cochlear implants. CCSHCN administers the state Early Hearing Detection and Intervention (EHDI) newborn hearing screen surveillance program.
- Foster care support programs, which support children with special needs in the child protective service system through collaboration with DCBS.
- Family to Family Health Information Centers (F2F), which provide assistance to families and professionals in navigating health care systems; information, education, training, support and referral services; outreach to underserved/underrepresented populations; guidance on health programs and policy; and collaboration with other F2Fs, family groups, and professionals in efforts to improve services for CYSHCN.
- Operation of the First Steps (Early Intervention) point of entry in the state's largest region.
- Care for CYSHCN through partnerships and collaborations.

KY CFHS has had multiple leadership changes in the past year. Secretary Vickie Yates Brown Glisson resigned January 2018; Scott Brinkman served as Interim Secretary until June 2018 when Adam Meier was appointed Secretary of the CHFS. Mr. Meier previously served as Deputy Chief of Staff for Policy, focusing on healthcare policy in KY, and was responsible for oversight of KY's 115 Medicaid Waiver.

Commissioner Hiram C. Polk, MD resigned fall 2017. During his tenure, Commissioner Polk worked to address the current opioid epidemic in KY through the launch of the Mobile Harm Reduction Pharmacy that dispenses Naloxone, holds needle exchange programs, provides education, and offers testing for Hepatitis C and HIV. Upon his

resignation, Jeffery D. Howard, MD, served as Acting Commissioner for KDPH with appointment to Commissioner, June 2018. Dr. Howard, a KY Appalachian native, attended the University Of Louisville School Of Medicine prior to the Harvard T.H. Chan School of Public Health. Dr. Howard often states “KY’s number one public health focus is to address the state’s opioid epidemic.” Dr. Howard continues to support programming addressing:

- NAS
- ACEs
- Mobile Harm Reduction Pharmacy

Dr. Henrietta Bada, a neonatologist with the University of KY, was appointed to serve as the Director for the Division of Maternal and Child Health as well as KY’s Title V Director in 2017. Dr. Bada serves as the Mary Florence Jones Professor and Vice Chair of Academic Affairs of the Department of Pediatrics at the University of Kentucky, where she practices clinical neonatology. Dr. Bada is a graduate of the University of Santo Tomas, Manila, Philippines. At the University of Louisville, her residency was in Pediatrics and her fellowship was in Neonatology. Dr. Bada earned a Masters of Public Health from the University of South Florida. She is Board Certified by the American Board of Pediatrics in General Pediatrics and Neonatal-Perinatal Medicine. She has been involved in clinical and basic science research for several years. Her areas of research include newborn brain disorders, perinatal addiction, and developmental follow-up. She served as Principal Investigator (PI) of the Maternal Lifestyle Study (MLS) in collaboration with other PIs from the University of Miami, Wayne State University, and Brown University. The MLS is a longitudinal follow-up of children exposed to cocaine and or opiates in utero until the children reached 16 years of age. Dr. Bada has numerous publications with recent ones related to the findings on follow-up of children and adolescents who had prenatal drug exposure (see CV Attachment).

Shellie A. May, BSN, was appointed CCSHCN Executive Director in January 2018. She is a graduate of Bellarmine University School of Nursing. She has served in executive level administrative positions with local government, while serving on a number of committees focused on the state's most vulnerable children, including the B.O.D. of Kid’s Center, Louisville Pediatric Therapy Center, and Easter Seals of Louisville. As a mother of premature triplets, one a special needs son, she has a unique perspective into the life and challenges of families and children with special health care needs. Shellie brings 22 years of personal experience in CBS, First Steps, IEP planning, home ventilation, home health/PD nursing, feeding issues and all types of therapies.

Agency Capacity

Title V services are provided in all 120 counties to assure operationalization of programming for the MCH population through partnerships and collaborations as described later in the application.

DPH/MCH Workforce Development and Capacity:

MCH employs 93 public health staff focused on improving the well-being of all KY women, infants, children, adolescents, and their families.

DPH/MCH Staff:

- Dr. Connie White, Senior Deputy Commissioner for Clinical Affairs, is Board Certified in OB/GYN with emphasis on patient education and preventive medical care.
- Joy Hoskins, RN, BSN, Director of Women’s Health and the Director of Nursing for DPH.
- Vivian Lasley-Bibbs, MPH, directs the Office of Health Equity and is a Health Disparities Epidemiologist and Healthy People 2020 State Coordinator.
- Dr. Henrietta Bada, MCH Division and Title V Director: She is Board Certified in Pediatrics and Neonatal-Perinatal Medicine. She also has an MPH.
- Andrew Waters, MPH’ Assistant MCH Division Director, Epidemiologist: Manages day to day MCH operations; legislative liaison, MCH planning and budget process, branch oversight and has experience with tobacco prevention and cessation, and environmental health.
- Tracey Jewell, MPH, Senior MCH Epidemiologist with over 18 years of experience in DPH and Title V.
- Jan Bright, RN, BSN; Manager: Child and Family Health Improvement Branch (prenatal, pediatric, and oral health programs); administers the Title V MCH Block Grant.
- Nicole Nicholas, MS, RD, LD; Manager, Nutrition Services Branch (WIC, MCH Nutrition Program, Breastfeeding Peer Counselor Program, and WIC Farmer’s Market).
- Paula Goff, MS; Manager: Early Childhood Development Branch, (HANDS, First Steps, Newborn Screening, and Early Childhood Mental Health).
- Erin Hill: Manager: Health Promotions Branch (Tobacco Prevention and Cessation, Obesity Prevention, and

Physical Activity).
- Julie McKee, DMD; State Dental Director: KY Oral Health Program. Leads the effort in expanding the KY Oral Health Program.
- Monica Clouse, MPH, is a division level epidemiologist for MCH overseeing child fatality data, KBSR, and Zika Birth Defects Surveillance.
- Laura Beard, MCH Family Consultant: Early Childhood Mental Health, KY Strengthening Families, and family informed workgroups.

CCSHCN

With 137 employees state-wide, CCSHCN strengths include organizational structure, collaborative history, financial management, and affiliation with hospitals and universities.

CCSHCN Staff:

- Shellie A. May, BSN, CCSHCN Executive Director, has served in many public non-profit programs supporting care of children with special needs.
- Judith Theriot, MD, Medical Director, is Board Certified in Pediatrics, a Certified Physician Executive, and a University of Louisville (UL) professor of Pediatrics. Prior to her appointment with CCSHCN, she served as director of the Pediatrics Clinical Research Unit at UL and as medical director of the multidisciplinary primary care clinic serving the inner-city, high risk children of Louisville.
- Cherjuantoe Moran, MBA, Director of the Division of Administrative and Financial Services, joined CCSHCN in 2017 after serving with Louisville Metro Government over 19 years in various roles in the Office of Management and Budget, including Fiscal Administrator of various agencies comprising the Louisville Zoo, Community Services and Revitalization, and Human Resources.
- Karen Rundall, RN; Director of the Division of Clinical and Augmentative Services, has 29 years of experience as a registered nurse providing pediatric care for children with special needs, including 17 years at CCSHCN.
- Ivanora Alexander is Assistant Director of Support Services. Ivy holds a Bachelor of Science Degree in Biomedical Engineering and worked in the field of rehabilitation engineering for 14 years as a service provider and later a manager. She recommended and designed technology for children and adults with disabilities.

Family Members on CCSHCN Staff:

The Parent Advisory Council (PAC) and Youth Advisory Council (YAC) each meet quarterly to provide input on how to better serve KY families. In addition to 113 trained family support parents, 7 PAC members, 6 YAC members, and the agency's Executive Director, the following family members of CYSHCN serve on the staff:
- Debbie Gilbert, Co-Director, F2F, served on the Council on Developmental Disabilities for 6 years, having worked with many disability groups. She is currently State Coordinator for Family Voices, and she is a state affiliate of Parent to Parent of KY
- Sondra Gilbert, Co-Director, F2F, has 14 years of experience writing Individual Education Plans for CYSHCN. Sondra has been a volunteer in the Owensboro school district, is appointed to the Council on Developmental Disabilities, and serves on the Regional Genetics Collaborative

Cultural Competence

MCH partners with the Office of Health Equity (OHE) to promote activities raising awareness of health inequities. This includes using the Bridges Out of Poverty and Bridges into Health curriculums to enhance understanding of how our personal biases influence our health decision making.

The OHE provides training on aspects of cultural competence for communities and programs both face-to-face or via two web-based modules. The OHE partnered with MCH to provide training focused on:
- Public health equity approaches
- How to incorporate equity approaches into state plans for smoke-free environments in public housing
- Ways to address infant mortality disparities seen in communities of color, in particular African American

OHE collaborates with the KY BRFSS to ensure oversampling of the largest minority populations in KY as a data source for focused programming addressing health disparities encouraging:
- Local efforts to develop Community Health Assessment and Community Health Improvement Plans that

address the prevailing health and safety needs of residents
- Communities to include input from underserved and marginalized groups such as
    - Homeless
    - Lesbian, Gay, Bisexual, Transgender (LGBT)
    - Elderly
    - Veteran populations
- Faith-based leaders to address disparities in the African American community using faith-based models
- Engagement of community partners with Kentucky Functional Access and Needs Collaborative teams to address cultural and social norms specific to minorities and the underserved in the event of a natural or man-made disaster

OHE prepares the biennial Minority Health Status Report to inform key decision makers about health disparities and inequities affecting Kentuckians. With the guidance of OHE, KDPH adopted a department wide health equity policy to guide equity efforts.

Partnerships, Collaboration, and Coordination

Partnerships with state agencies and community partners extend the reach and influence of MCH. Academic partners collaborate with OHE to provide content area expertise to ensure holistic training and professional development of students in the health sciences. MCH and CCSHCN strive to collaborate with federal partners and private organizations to help meet aligned agency goals and to address the priority needs of the women, children and children with special health care needs. With a 90-plus year history of service provision, CCSHCN has developed formal and working relationships with a variety of programs providing services to children.

Emerging Issues

As previously identified, the opioid crisis has a devastating impact on the MCH population on many fronts (ACES, NAS, suicides, maternal mortality, SUID). Data in 2016 showed an increase in all of these concerns. These will be discussed in the domain narratives.

Other Programmatic Activities

Kentucky has invested in many programs to improve outcomes. Some examples are:
- SSDI initiative
- Mentors for HRSA Epidemiology Graduate Program Students
- HANDS/MIECHV
- KYSF
- Federal Healthy Start Program
- CDC grants
- SUID case registry
- PRAMS
- Birth Surveillance Registry
- Childhood Lead Poisoning Prevention
- National State Based Tobacco Control Programs

Partnerships exist with WIC, family planning, FQHCs, BRFSS, Department for Child Welfare, DBHDID, DMS, and FRYSC. In addition, KY partners with KY Injury Prevention and Research Center at UK, the bona fide agent for injury prevention and the statewide injury prevention plan for children. KDPH and the CCSHCN have cross collaboration with First Steps, Early Hearing Detection and Intervention, Zika Registry, and Child Welfare to provide home visitation to medically complex children in foster care, training, workforce development, expertise, and specialty providers for gap filling services for children with special needs.

Needs Assessment Summary

Kentucky did not coordinate any structured needs assessment activities during the current year. Stakeholder and client input was reviewed throughout the year for program enhancements.

Organizational Structure

There are 11 Cabinets in Kentucky's Executive Branch, the largest of which is the Cabinet for Health and Family Services (CHFS). KDPH and CCSHCN are organizationally located within CHFS. KDPH is the state health agency; Title V is implemented through the Division of Maternal and Child Health within KDPH.

The foundational statute for Kentucky MCH is within KY Revised Statute (KRS) 211.180, which gives CHFS the responsibility and authority to formulate, promote, establish and execute policies, plans and programs relating to all matters of public health. Legislation related to MCH is contained in the Overview document of the Title V Application. The majority of Title V funding is provided to LHDs to implement MCH Evidence Informed Strategies based upon the priority needs of the MCH population.

As per the mandates and authorizations in state statute, services provided by CCSHCN include:

1. Direct care gap-filling clinics for children with a diagnosis on the agency's eligibility list.
2. Audiology services, including hearing conversation, testing, hearing aid fittings, and programming for cochlear implants. CCSHCN administers the state Early Hearing Detection and Intervention newborn hearing screen surveillance program.
3. Foster care support programs, which support children with special needs in the child protective service system through collaboration with the DCBS.
4. Family to Family Health Information Centers (F2F), which provide assistance to families and professionals in navigating health care systems; information, education, training, support and referral services; outreach to underserved populations; guidance on health programs and policy; and collaboration with other F2Fs, family groups, and professionals in efforts to improve services.
5. Operation of the First Steps (Early Intervention) point of entry in the state's largest region.

The Governor appointed Vickie Yates Brown Glisson to be Secretary of the Cabinet for Health and Family Services in December 2015. Secretary Glisson is a nationally recognized health care and health insurance attorney and has held a number of appointments including serving as a member of the National Institutes of Health Advisory Council for the Human Genome Project and the Advisory Council of the National Institute of Diabetes, Digestion and Kidney Disease as part of the National Institutes of Health.

Secretary Glisson appointed Hiram C. Polk, MD to serve as Commissioner for the Department for Public Health. Commissioner Polk, a prominent Louisville surgeon is forging the path for KDPH by emphasizing prevention, promotion, and protection for healthier communities across the Commonwealth. He is addressing the current opioid epidemic by establishing and expanding prevention programs with early childhood education (K-3) stressing the negative consequences of drug, alcohol and tobacco use. Efforts have also focused on the launch of a traveling mobile pharmacy that dispenses Narcan and offers testing for Hepatitis C and HIV. Dr. Polk has launched a weekly awareness campaign, 52 Weeks of Public Health, highlighting public health efforts to accomplish the goal of being the "healthiest nation in a generation". With Dr. Polk's leadership, KDPH is actively preparing for accreditation with the intention to submit all required documentation to the Public Health Accreditation Board by September 2018.

Dr. Henrietta Bada, a neonatologist with the University of Kentucky was appointed to serve as the Director for the Division of Maternal and Child Health within the Department for Public Health as well as Kentucky's Title V Director. Dr. Bada also serves as the Mary Florence Jones Professor and Vice Chair of Academic Affairs of the Department of Pediatrics, University of Kentucky where she also practices clinical neonatology. Dr. Bada is a graduate from the University of Santo Tomas, Manila, Philippines and had her residency in Pediatrics and fellowship in Neonatology at the University of Louisville. Dr. Bada is Board Certified by the American Board of Pediatrics in General Pediatrics and Neonatal-Perinatal medicine. Dr. Bada also received a Masters of Public Health from the University of South Florida.

She has been the course faculty for the Introduction to Maternal and Child Health at the University of Kentucky, College of Public Health. The course is a prerequisite to be awarded a certificate in Maternal and Child Health. She

has been involved in clinical and basic science research for several years. Her areas of research include newborn brain disorders, perinatal addiction, and developmental follow-up. She served as Principal Investigator (PI) of the Maternal Lifestyle Study (MLS) in collaboration with other PIs from the University of Miami, Wayne State University and Brown University. The MLS is a longitudinal follow-up of children exposed to cocaine and or opiates in utero until the children reached 16 years of age. She has numerous publications with recent ones related to the findings on follow-up of children and adolescents who had prenatal drug exposure (see Attachments for CV).

Jackie Richardson continues to serve as Executive Director of the Commission for Children with Special Health Care Needs. Ms. Richardson is responsible for policy making and the administration of all programs related to specialty medical and therapeutic services for children with special health care needs, as well as the administration of the First Steps Early Intervention Services point of entry in the seven-county area including Louisville. In addition to Kentucky's CCSHCN program serving as a gap-filling direct care provider, Ms. Richardson ensures that CCSHCN assumes a leadership role in assuring state and local systems of family centered, comprehensive, coordinated care are accessible for CYSHCN. Ms. Richardson attended the University of Kentucky for undergraduate studies and received an MBA from Webster University. She also earned a Professional in Human Resources certification. Prior to joining CCSHCN, Ms. Richardson's 18-year career with Louisville Metro government included serving as chief financial officer for the zoo, internal auditor, and chief of staff for Health and Wellness.

Agency Capacity

Title V services are provided in all 120 counties to assure gap-filling services for the MCH population. Partnerships and collaboration are described later in this needs assessment summary. The basic preventive and assurance services that are provided by population health domain are described in the original needs assessment summary.

MCH Workforce Development and Capacity

MCH employs 93 public health practitioners focused on improving the physical, socio-emotional health, safety and well-being of all KY women, infants, children, adolescents and their families.

DPH/MCH Staff

Dr. Connie White, Senior Deputy Commissioner for Clinical Affairs, is board certified in OB/GYN with emphasis on patient education and preventive medical care.

Joy Hoskins, RN, BSN is Director of Women's Health, and the Director of Nursing for DPH.

Vivian Lasley-Bibbs, MPH, directs the Office of Health Equity and is a Health Disparities Epidemiologist and Healthy People 2020 State Coordinator, affiliated with national, state, civic and community based organizations.

Dr. Henrietta Bada directs the Division of MCH and is Board Certified in Pediatrics and Neonatal-Perinatal Medicine. She also has an MPH. She is actively involved in clinical and basic science research and has numerous publications.

Andrew Waters, MPH, Assistant Director for MCH has background in Epidemiology, tobacco prevention and cessation, and environmental Health. He serves as the legislative liaison for MCH, and oversees the LHD plan and budget process.

Joyce Robl, EdD, MS, CGC, MCH Data and Evaluation Officer, is a board certified genetic counselor and coordinates epidemiology, surveillance, and evaluation within MCH.

Tracey Jewell, MPH, Senior MCH Epidemiologist has over 18 years of experience in DPH and Title V.

Jan Bright, BSN, Manager, Child and Family Health Improvement Branch; manages Prenatal, Pediatric, and Oral Health Programs, and administers the Title V MCH Block Grant.

Jennifer Wyatt, MS, RD, LD manages Nutrition Services branch including; WIC, MCH Nutrition Program, statewide WIC EBT, Breastfeeding Peer Counselor Program, and WIC Farmer's Market.

Paula Goff, MS, manages the Early Childhood Development branch including; HANDS, First Steps, Newborn Screening, and Early Childhood Mental Health.

Erin Hill, manages the Health Promotions branch including; Tobacco Prevention and Cessation, Obesity Prevention

and Physical Activity.

Julie McKee, DMD, State Dental Director oversees the Oral Health program in KY, was previously the Director of WEDCO District HD and leads the effort in expanding the KY Oral Health program.

Monica Clouse, MPH is a division level epidemiologist for MCH overseeing child fatality data, KBSR, and Zika Birth Defects Surveillance.

CCSHCN

With 137 employees in offices throughout the state, CCSHCN strengths include organizational structure, collaborative history, financial management, and affiliation with hospitals. Needs include limited supply of providers, wait time for appointments, and missing skill sets such as marketing and epidemiology/data capacity.

CCSHCN Staff

Jackie Richardson, Executive Director; prior to joining the CCSHCN, she served 18 years with the Louisville Metro Government in various roles including Chief of Staff for Public Health and Wellness.

Judith Theriot, MD, Medical Director; Dr. Theriot is Board Certified in Pediatrics, a certified physician executive and a professor of Pediatrics at UL. Prior to her appointment with the CCSHCN, she served as director of a Pediatrics Clinical Research Unit at a multidisciplinary primary care clinic serving inner-city, high risk children.

Cherjuantoe Moran, Director, Division of Administrative and Financial Services; Juan comes to CCSHCN following serving with Louisville Metro Government over 19 years in various roles in the Office of Management and Budget, including Fiscal Administrator of various agencies which include Community Services and Revitalization, Louisville Zoo, and Human Resources.

Karen Rundall, RN, Director, Division of Clinical and Augmentative Services; 22 years of experience as a nurse providing pediatric care for children with special needs, including 9 years at CCSHCN.

Ivanora Alexander, Assistant Director of Support Services; Ivy holds a Bachelor of Science Degree in Biomedical Engineering and worked in the field of rehabilitation engineering for 14 years, as a service provider and later a manager, were she recommended and designed technology for children and adults with disabilities.

Mike Weinrauch, MSW, Title V MCH Coordinator; 20 years of experience with CHFS, including 10 with CCSHCN. Other areas of focus include technical assistance with foster care support programs, and general policy guidance/analysis.

Family Members on Staff

The Parent Advisory Council (PAC) and Youth Advisory Council (YAC) each meet quarterly to provide input on how to better serve KY families. In addition to 105 trained family support parents, 16 PAC members, 9 YAC members, and the agency's Executive Director, the following family members of CYSHCN serve on staff:

Co-Director, F2F: Debbie Gilbert served on the Council on Developmental Disabilities for 6 years, having worked with many disability groups. She is currently State Coordinator for Family Voices, and state affiliate of Parent to Parent of KY.

Co-Director, F2F: Sondra Gilbert has 13 years experience writing Individual Education Plans for CYSHCN. Sondra has been a volunteer in the Owensboro school district, is appointed to the Council on Developmental Disabilities, and serves on the Regional Genetics Collaborative.

CULTURAL COMPETENCE

MCH partners with the Office of Health Equity (OHE) to promote activities to raise awareness on health inequities. This includes using the Bridges Out of Poverty and Bridges into Health curriculums as tools to enhance understanding of how our personal biases influence health decision making. OHE provides face-to-face training on all aspects of cultural competence for communities and programs. There are currently two modules on TRAIN available when face-to-face is not available. OHE prepares the biennial Minority Health Status Report to inform key decision makers about health disparities and inequities that affects Kentuckians. In addition, OHE collaborates with the Kentucky Behavioral Risk Factor Surveillance System to ensure oversampling of the largest minority populations

within the state as an additional data source to provide more focused programming efforts to address health disparities.

The OHE is instrumental in the use of the Community Health Improvement Plan to determine prevailing health and security needs of the community and representing the underserved and marginalized, such as the homeless, Lesbian, Gay, Bisexual, Transgender (LGBT), elderly, and Veteran populations.

OHE works with the faith based community and existing social networks along with spiritual leaders, to address disparities in churches, within the African-American community using faith based models. They also work with the Kentucky Functional Assessment Needs teams to collaborate with other community partners in addressing cultural and social norms specific to minorities and the underserved in the event of natural or man-made disasters. In addition, OHE applies for grants to assist in adequately meeting the needs of culturally diverse groups.

Academic partners collaborate with OHE to provide content area expertise to ensure holistic training and professional development of students in the health sciences. The areas covered include; cultural competency, health literacy and social determinants of health, and other social injustices related to health inequities.

OHE is currently outlining guidance for health in an all-policies approach in addressing health inequities to be incorporated in the department strategic plan and infused throughout all state public health programs.

PARTNERSHIPS, COLLABORATION, AND COORDINATION

Partnerships with state agencies and community partners extend the reach and influence of MCH on behalf of mothers, infants, children and adolescents. MCH and CYSHCN programs strive to work collaboratively with other federal partners and private organizations to help meet aligned agency goals and to address the priority needs of the MCH populations. CCSHCN plays a critical role in coordinating partnerships to assure that the needs of this group are met. With a 90-plus year history of service provision, CCSHCN has developed relationships with a variety of programs providing services to children.

Five Year Needs Assessment Summary (Update)

Kentucky's (KYs) Title V Program continued the needs assessment process in the past year by convening a group of stakeholders to continue discussion of the priority topics that were identified in the 2015 Needs Assessment and identify potential strategies for the State Action Plan to address KY's national (NPM) and state (SPM) performance measures. The meeting was held on December 11, 2015 with 81 participants representing a diverse stakeholder group, including families, family organizations, professionals, and advocates. Ninety-five percent of the participants reported that they were interested in continuing to participate in discussions about maternal and child health priorities and performance measures.

The Title V director provided an overview of the priorities identified in the needs assessment and a description of the performance measures chosen for each domain to begin the meeting. Participants then began small group work based on their chosen area of interest. Each interest group had 4 to 14 participants, and a facilitator and content expert. Each small group was asked to respond to 3 questions:

1. What is currently working–in KY or across the nation–to address this topic?

2. What are the gaps that exist in addressing this topic for mothers and children [including children and youth with special health care needs (CYSHCN)] in KY?

3. What strategies would be most effective for KY to implement or enhance to improve outcomes and "move the needle" on the performance measure for this topic?

Participants were asked to prioritize the responses developed by their group for the gaps (question 2). After discussing most effective strategies (question 3), they prioritized strategies from their list, and then assessed the feasibility of the identified strategies. Using a matrix, participants rated the priority strategies on a scale of 1 to 5 for the following questions: addresses a gap, economic/social impact, the state's ability to implement the strategy, and if you could address only 1 strategy, how important is this one.

A summary of the findings from this stakeholder meeting are described below by population health domain. The topics covered included:

- Women & Maternal Health: Maternal Morbidity (NPM #2)
- Perinatal & Infant Health: Infant Mortality (NPM #4 and NPM #5)
- Child Health: Child Abuse & Neglect (SPM #2)
- Child and Adolescent Health: Child Injury (NPM #7); Child Obesity: Physical Activity (NPM #8)
- Children & Youth with Special Health Care Needs: Transition (NPM #12) & Access to Care (SPM #3)
- Cross-Cutting: Neonatal Abstinence Syndrome (NAS) (SPM #1), Oral Health (NPM #13), Tobacco (NPM #14), & Insurance Coverage (SPM #5)

Women and Maternal Health:

Maternal Morbidity. Gaps identified included a lack of a standard for induction of labor, lack of education (health care providers about active labor management and pregnant women), and a lack of hard-stop policies in birthing facilities. Strategies that were identified included: 1) Identify and educate facilities without hard-stop policies; 2) Improve provider education around substance abuse and its effect on pregnant women; 3) Non- or reduced payment for elective deliveries; 4) Centering Pregnancy or similar group prenatal care programs.

Perinatal and Infant Health:

Breastfeeding. Gaps identified included a lack of International Board Certified Lactation Consultants (IBCLCs) at birthing facilities, lack of perinatal and postpartum support for breastfeeding, and a lack of acceptance at the family, workplace and social levels. Strategies that were identified included: 1) Buy-in from hospitals and providers that

IBCLCs are needed, using communication and education with data, customer satisfaction surveys, and Maternal Practices in Infant Nutrition and Care (mPINC) surveys from the Centers for Disease Control and Prevention; 2) Increase the number of qualified providers for lactation consulting and increase number of referrals for outpatient consultation; 3) Improve education for medical providers, such as website, continuing medical education on breastfeeding, etc; 4) Administer a statewide campaign to promote normalcy of breastfeeding with partners.

Safe Sleep. This table discussed both Safe Sleep and the topic of Child Injury. Gaps identified included a need for education (problems/risks associated with unsafe sleep, lack of consistent messaging, changes to social/cultural norm), the need to connect safe sleep with other prevention messages related to infant health, and a lack of consistent language when discussing the topic (e.g. avoiding terms like accidental suffocation and strangulation in bed). Strategies that were identified included: 1) Send information on safe sleep/abusive head trauma/car seat safety to all parents when sending birth certificates; 2) Family court requires safe sleep/abusive head trauma/child safety training for all foster, adoptive, and grandparents; 3) Combine safe sleep with other infant risk issues; 4) Legislation mandating safe sleep education in hospitals for all parents.

Child Health:

Child Abuse and Neglect. This was the largest interest group, with 14 individuals; a diverse group including a pediatric trauma surgeon, an obstetrician, a child abuse pediatrician, child welfare, mental health, and general pediatrics. Gaps identified included educational needs (effective education for professionals and caregivers, lack of understanding adverse childhood experiences (ACEs), lack of consistency among agencies and resources, lack of data on the topic, and the need for substance abuse treatment programs for parents and caregivers. Strategies that were identified included: 1) Long term data collection and evaluation; 2) Recommend to the Department of Education that an age-appropriate educational curriculum include social-emotional skills; 3) Marketing/public education campaign about short- and long-term adverse effects of ACEs; 4) Develop strategies for statewide training and education.

Child Injury. Gaps identified included inadequate access to behavioral health and educational needs (consistent across all demographics, especially effective car seat usage). Strategies that were identified included: 1) Education, partnerships and collaborations for healthcare professionals on getting patients into behavioral health treatment (suicide prevention, substance abuse, depression); 2) Graduated driver's license education for parents (e.g. passenger restriction, curfew).

Child and Adolescent Health:

Physical Activity(PA). Gaps identified included lack of funding for PA programs, lack of regulations in schools, and lack of parental engagement. Strategies identified included: 1) Training and technical assistance for people who work in PA: early childhood education/care staff, schools, staff/worksite wellness to educate parents and community; 2) Community and family engagement/buy-in: consistent messaging, relationship building (local leaders), identify a community champion, utilize the media; 3) Top-down funding and coordination of funding streams that affect children who receive PA services; 4) Advocate for the state to have regulations in schools, programs, early childhood education, etc. regarding PA requirements (refer to what other states have enacted successfully).

Children & Youth with Special Health Care Needs:

Transition. Gaps that were identified included a lack of access to quality adult and pediatric specialty providers, need to access employment/work for individuals with disabilities, lack of connecting to all children with special health care needs through independent case management, mindset on living with disability versus quality of life in pursuing access to service, and need to assist aging-out youth in foster care to benefit from access to services/college through extended commitment. Strategies identified included: 1) Utilizing non-clinical support to analyze regional data; 2) Establish ongoing relationship with schools so they can refer for education regarding available services; 3) Increase the number of schools participating in Disability Employment Awareness activities.

Access to Care. Gaps identified included lack of data sharing between agencies, lack of provider capacity, challenges associated with the rural nature of KY, need for payment reform for coordinated care and multidisciplinary

visits, and a need to engage those who haven't accessed care. Strategies identified included: 1) Shared vision, leadership, and strategy regarding data sharing and use; 2) Telehealth, including tools and education for families; 3) Improve skills and capacity of current providers.

Cross-Cutting/Life Course:

Substance Abuse/Neonatal Abstinence Syndrome. The gaps identified included a lack of a Center of Excellence to coordinate education and treatment efforts, lack of standardized guidelines for treating mothers and babies as well as maternal screening/referral, lack of funding for treatment, and a lack of communication across both providers and agencies. Strategies that were identified included: 1) Create a Center for Excellence for public and private education, website, grant writing, standardized guidelines; 2) State and regional collaboratives, including many partners, to disseminate quality, research, treatment, long-term outcomes, child development, etc. to educate public and private entities; 3) Proactive legislation to create a Center for Excellence, including "treatment as the first response"; 4) Continued data collection and dissemination; 5) Develop standardized guidelines for maternal screening and treatment (e.g. Screening, Brief Intervention, and Referral to Treatment; Assessment, Counseling, and Educational Services).

Oral Health. This was the second largest interest group with 13 participants, including university, public and private partners. The State Dental Director served as the facilitator. Gaps identified included a lack of collaboration between obstetrics/primary care providers and dental providers, limited school-based dental services, a gap in services for 1-3 year olds, and a lack of Medicaid reimbursement for providers. Strategies identified included: 1) Opt-out school based dental services; 2) Expand sponsoring agencies for public health dental hygienists; 3) Establish a soda or sugar-sweetened beverage tax, earmarked to oral health and obesity prevention; 4) "Statewide" oral health delivery framework.

Tobacco. Gaps identified included limited secondhand smoke exposure data, limited access to resources, lack of innovative ways to reduce barriers for high risk pregnant women, inconsistent assessment of tobacco use at every clinic visit, and a lack of alternative access routes to the Quit Line services. Strategies identified included: 1) Administrative public health forms should assess other household members' smoking status; 2) Encourage other household members not to smoke in the house or car; 3) Birth records should access and capture details of father's smoking and other household members' smoking status; 4) Electronic medical records should be empowered to transmit information to or be linked to the Quit Line who will initiate a call to people who smoke; 5) Continuing medical education using centralized evidence-based resources tailored to patients.

Insurance Coverage. Gaps identified included the high cost of insurance (premiums, co-pays, deductibles), inconsistency in coverage (multidisciplinary meetings, therapies such as speech, physical), and limited provider/specialist networks. Strategies identified included: 1) Maintain Medicaid expansion and access to health benefits exchange; 2) Take current data from the National Committee for Quality Assurance on all insurance companies and identify gaps; 3) Additional waivers for special health care needs; 4) Community experts and patient advocates to assist people in navigating benefits, appeals, and claims; 5) Increase the number of providers with loan repayment to help stay in KY.

Following the small group work, the top strategies prioritized by each small group were put on flip chart paper and hung on the back wall. Each team reported out a summary of the discussion from their table so that everyone would have some information on each of the strategies selected. The meeting concluded with all stakeholders participating in a departing "dot" activity: Participants were instructed to review all of the day's top strategies identified by each team, and were given three "Dots" to place on any strategy. They were instructed to place one dot on each of the three strategies that they felt were the most important and feasible for maternal and child health work in KY. The table below summarizes the results of the final prioritization of strategies by participants for the top ten strategies.

Rank	Topic	Strategy	# of dots
1	Maternal Morbidity	Providers asking about substance abuse in order to educate	28
1	Oral Health	KY soda (sugar-sweetened beverage) tax earmarked for oral health & obesity	28
3	Child Injury/Safe Sleep	Family court to require safe sleep, abusive head trauma & car seat education to all taking home/caring for an infant	26
4	CYSHCN: Adequate Insurance Coverage	Maintain Medicaid expansion & kynect	24
4	Substance Abuse/NAS	Proactive legislation to create a Center for Excellence including treatment as the 1st response	24
6	CYSHCN: Access to Care	Telehealth capacity: use telehealth to educate families	23
7	Child Abuse and Neglect	Recommend Dept of Education develop age-appropriate educational curriculum that includes social emotional skills	22
8	CYSHCN: Transition	Increase number of high schools participating in disability employment activities by collaborating with regional interagency teams & new transition efforts	20
9	Child Obesity: PA	Advocate for state regulations in schools, early childhood education programs, PA programs regarding PA requirements (Refer to other states success)	18
10	CYSHCN: Access to Care	Improve skills/capacity of current providers	17

The input collected at this meeting informed the ongoing development of the state action plan. Stakeholders who wanted to remain involved were added to a list serve for ongoing communication.

Five-Year Needs Assessment Summary
(as submitted with the FY 2016 Application/FY 2014 Annual Report)

II.B.1. Process

Five Year Needs Assessment Summary

The 2015 KY Title V Needs Assessment was conducted by the KDPH MCH and KY CCSHCN with support provided by the University of KY College of Public Health (UK CPH). Throughout 2014, the planning committee gathered and analyzed information from LHD staff and consumers, CCSHCN clinic staff and families, and a diverse group of MCH stakeholders.

THE PROCESS

The planning committee had three goals for the 2015 MCH Needs Assessment process: to thoroughly examine the health status of the population health domains using quantitative and qualitative data; to identify priorities for the Title V program over the next five years; and to achieve this work with an unprecedented level of integration between the two agencies.

Quantitative and qualitative methods, data resources

To measure progress on current priorities and build evidence to identify new priorities, KY used quantitative and qualitative analysis techniques. The quantitative and qualitative data resources and a brief description of the process are described below. Selected results from the data resources will be presented under MCH Population Needs.

Quantitative Data Resources

MCH Fact Sheets: Sixteen MCH fact sheets (Attachment A) were developed from May to December in 2014 by Title V staff and practicum MPH students from the UK CPH. Using state-level data such as Vital Statistics, the Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Surveillance System as well as national surveys, fact sheets were developed as the foundation for needs assessment efforts.

National Survey of Children's Health (NSCH) & National Survey of Children with Special Health Care Needs (NS-CSHCN) Analysis: To enhance data capacity and review outcomes for KY CYSHCN, survey results for the 2011/2012 NSCH and 2009/10 NS-CSHCN were analyzed to compare KY outcomes to HRSA Region IV and the Nation. The results examined core performance outcomes, inequities between CYSHCN and non-CYSHCN, and the prevalence of select conditions (Attachment B).

Consumer/Family Survey Analysis: A consumer survey (English and Spanish) was distributed in county and district health departments and CCSHCN clinics across KY in May. A total of 3,361 surveys (813 from CCSHCN families) were returned. The UK CPH team examined statewide results and compiled LHD and regional CYSHCN reports for sites with at least 75 completed surveys. A detailed report on the survey is in Attachment C.

Stakeholder Survey: In October, a survey was developed to prioritize topics identified by the consumer survey. The criteria and weight (wt) used for prioritization included: seriousness of issue (wt=2); economic and social impact (wt =1); state's ability to prevent, improve, or impact the issue (wt =3); and overall importance of the issue to the rater (wt =2). The survey was distributed to all potential attendees of the stakeholder meeting as a "pre-meeting" assignment. One hundred and sixty-four responses were received, and weighted by domain and overall. Results were presented during the stakeholder meeting.

CYSHCN Prevalence Estimates for Select Conditions: In an attempt to better estimate the prevalence of five chronic conditions (Asthma, Diabetes, Epilepsy, Allergies and Attention Deficit Hyperactivity Disorders [ADHD]) within the Commonwealth and CCSHCN Regions, staff at CCSHCN conducted a research project using KY Dept. of Education (KDE) data tracking condition and diagnosis data for students requiring health service accommodations. KDE provides information

on the number of children with a specific condition at each of their public schools. These numbers were summed and then compared to county-level school enrollment statistics, allowing CCSHCN staff to estimate the proportion of children affected by county for each condition. This proportion was then applied to the total population of all children (ages 5-19) in each county and estimates of the true prevalence of each condition were extrapolated. These estimates were compared to CCSHCN electronic patient data system (CUP) to identify gaps, if they existed, at the state and CCSHCN regional office level.

Qualitative Data Resources

Focus Groups: In September and October of 2014, MCH LHD and CCSSHCN staff volunteered to participate in focus groups that were held in 10 KY sites with one Central pilot site: 2 Eastern, 4 Western, and 4 in North/Central KY. CYSHCN parent involvement was included where possible. The intent of the focus group process was to critically examine topics from the consumer survey and identify major themes of importance to communities. Four topics were discussed: Substance Abuse; Child Abuse/Neglect; Services and Resources for CYSHCN; Access to Care – Medical, Dental and Mental Health. Participants ranked these topics specific to their impact on the community, provided details about each problem based upon experience, and discussed what was working in their communities to address these issues. The focus groups had a total of sixty-six participants with an average of 6 per group. At least one CCSHCN staff member and/or parent representative was present at all sites. Group membership was primarily female with an average of nearly 14 years of public health experience. The fields of nursing, social work, public health and other areas represented. Focus groups were transcribed and recorded. UK CPH conducted the focus groups and completed the data analysis.

Hospital Community Health Needs Assessments (CHNA): The ACA requires non-profit hospitals to conduct a CHNA at least once every three years. Non-profit hospitals throughout KY were identified and a search was conducted for a CHNA document for each. Of 125 identified hospitals, 73 CHNA documents were identified and reviewed. Details within the CHNA documents varied substantially; however, MCH problems and needs were quickly identified with several topics raised as issues of critical importance to hospitals and their communities.

Stakeholder Meeting: Stakeholders registering for the November meeting were asked to select a domain area and then assigned, in small groups (8-10) to their selected area. Eight groups were formed in total – Women/Maternal (1); Perinatal (1); Child (3); Adolescent (1); CYSHCN (2). Each group included a facilitator and subject matter expert familiar with data available in the domain to assure that discussions focused on measureable, achievable targets.

With nearly 100 individuals in attendance, the meeting began with an overview of the Title V mission and evidence collected to date. KDPH and CCSHCN leadership used this time to set the stage for the work to come - challenging the participants to identify priorities for the domains. Those in attendance would discuss and vote during the small group work portion of the meeting.

Each small group was given 3-5 topics determined by consumer and stakeholder surveys, and was asked to select the two most important topics by voting. The two issues selected would determine their discussion for the remainder of the meeting. The discussion addressed what communities were currently doing to address the topic, what gaps exist, what participants wanted to see happen in communities, and action steps necessary to implement their ideas. Upon completion of the small group work, participants reconvened for a report out by each group. The three gaps identified for *each* of their two topical areas were reported, and these were the subject of the final vote of the day by all participants.

II.B.2. Findings

II.B.2.a. MCH Population Needs

MCH POPULATION NEEDS

Women's and Maternal Health

Overview: The statewide consumer survey identified the top issues for women as *overweight/obesity* (56.5%), *drug/marijuana use* (34.3%), *depression* (30.0%), w*omen who smoke* (23.1%) and *secondhand smoke* (22.6%), with other

comments including *domestic violence, abuse, Hepatitis C* and *poverty*. **Prioritization by stakeholders resulted in the following ranked priorities for this domain: *substance abuse*, *overweight/obesity*, *pregnancy/health problems related to pregnancy*, and *mental health*.** The priority topics in KY have not changed since the 2010 needs assessment although the order has changed with substance abuse becoming the leading concern.

Strengths and Needs: Strengths that were identified include few reported problems obtaining family planning services, WIC vouchers, or seeing a doctor for care during pregnancy or yearly checkups based on the consumer survey. Regional differences were noted with concerns about drug use higher in the East (46.9%) than the West (22.9%). Concerns about mental health, problems related to pregnancy, and sexually transmitted diseases (STDs) were more common in Western KY.

Drug abuse was the top concern across KY hospital Community Health Needs Assessments with discussion of prescription and non-prescription drug addiction; lack of rehabilitation services and inpatient facilities as well as limited substance abuse counseling. Tobacco and alcohol abuse, domestic violence (and the need for shelters) were also common concerns. Availability of mental health services for all ages and obesity were also raised by community hospitals. Further, a need for specialists in obstetrics/gynecology and maternal fetal medicine, a need for coordinated obstetric care, and more resources to support chronic diseases (particularly diabetes) were also documented.

Needs identified based on stakeholder input included a lack of comprehensive substance abuse and mental health treatment options (residential and outpatient centers) and the need for prevention and early intervention services. Shortages of mental health providers and long wait times for substance abuse and mental health treatment, even during pregnancy, were primary concerns. A need for developing support groups outside of 12-step/referrals and treatment facilities available for those unable to pay were identified. Education about substance abuse and mental health issues for professionals across many disciplines was noted. Stakeholders also discussed a focus on youth and prevention, collaboration across service providers, continuity of care, and the need for stricter guidelines for medication-assisted treatment.

Successes, Challenges, and Gaps: Focus group participants noted that heroin is more prevalent in urban areas with methamphetamines and prescription drugs a wider concern in rural communities. They reported few treatment options are available and waits for in-treatment beds are long, an average of three months. Addicts are selling Subutex and Suboxone on the street and Hepatitis C is increasing, particularly in Northern KY.

Tobacco use during pregnancy is known to be a concern for families across KY. KYs rate of smoking during pregnancy has decreased 9% in the past five years from 24.1% in 2009 to 21.9% in 2013, but more work must be done. Stakeholders recommended that work towards a statewide smoking ban continue.

The concern about health problems related to pregnancy and PT birth continues to be an issue. KYs rate of PT birth has been decreasing since 2007, in part due to efforts to reduce EEDs, particularly late PT births (34-36 weeks) through our Healthy Babies are Worth the Wait (HBWW) projects. In 2013, KYs PT birth rate is estimated to be 12.6%; nearing the US rate of 11.4% suggesting that the gap between KY and the US is beginning to close. In 2013, 30.6% of KY low-risk first births were delivered by cesarean section compared to 26.8% in the US. These cesarean sections were common among non-Hispanic Black women, and women over the age of 29.

Recognizing Preterm birth as a continuing problem for KY, stakeholders recommended increasing the birthing hospitals with hard-stop policies and stressed the importance of education for vulnerable populations about the risks of prematurity. They also noted that increased access to obstetric care, and extended Medicaid eligibility following delivery for both mother and baby, were important goals that would require legislative support to achieve. Finally, enhanced provider knowledge about progesterone therapy to reduce PT deliveries was considered optimal.

Programmatic Approaches: Programmatic approaches to improve the health of women and mothers include collaborative efforts with other state agencies to increase comprehensive treatment options, promotion of preconception and interconception health, and strategies to increase access to mental health services. HANDS, HBWW, and CoIIN activities should continue as well as efforts to promote smoke-free policies.

Perinatal/Infant Health:

Overview: The top issues identified by consumers for infants included secondhand smoke exposure, improper use of car seats, and preterm birth (born too early), and drug use by parents/children living in homes where drugs are used/ infants

born addicted to drugs. Over half (54%) of the comments received were about some *exposure to drugs*. **Prioritization by stakeholders resulted in the following priorities for this domain: *NAS, Preterm births,* and *Breastfeeding*.**

Strengths and Needs: Overall there has been an increase in provider education regarding NAS with special emphasis on standardizing medical treatment for infants. Additionally it was noted by stakeholders that HANDS continues to have a positive impact on preterm birth as well as our collaboration with March of Dimes and the Kentucky Hospital Engagement Network (KHEN) that is working to implement hard stop policies in birthing hospitals to reduce elective deliveries less than 39 weeks gestation. These will continue as strategies in the maternal health domain.

The Hospital CHNA overview reflected issues associated with NAS and child abuse/neglect. Needs identified by stakeholders included improvement in post-discharge care for addicted mothers and their infants, need for medical homes and providers to see these patients. Additional suggestions from the group included the immediate identification of infants diagnosed with NAS followed by the use of risk-reduction interventions to support families as they work to break the cycle of addiction. The need for legislative support, including policy development, funding and accountability, was emphasized by participants.

Successes/Challenges/Gaps: Focus group members discussed their concerns about rates of NAS in their communities and the risks for infants raised by drug-addicted parents. Exposure to secondhand smoke, while recognized by members as a significant issue, was preempted by the severe and immediate influence that drugs had on the families under their care. The number of reported cases of child abuse and neglect were increasing exponentially and, in some communities, overwhelming the safety net systems established to address them.

Breastfeeding was identified as a larger issue in the 2010 Needs Assessment than in 2015. However, our data reflects that even though we have made significant progress in breastfeeding initiation rates, there is still room for improvement and thus have chosen to continue to focus efforts on improving breastfeeding rates in KY.

Although the issue of safe sleep was not a highly ranked priority by consumers or stakeholders, our data shows an increasing number of KY infants are dying due to unsafe sleep. In 2013, 90.5% of SUIDs had at least one sleep-related risk factor documented, and over half (54.8%) of the sleep-related deaths in 2013 had bed sharing listed as a risk factor. Due to the overwhelming presence of this potentially preventable risk factor, KY has chosen to focus on safe sleep efforts in the upcoming years.

Programmatic Approaches: The Kentucky Perinatal Quality Collaborative (KPQC) has introduced an NAS quality improvement project with the goal of collecting information from partnering hospitals in KY. From there, information on best practices for treating infants with NAS will be disseminated to hospitals and maternal-infant health care providers. Initially, the focus will be on interventions for hospitalized newborns with NAS, including both medication and non-medical treatments. MCH is developing a hospital recognition program that promotes both breastfeeding and safe sleep (http://chfs.ky.gov/dph/mch/ns/KISS.htm). Continued participation in the National CoIIN efforts on Safe Sleep will remain an area of focus for KY.

Child Health:

Overview: Kentucky's children comprise nearly one quarter of the state's population. KY ranks 35th in overall child well-being according to the 2014 Kids Count. In that data, the health measures are beginning to show improvement, but measures of economic well-being and family and community are lagging. **Priority topics for children that came out of the Needs Assessment process were child abuse and neglect, pediatric obesity, and injury prevention.** Child abuse and neglect, influenced in part by substance abuse issues of parents and caretakers, was identified as a top issue for KY children.

Strengths and Needs: LHDs still serve as safety net providers, as health care networks expand across the state more children are able to access medical homes. However, particularly in rural areas, transportation remains a major issue. Two major contextual factors, substance abuse and poverty, impact the health and well-being of children in the state. In the 2015 Needs Assessment process, these topics were all prominent concerns for the children of the state.

LHD and CCSHCN consumers selected the top problems for KY children as: exposure to secondhand smoke (55.9%); child abuse or neglect (53.2%); babies born too early (prematurity) (20.5%); inadequate use of car or booster seats for infants and children (20.2%); and overweight/obesity (19.5%). Results of the 2010 consumer survey results were similar with an

emphasis on secondhand smoke exposure and child abuse or neglect. On a positive note, the consumer survey also documented that few have problems obtaining immunizations for children or WIC vouchers. The stakeholder survey identified child abuse and neglect as the top priority for children, followed by obesity and developmental screening. Obesity will be dealt with in the Adolescent Health Domain. Developmental screening fell to a lower priority in the overall ranking of needs, but is noted in the discussions of child abuse in the stakeholder small groups (see below).

Successes, Challenges, Gaps: Stakeholders identified as strengths the increased awareness of child abuse and particularly the laws requiring education on pediatric Abusive Head Trauma (AHT), laws for child safety restraints, and places to check for proper car seat installation as positives that are currently helping address the problem. They noted that particularly in rural areas, many people were not aware of resources. This was compounded by lack of knowledge and siloed approaches by service providers. Lack of knowledge of parenting and child development came up frequently, as did lack of mental health and substance abuse treatment services. Lack of support for families was identified including difficulty accessing affordable child care, lack of family friendly work policies, lack of educational opportunities for parents, and concern about stigma as a deterrent to accessing needed services. Local CFR teams were seen as successful efforts to address injury prevention in their communities, but the need for more local data for local action was a gap.

Programmatic Approaches: Stakeholders identified a number of programmatic approaches as working well, including local CFR teams, the Strengthening Families initiative, and mandatory pediatric AHT education. They noted the HANDS home visiting program positive outcomes of HANDS, including reductions in child abuse and neglect, and encouraged the continuation and expansion of this program. Focus group participants also recognized HANDS for the positive difference it was making in the Commonwealth.

In addition, stakeholders suggested efforts that included integration/co-location of mental health and physical health providers, reducing stigma for mental health and substance abuse treatment, making coping skills part of the school curriculum, more child care assistance, more coordination between substance abuse treatment providers and child protection workers, improving transportation, involving faith based groups, and promoting community health workers. While the Title V agency does not have direct authority over many of these, Title V is working to influence and impact all of these through partnerships and interagency collaboration.

Adolescent Health

Overview: The statewide consumer survey regarded *drug or marijuana use* (60%) the top issue for the adolescent population with *teen pregnancy* second at 55.4%. Concerns for *teen smoking* (28.9%), *exposure to STDs* (17.3%) and *overweight/obesity* (16.5%) followed. Survey results were similar to 2010, with overweight/obesity replaced by injuries or deaths associated with motor vehicle accidents. **Prioritization of the leading topics by stakeholders resulted in the following ranked priorities for this domain: *substance abuse*, *overweight/obesity*, and teen pregnancy.**

Strengths and Needs: Regional survey results included concerns about drug use being higher in Eastern and Central KY (63.9% and 63.2% respectively) compared to Western KY (51.3%). Eastern KY ranked motor vehicle accidents as a concern, while the risk of STDs and teen self-harm were more serious in Western KY.

Substance abuse exposure and use in adolescents dominated discussions throughout the needs assessment process, as did poor mental health, stress associated with bullying and lack of community-level resources for teens. Stakeholders discussed youth living with families addicted to drugs and the resulting depression and isolation that permeated their lives.

The CHNA hospital scan revealed the need for drug abuse prevention (including smoking) and more mental health services. Hospitals expressed concern about depression, anxiety, overweight, obesity and diabetes among youth in their communities.

Adolescent fatalities due to drug overdose now exceed those caused by motor vehicle crashes. Increased rates of Hepatitis C when injecting heroin with dirty needles were particularly high in Northern KY. Western KY reported families as fearful to discuss their child's weight with doctors they may not address this and just tell parents the child is fine. LHDs are not equipped to see teens for substance abuse, and referral to a community mental health center or private substance abuse provider usually has a long wait time. Western KY stated immunizations may not be given in private physician offices, or for certain types such as Varicella, they send patients to the LHD. One comment was if immunizations were solely handled through LHDs everyone would get the right ones at the right time. Central KY cited the need for more public education on substance abuse.

Successes, Challenges and Gaps: Teen pregnancy, although declining in KY, varies by race and region of the state. While KY's rate per 1,000 has declined 28% since 2008, the greatest impact is reported among Black women, with a 46% decrease in teen births, a greater decline than that observed in the U.S. (30%) over the same time frame. Yet KY's rate remains one of the highest, ranking 5th among all states and the District of Columbia.

Needs or gaps identified for teen substance abuse included lack of residential treatment centers, too few school-based services and drug counselors, lack of proactive treatment, and the need to educate teachers and other school employees on early signs of drug use. Suggestions include increased positive youth development, peer support, more local treatment options, and family support.

Obesity discussions included needed parent education and support by the school system, with such barriers as the cost of healthy foods and lack of knowledge about healthy eating. A reduction of physical education and activity in schools with increased media time at home increases the problem. Improvement ideas included regular health education and student wellness programs for all grades. Parental education on healthy lifestyles is needed along with community agency engagement, and a statewide physical education requirement policy change.

The 2014 State of Obesity Report cites KY as the worst in high school student obesity at 18% and 8th worst in obesity among 10-17 year olds at 19.7%. Based on 2013 KY Youth Risk Behavior Surveillance System (YRBSS) data, 22.5% of high school students were physically active for at least 60 minutes per day on 7 of the past 7 days compared to 27.1% in the Nation. Non-Hispanic Black students were less likely to have this much physical activity (15.3%) compared to non-Hispanic Whites (23.6%), and only 15.4% of female high school students had this level of activity compared to 29.5% of male students.

Programmatic Approaches: The Coordinated School Health Program addresses obesity and overall youth well-being by increasing the number of schools with leadership trained in the SHAPE program, increasing the number of schools with a school wellness policy and CSPAP. The 5-2-1-0 campaign is designed to give parents, healthcare professionals and child care providers a memorable way to talk about the key evidence-based behaviors that reduce childhood obesity before the teenage years.

Children and Youth with Special Health Care Needs

CCSHCN saw *improvement* in 6 of 8 measures from 2009-2014. The number of infants screened for hearing revealed a slight decline, due in part to better tracking and an increase in home births. Obesity rose slightly in 2013 and 2014 although no trend is evident over the 5-year period. CCSHCN faces challenges associated with completing the transition from a traditionally direct service role to an assurance role with regard to ensuring statewide systems of care and infrastructure-building. The gulf between the number served in CCSHCN specialty clinics (approximately 9400) and the estimated population of CYSHCN (197,000) illustrates the issue, as does the fact that KY's rate of CYSHCN is the highest in the country. CCSHCN looks to fill gaps in services–not necessarily through provision of direct care, but by ensuring integrated services exist in communities where CYSHCN live. As 2015 progresses, CCSHCN intends to leverage partnerships, TA, and community resources to emerge with a robust plan to strengthen and enhance the overall system of care for CYSHCN in KY.

When asked about needs for CYSHCN, survey respondents said that their greatest concerns are ensuring the ability of families to receive services, ability to find insurance to pay for care, and availability of developmental, social, and emotional screening services. Training and support for children with behavioral issues, and finding doctors who can provide care were the last two priorities. When this category was examined using only data from families of CYSHCN enrolled in CCSHCN clinical programs, priorities varied slightly. The need to find insurance moved off the list completely and was replaced by concerns about finding doctors to provide care as the second issue. Training and support for children with behavioral issues moved to the third priority and the need for early identification of special health care needs was added to the list. When responses were examined by region, statistically significant variations occurred. Finding doctors who can provide care was of greater concern in Western KY than in Eastern, though the latter is known for provider shortages. Finding insurance to pay for care was more of an issue in Central KY and nearly a quarter of respondents from Eastern KY said early identification of CYSHCN was a high priority need. The need for transition services was thought to be greater in Eastern KY.

The analysis of NSCH and NS-CSHCN data compared KY outcomes to Region IV and national results overall, KY fared well; 2 outcomes are targeted for improvement: *access to community-based services,* and *Transition Services*.

When condition prevalence was examined, KY had more children living with Asthma; Arthritis; ADD or ADHD; Behavioral or

conduct problems; Epilepsy/seizure disorders; heart problems; and Cerebral Palsy. KY fared better than either Region IV or the nation in autism prevalence and blood problems. Small sample sizes in the datasets present issues in accurately analyzing disparities within the state; it is noted that with the exception of Hispanic, males outnumber females in CYSHCN prevalence in every race/ethnicity. KYs population is significantly more rural than CYSHCN nationally.

Focus groups discussed issues pertaining to CYSHCN and their families. Access to resources and services was the primary topic. Specialized providers are not available in many rural areas of KY. The lack of pediatric dentists and pediatric mental health providers was noted as were barriers families faced as they traveled long distances for needed specialty care. Professionals report that families often struggle to navigate existing systems. Sometimes services are available but unknown. Parents may be overwhelmed by responsibilities and the need for respite was frequently mentioned.

The stakeholder meeting devoted 2 tables to CYSHCN issues. Gaps identified by stakeholders included provider shortages, transportation and complexity of system navigation for families. Too few providers accept Medicaid in KY, so enrollment does not equate with access to care. Multiple possible solutions were discussed, including education of medical societies regarding barriers, creation of a CYSHCN resource hotline, increased use of telemedicine, etc. Provider capacity issues explored included lack of specialists, too few clinics, and reimbursement issues. Ideas included collaborations to provide loan repayment support for young physicians as well as increased use of physician extenders. To improve provider reimbursement, negotiations with MCOs for bundled payments for multidisciplinary clinics and special rates for CYSHCN were suggested. Stakeholders acknowledged that often families did not know what services were available and that many lived in resource-poor regions of the state. Solutions included blended funding, expanded outreach and centralized resources to help families navigate services.

Cross-Cutting/Life Course:

The cross-cutting/life course domain was not a separate domain in the needs assessment process. Instead, all topics were considered in each of the population domains, and following prioritization were reviewed to determine those topics that crossed multiple populations. Priority topics that were considered in this domain include: adequate insurance coverage, adverse childhood experiences, oral health, overweight and obesity, and substance use including tobacco use. **The priorities in the cross-cutting/life course domain that were identified through the needs assessment process are substance abuse and oral health.**

Substance Abuse

Overview: Substance abuse was, by far, the most significant priority identified throughout the needs assessment process. This epidemic is having a devastating effect on all MCH population domains; a leading priority in 3 domains: women/maternal, perinatal/infant, and adolescent. Child abuse and neglect, a priority issue in child health is linked to substance abuse.

Strengths and Needs: A significant strength in this area is the collaborative efforts that have occurred to identify best practices for comprehensive treatment options for women with substance use disorder especially pregnant women who have substance use disorder. These efforts are described in the State Action Plan.

The needs are many, but an initial focus must be access to quality, evidence-based treatment programs for individuals with substance use disorder. Consistent data is needed across age groups with consistent definitions among agencies and stakeholders.

Successes, Challenges and Gaps: Successes related to the area of substance abuse is legislation requiring reporting of NAS to MCH, and a 2015 comprehensive Heroin bill. Focus group participants noted that heroin is more prevalent in urban areas with methamphetamines and prescription drugs a wider concern in rural communities. They reported few treatment options are available and waits for in-treatment beds are long, an average of three months. Addicts are selling Subutex and Suboxone on the street and Hepatitis C is increasing, particularly in the Northern portion of the state. Related specifically to tobacco, KY has documented some progress with a decrease of 9% from 2009 to 2013, but more work must be done.

Programmatic Approaches: Communities are fighting back. Activists in Northern Kentucky are responding to the heroin epidemic through a collective impact initiative (Drug Free NKY, 2013). In Eastern KY, Operation UNITE works to empower communities and to raise awareness about drug addiction to change society norms. Efforts to improve the data related to substance abuse are important to understand its complete impact and monitor progress. Additionally, comprehensive treatment options are needed across the Commonwealth for all age groups. Stakeholders also supported comprehensive

smoke-free legislation to improve the health of all MCH populations.

Oral Health

Overview: Oral health problems, and a lack of oral health services, continue to challenge KY families. Oral health was not a top priority from the 2015 Needs Assessment, but due to its inclusion as one of six focus areas in kyhealthnow, it has been chosen as a priority of focus for the next five years.

Strengths and Need: A major strength in oral health is the increased emphasis that it has received from all levels of leadership. State General funds have been provided to build infrastructure including additional personnel for water fluoridation, epidemiology, and program management, and to establish a public health dental hygiene program with a state-level hygienist program manager. During the Needs Assessment and MCH focus groups, it was reported that dental preventive services (oral exams, sealants and fluoride varnishes) provided in LHDs and school satellite clinics fill an important gap. Too few dentists will accept Medicaid, and those dentists who do accept Medicaid children are near capacity in the number of patients they can accept. Reports also included dentists are not comfortable treating children with cleft lip and palate and other special needs. In Western and Central KY, group input applauded the fluoride varnish program, especially access for consumers through school clinics.

Successes, Challenges and Gaps: KY ranks 41st in annual dental visits, 45th in the percentage of children with untreated dental decay (34.6%), and 47th in the percentage of adults 65+ missing 6 or more teeth (52.1%). In 2015, state general funds were provided to establish the public health dental hygiene program. The program allows hygienists to provide preventative services, but the most important service provided to this at-risk population is the referral of these patients to a permanent 'dental home' in their own communities.

Programmatic Approaches: Support for existing public health dental hygiene programs is ongoing and efforts will focus on increasing the number of LHD dental hygiene programs, and promoting fluoride varnish by public health nurses. To address access for children in rural areas, the KOHP has a training program that offers general dentists practical training in pediatric techniques so that they will see this young patient population (under six years of age).

II.B.2.b Title V Program Capacity

II.B.2.b.i. Organizational Structure

ORGANIZATIONAL STRUCTURE

Governor Steven L. Beshear remains in office until December 2016. In his Executive Branch there are 11 Cabinets, the largest of which is the Cabinet for Health and Family Services (CHFS). KDPH and CCSHCN are organizationally located within CHFS. Other agencies located within CHFS include the Department for Aging and Independent Living, the Department for Community Based Services (DCBS), Department for Family Resource Centers and Volunteer Services, Office of Health Benefit and Health Information Exchange, Office of Health Policy, Department for Income Support, Department for Medicaid Services (DMS), and Department for Behavioral Health, Developmental and Intellectual Disabilities. KDPH is the state health agency; Title V is implemented through the Division of Maternal and Child Health.
The foundational statute for Kentucky MCH is within KY Revised Statute (KRS) 211.180 which gives CHFS the responsibility and authority to formulate, promote, establish and execute policies, plans and programs relating to all matters of public health. Legislation related to MCH is contained in the Overview document of the Title V Application. The majority of Title V funding is provided to LHDs to implement MCH Evidence Informed Strategies based upon the priority needs of the MCH population. Other programs supported with Title V funds include maternal mortality, regionalized perinatal care, access to specialty care (Genetics, Developmental Evaluations) and infrastructure for the MCH effort including IT systems, university based trainings, MCH workforce, and pediatric injury prevention technical assistance.

As per the mandates and authorizations in state statute (KRS 200.460-200.499), services provided by CCSHCN include:

1. Direct care gap-filling clinics for those children with a diagnosis on the agency's eligibility list. Clinic visits include access to nutritional services, social services and transitions preparation, care coordination through a registered nurse, and care provided by contracted specialty physicians. Therapists are included in clinics for children with conditions such as

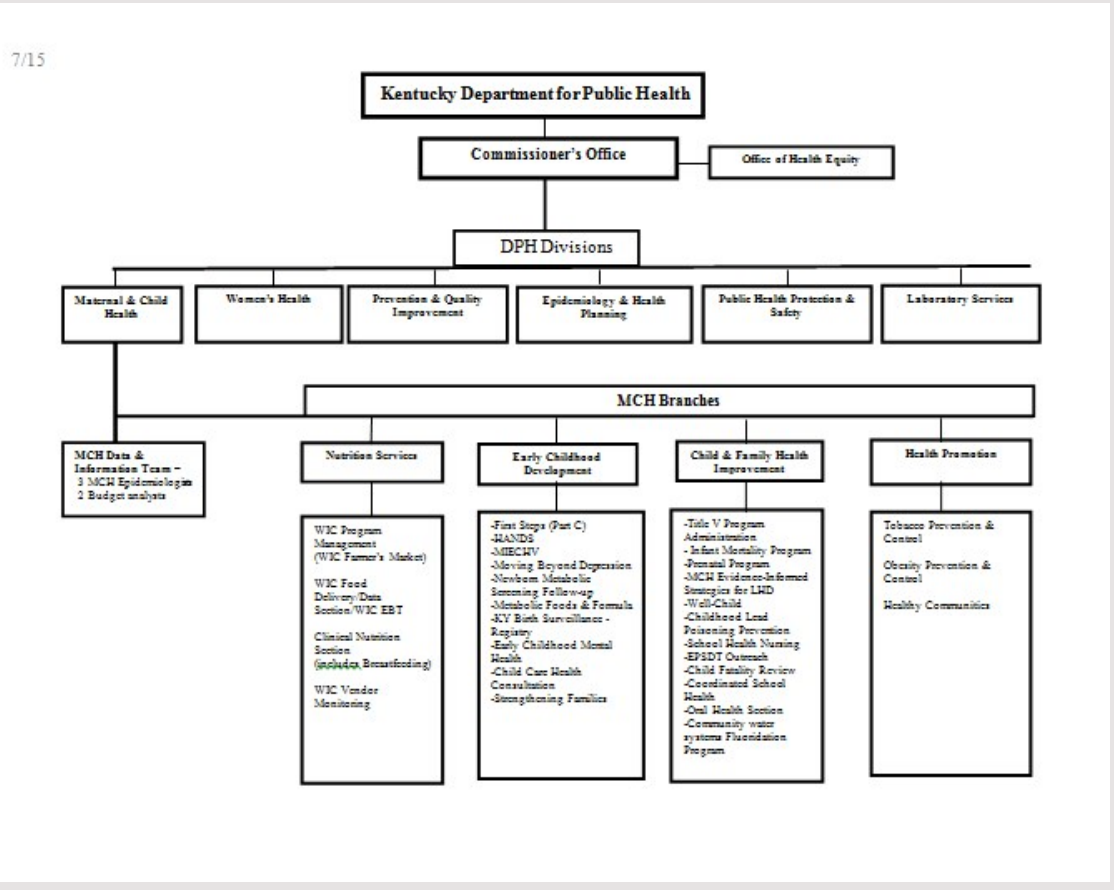
orthopedic conditions, cerebral palsy, hearing loss or other conditions that affect speech and language development. Clinics in which complex conditions are treated offer the services of multiple physicians who provide a team approach to management. Clinical services offered via telehealth are a newly added method of service delivery.

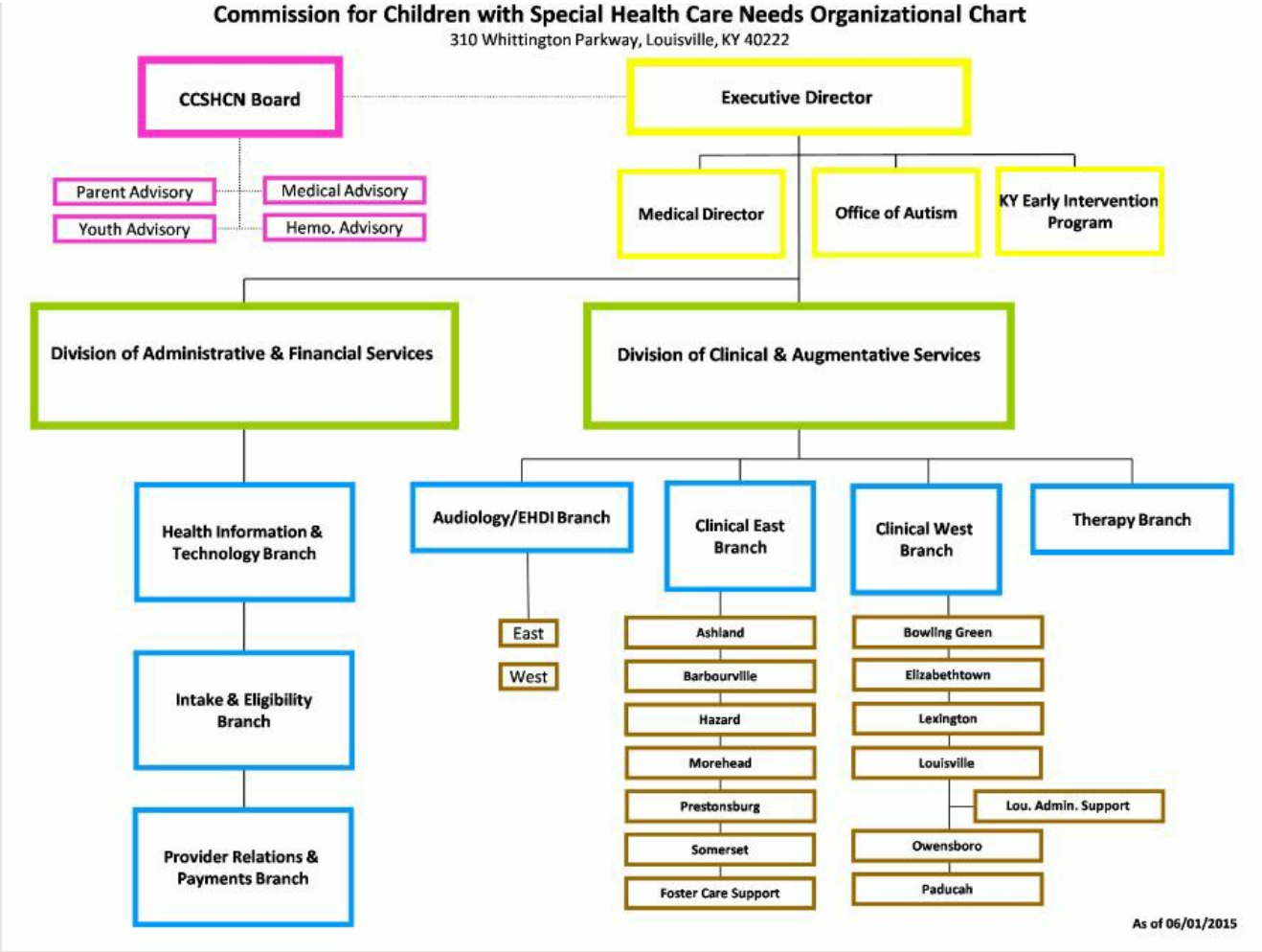
2. Audiology services, which are easily accessible and includes hearing conservation, testing, hearing aid fittings, and programming for cochlear implants. CCSHCN administers the state Early Hearing Detection & Intervention (EHDI) newborn hearing screen surveillance program.

3. Foster care support programs, which support children with special needs in the child protective service system through collaboration with the DCBS. This involves a home visitation program to meet the needs of medically fragile children placed in foster care, and a nurse consultant program which provides consultation and assistance on medical issues through nurses stationed in regional DCBS offices statewide.

4. Support for those with Autism Spectrum Disorders, which includes a statewide Office on Autism created within CCSHCN, an advisory council of community partners and service providers, and direct services provided through pilot clinics in collaboration with the UL.

5. Family to Family Health Information Centers (F2F HICs), which provide assistance to families and professionals in navigating health care systems; information, education, training, support and referral services; outreach to underserved/underrepresented populations; guidance on health programs and policy; and collaboration with other F2F HICs, family groups, and professionals in efforts to improve services for CYSHCN.





II.B.2.b.ii. Agency Capacity

AGENCY CAPACITY

Title V services are provided in all 120 counties to assure gap-filling services for the MCH population. Partnerships and collaboration are described later in this needs assessment summary. The basic preventive and assurance services that are provided by population health domain include:

Women's/Maternal Health: MCH assures the health of Kentucky's women and maternal population with direct services for prenatal, postpartum and interception care. The Prenatal Program provides gap-filling services and the statute intends that no pregnant woman in Kentucky should go without prenatal care. MCH collaborates with the Division of Women's Health (DWH) in KDPH on adolescent health, family planning & teen pregnancy prevention, and preconception/interconception care efforts.

Perinatal/Infant's Health: Perinatal and infant health in Kentucky relies upon preventative services, the promotion of nutrition and breastfeeding, and healthy beginnings for infants and young children. The newborn screening program assures that all infants born in Kentucky are screened for conditions recommended by the ACMG. The HANDS home visiting program promotes healthy birth outcomes and safe environments for KYs most vulnerable population.

Child Health: Child health programs utilize a holistic approach to promote child well-being including physical, mental, emotional, and oral health in children. Preventative services include well child exams, nutrition counseling, injury prevention, and services provided in the school setting.

Adolescent Health: Adolescents receive gap-filling services including immunizations, physical exams, family planning, and

STD screening. MCH partners with the Division of Women's Health on teen pregnancy prevention.

CYSHCN: CCSHCN has made continuous attempts to expand beyond the clinically eligible population and reach more of the estimated 197,000 CYSHCN through non-direct services. While there will always be a need for the provision of gap-filling direct services, in recent years, deliberate attention has been placed on assuming a place in a well-constructed service system. These attempts are institutionalized in the agency's strategic plan and draft standards of practice documents. CCSHCN programs are administered on a regional basis by staff located in twelve (12) offices throughout the state. Regional clinics operate with available area providers who contract with CCSHCN, and outreach and programs are based on the particular community's needs. While the formal needs assessment, program planning, and evaluation processes are functions of the central administration, CCSHCN relies on each regional office to identify solutions to localized issues and to participate in human service councils or other partnerships to advance those beyond the scope of one agency.

CCSHCN program collaborations with other agencies include formal memoranda of understanding with the KDPH for audiology referral services (as well as interpreter services) for the First Steps early intervention system, and the DCBS for foster care support and audiology services. The public health agencies collaborate through a variety of other initiatives as well, such as participation in healthy weight initiatives with the Partnership for a Fit KY and distribution of folic acid multivitamins as a preventative measure to the specific population of families of CYSHCN. Given the structure of CHFS and weekly leadership meetings, many partnerships may start at the management level (e.g. services for children with ASD, a collaboration with the state's behavioral health system), while others develop at a community level as pilot initiatives (e.g. foster care support services), originating to address an identified need in one community and expand statewide. As public programs are only one part of the array of KYs services, CCSHCN collaborates with private organizations as well, such as recently entering into an agreement with Health First Bluegrass, a FQHC, to assure medical home services for underserved populations in the Lexington area. Through a public-private partnership, CCSHCN therapy staff is housed at, and have access to the state-of-the-art equipment of the Home of the Innocents, a private facility specializing in the care of children with medically complex needs. CCSHCN's board and advisory councils include representatives from various private entities, and staff participates in committees and boards locally, regionally, and at the statewide level.

Cross-cutting/ Life Course : All MCH population domains are included in this domain. Strategies are developed to target individual population domains, but cross-cutting allows an opportunity to coordinate these strategies across the life span. This domain requires significant collaborative efforts with other agencies in order to develop a comprehensive approach for dealing with significant issues. Further details are provided in the State Action Plan.

II.B.2.b.iii. MCH Workforce Development and Capacity

MCH WORKFORCE DEVELOPMENT AND CAPACITY

MCH employs 80 public health practitioners focused on improving the physical, socio-emotional health, safety and well-being of all KY women, infants, children, adolescents and their families. MCH provides funds to the LHDs to implement Evidence Informed Strategies in alignment with MCH priorities to assure an identified person as MCH Coordinator at each local health department.

DPH/MCH Staff

Dr. Connie White, Deputy Commissioner for Clinical Affairs, is board certified in OB/GYN with emphasis on patient education and preventive medical care.

Joy Hoskins, RN, BSN is Director of Women's Health, serving DPH in MCH and WH, and the Director of Nursing for DPH.

Vivian Lasley-Bibbs, MPH directs the Office of Health Equity (OHE), and is a Health Disparities Epidemiologist and Healthy People 2020 State Coordinator, affiliated with national, state, civic and community based organizations.

Dr. Ruth Ann Shepherd directs MCH, and is Board Certified in Pediatrics and Neonatal-Perinatal Medicine, and has certificates in Business Administration, Non-Profit Management, and Healthcare Quality. She served on HHS Secretary's Advisory Committee on Infant Mortality and was a team co-lead in the initial HRSA COIIN.

Marvin Miller, MSW, Assistant Director for MCH was instrumental developing WIC, HANDS and many Well Child Programs. He is legislative liaison for MCH, and oversees the LHD plan and budget process.

Shelley Adams, MSN, RN manages Child and Family Health Improvement, Prenatal, Pediatric, and Oral Health Programs, and administers the Title V MCH Block Grant.

Frances Hawkins, RDLD manages Nutrition Services, WIC, MCH Nutrition Program, including state-wide WIC EBT, Breastfeeding Peer Counselor Program, and WIC Farmers' Market.

Paula Goff, MS manages Early Childhood Development, HANDS, First Steps and Newborn Screening. She was the Part C Coordinator in KY and Missouri, and serves on the Governor's Early Childhood Advisory Council.

Andrew Waters manages Health Promotions. He is an epidemiologist with experience in local health, tobacco prevention/control, and environmental health.

Julie McKee, DMD, State Dental Director, was previously the Director of WEDCO District HD and is instrumental in expanding KY Oral Health Program.

Joyce Robl, EdD, MS, CGC, MCH Data and Evaluation Officer, is a board certified genetic counselor that coordinates epidemiology, surveillance, and evaluation within MCH.

Tracey Jewell, MPH is the lead MCH epidemiologist for the MCH, with 17 years' experience in DPH and Title V.

Monica Clouse, MPH is a division level epidemiologist for the MCH, overseeing child fatality data and KBSR.

CCSHCN

With 155 employees in offices throughout the state, CCSHCN strengths include organizational structure, collaborative history, financial management, and affiliation with hospitals. Needs include limited supply of providers, wait time for appointments, and missing skill sets such as marketing and epidemiology/data.

CCSHCN Staff

Executive Director: Prior to appointment, Jackie Richardson served 18 years with the Louisville Metro Government in various roles, including Chief of Staff for Public Health and Wellness.

Medical Director: Judith Theriot served as director of a Pediatrics Clinical Research Unit and a multidisciplinary primary care clinic serving inner-city high risk children prior to appointment. Dr. Theriot is a certified physician executive and a professor of Pediatrics at UL.

Director, Administrative and Financial: Janaki Kannan has 12 years of government experience in various roles . She is a degreed Certified Public Accountant with a Fellowship of Cost and Executive Accountant.

Director, Clinical and Augmentative: Karen Rundall has over 22 years of experience as a nurse providing pediatric care for children with special needs, including 9 years at CCSHCN.

Director, Office of Autism: Amy Cooper-Puckett has 17 years of professional social work experience, 12 years with CHFS. Experience includes child protection, clinical therapy services, and program management.

Title V MCH Coordinator - Mike Weinrauch has 19 years of experience with CHFS, including 9 with CCSHCN. Other areas of focus include technical assistance with foster care support programs, and general policy guidance/analysis.

Family members on staff

The Parent Advisory Council (PAC) and Youth Advisory Council (YAC) each meet quarterly to provide input on how to better serve KY families. In addition to 96 trained family support parents, 16 PAC members, 9 YAC members, the agency's Executive Director, and participants on boards, the following family members of CYSHCN serve on staff:

Co-Director, F2F: Debbie Gilbert served on the Council on Developmental Disabilities for 6 years, having worked with many disability groups. She is currently State Coordinator for Family Voices, and state affiliate of Parent to Parent of KY.

Co-Director, F2F: Sondra Gilbert has 12 years experience writing Individual Education Plans for CYSHCN. Sondra has been a volunteer in the Owensboro school district, is appointed to the Council on Developmental Disabilities, and serves on the Regional Genetic Collaborative.

CULTURAL COMPETENCE

MCH partners with The Office of Health Equity (OHE) to promote activities to raise awareness on health inequities. This includes using the Bridges Out of Poverty and Bridges into Health curriculums as tools to enhance understanding of how our personal biases influence our health decision making. The OHE provides face-to-face training on all aspects of cultural competence for communities and programs. There are currently two modules on TRAIN available when face-to-face is not available. The OHE prepares the biennial Minority Health Status Report to inform key decision makers about health disparities and inequities that affects Kentuckians. In addition, OHE collaborates with the Kentucky Behavioral Risk Factor Surveillance System (KyBRFSS) to ensure oversampling of the largest minority populations within the state as an additional data source to provide more focused programming efforts to address health disparities.

The OHE is instrumental in the use of the Community Health Improvement Plan to determine prevailing health and security needs of the community and representing the underserved and marginalized, such as the homeless, Lesbian, Gay, Bisexual, Transgender (LGBT), elderly, and Veteran populations.

OHE works with the faith based community and existing social networks along with spiritual leaders, to address disparities in churches, within the African-American community using faith based models. They also work with the Kentucky Functional Assessment Needs teams to collaborate with other community partners in addressing cultural and social norms specific to minorities and the underserved in the event of natural or man-made disasters.

OHE applies for grants to assist in adequately meeting the needs of culturally diverse groups. OHE conducts community based participatory research as one method used in capturing data from diverse populations to better understand barriers to care such as; access, service delivery and other social determinants of health. This data is used to enhance program development in addressing health inequities and social justice issues.

Academic partners collaborate with OHE to provide content area expertise to ensure holistic training and professional development of students in the health sciences. The areas covered include; cultural competency, health literacy and social

determinants of health, and other social injustices related to health inequities.

The office provides a pipeline for racially diverse students and recent graduates who are interested in health disparity work by providing the opportunity to explore research interests and exposure to public health via interdisciplinary collaborations.

OHE is currently outlining guidance for health in an all-policies approach in addressing health inequities to be incorporated in the department strategic plan and infused throughout all state public health programs.

II.B.2.c. Partnerships, Collaboration, and Coordination

PARTNERSHIPS, COLLABORATION, AND COORDINATION

Partnerships with state agencies and community partners extend the reach and influence of MCH on behalf of mothers, infants, children and adolescents. Along with KDPH, MCH programs strive to work collaboratively with other federal partners and private organizations to help meet aligned agency goals and to address the priority needs of the MCH populations. In addition, the CCSHCN plays a critical role in coordinating partnerships to assure that the needs of this population group are met. The vision of the CCSHCNs is “To be the visible leader in supporting the highest quality of life for KYs children with special health care needs and their families through collaboration and creation of a more accessible community based system of support.” In accomplishing this vision, partnerships, collaboration, and coordination are essential values. The agency’s strategic plan includes specific sections on collaboration, as well as marketing and outreach (partially in the service of further collaboration). In addition to involvement on a care coordination level, several CCSHCN staff actively serve on boards and councils that further the agency’s mission. As a state agency with a 90 year history of service provision, CCSHCN has developed formal and working relationships with a variety of programs providing services to children. CCSHCN's contracted network of direct providers for clients numbers in the hundreds. CCSHCN strives to remain connected and relevant by remaining involved with outside organizations that are resources to families of CSHCN.

A more extensive discussion of partnerships and collaborations, including other MCHB, HRSA, and federal investments, as well as other government agencies, public and private partners, is found in the “Other Programmatic Activities” in the State Action Plan.

III.D. Financial Narrative

	2015		2016	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$10,637,166	$10,481,657	$11,029,949	$11,316,416
State Funds	$35,788,000	$27,530,982	$28,672,600	$29,362,066
Local Funds	$0	$0	$0	$0
Other Funds	$17,108,200	$0	$139,767	$0
Program Funds	$0	$16,869,762	$21,651,933	$19,003,467
SubTotal	$63,533,366	$54,882,401	$61,494,249	$59,681,949
Other Federal Funds	$152,586,559	$129,968,638	$129,434,229	$125,626,092
Total	$216,119,925	$184,851,039	$190,928,478	$185,308,041

	2017		2018	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$11,034,716	$11,256,327	$10,986,565	
State Funds	$31,024,500	$30,321,932	$28,718,900	
Local Funds	$0	$0	$0	
Other Funds	$0	$0	$0	
Program Funds	$26,998,206	$23,126,210	$25,975,964	
SubTotal	$69,057,422	$64,704,469	$65,681,429	
Other Federal Funds	$120,101,030	$118,916,101	$116,510,768	
Total	$189,158,452	$183,620,570	$182,192,197	

	2019	
	Budgeted	Expended
Federal Allocation	$10,963,089	
State Funds	$28,704,200	
Local Funds	$0	
Other Funds	$0	
Program Funds	$27,161,800	
SubTotal	$66,829,089	
Other Federal Funds	$122,983,288	
Total	$189,812,377	

III.D.1. Expenditures

Kentucky maintains and provides budget and expenditure data as required under the Title V Section 5050(a) of the Social Security Act. Available budget and expenditure data reflects the overall federal application and the breakdown of primary and preventive care for MCH children, children with special health care needs, maintenance of effort, and administrative costs.

III.D.1 Expenditures

Block Grant funding and expenditures are provided by the state, as are explanations for significant variations of 10% or greater in the expenditure data compared to the previous year, as reported in Forms 2 and 3. Expenditures for this section are based on actual expenditures for state fiscal year 2017 which ended June 30, 2017 while the budget is based on state fiscal year 2017. Reporting of actual expenditures may differ from the reported budget due to state fiscal year carryover and grant year amount variations. Kentucky's state fiscal year begins on July 1st and ends on June 30th, which is different from the federal grant year of October 1st through September 30th. The variance in budgeted vs. expended for FY2017 was $293,239. (Expenditures were greater than budget in financial system and will be adjusted to fit within the budget). Those funds unused within the State Fiscal Year will be spent in the first quarter of the new state fiscal year, July – September, which is the 4th quarter of the federal fiscal year. Other differences may include additional expenditures from other revenues and budget adjustments made throughout the year, but these are generally minor. The Commonwealth of Kentucky requires a balanced budget at the end of each fiscal year.

MCH has funded total expenditures using 16% from the State General Fund, 71% from Federal Funds, and 13% from Agency Funds. Maintenance of effort and match are made up of total State General Funds and Agency Funds. Details of these sources are found in Form 2.

Local Health Departments deliver Title V services for their respective county's community MCH populations. Greater than half of the MCH Title V funds go directly to expenditures for services at the LHDs. MCH's goal is to assure some level of flexibility for LHDs to meet community needs while maintaining accountability for Title V funding. Promotion of enabling, population-based, and system services within the changing healthcare landscape of KY is being utilized by KY Title V Program to off-set the decreasing direct services to MCH populations. LHDs are encouraged to partner with community providers, federally qualified health centers, and especially primary care providers to assure MCH services are available. If resources are limited or absent in the community, then the LHD provides the services to MCH populations as a payor of last resort. Title V federal funds to LHDs are managed through allocations from KPDH and monitored by the system-wide financial structure capturing all LHD expenses. Activities are reported directly to the Title V Program and reviewed monthly to assure activities and expenses align to meet MCH population needs.

Expenditures for Federal MCH Title V Program Services are divided by types of MCH services provided:

- 0% Direct Health Care for preventive and primary care for pregnant women, mothers, and infants up to 1 year of age
- 0% Direct Health Care for preventive and primary care services for children
- 51% Enabling services
- 44% Public health services and systems
- 5% Administrative Program costs

The percentages provided are estimates based on available data since KY accounting systems do not specifically identify these types of services. These percentages do not include other MCH activities funded by other federal funding sources.

Title V funds are not currently used for direct services. Past reports included direct services; however, based upon definitions provided, KY re-evaluated services and determined previously reported direct services were actually enabling services. For example, Title V funds related to services for pregnant women was considered direct services for salary support for LHD staff working for in-house prenatal programs. As well, funding used to support staff time for face-to-face medical nutrition therapy by dieticians for pregnant women and mothers was previously reported as direct vs. enabling services.

Title V funds are not used for reimbursing for direct medical claims. Title V remains the payor of last resort. With expanded Medicaid and aggressive outreach/referral, it is rare for LHDs to pay for deliveries. LHDs continue to contract with local providers, hospitals, and labs or provide in-house prenatal services to ensure the needs of this population are met. Title V funds are not used for in-hospital services as hospitals are obligated to serve the

uninsured.

It should be noted KY's largest non-federal investment in encounter driven primary and preventive services for pregnant women, mothers, and infants is the $8.5M dedicated for the core HANDS home visiting program for first time parents funded from Master Settlement Tobacco Funds. These funds provide the opportunity to leverage an additional $19M in federal funds to support Core HANDS home visitation services for KY. Since 2011, KY has received Maternal, Infant, and Early Childhood Home Visiting (MIECHV) federal funding to provide home visitation services to multigravida families (families with more than one child) in 29 counties deemed at highest risk. The most recent MIECHV award was from $7M. An additional 6.6M was appropriated in KY General Funds in 2015 to expand multigravida services not covered by MIECHV grant funding to the remaining KY counties. This funding provides assessments and professional and paraprofessional visits to nearly 11,000 families annually for prenatal populations and children through age three. Eighty-five percent of families enter this program during pregnancy. With ongoing need to address the growing population of NAS, this program provides strong supports toward a plan of safe care for the infant/child. This KY investment is not part of the Title V budget forms as it is used for the MOE requirement for MIECHV. This investment is a significant part of Title V programming.

To address needs of children, public health nurses provide well child exams, screenings, health education, and other preventative primary services. They are trained to provide fluoride varnish services in populations in which dental providers are limited, enabling this service for the school age population. Title V funds support assurance for specialty services for comprehensive developmental evaluations at university-based, multidisciplinary child evaluation centers. Non-federal MCH funds support access to specialty visits for genetics, oral health services, and the Part C Intervention services (not covered by Medicaid). Non-federal funding supports the KY Metabolic Foods and Formula program to provide foods and formula for children with metabolic disorders who lack an ability to pay for life-saving specialized nutrition.

Enabling services supported by Title V include supports for 32 LHDs to provide case management for pregnant women for time spent for referral for Medicaid presumptive eligibility, promotion of early entry into prenatal care, and assessment of need and referral for services through HANDS, WIC, smoking cessation, substance use treatment, or domestic violence counseling. Non-federal funding is used for the KY Newborn Screening Program to include referral, counseling, and follow-up to the point of confirmatory diagnosis with the specialty provider. Non-federal funding supports case management and prevention activities for children with elevated lead levels, and it supports the KY Childhood Lead Poisoning Prevention Program activities not covered by the federal grant or Medicaid.

The final amount of federal and non-federal funding in MCH goes to support Public Health Services and Systems. An example of this is funding utilized for various programs to support safe sleep education to community partners and childcare centers and to provide crib kits for needy families without a safe place for infant sleep. The Cribs for Kids program is utilized in 28 counties in KY. These counties have successfully recruited a community partner match for Title V funding to double the number of cribs available for families in need. Title V funds support workforce development trainings for prenatal and public health programs. Funds support well child assessment trainings to assure services provided by PH school nurses and school board nurses billing Medicaid are trained in best practice pediatric assessment and expanding access for well child exams and acute care visits within the school setting thus decreasing absences from school for children with acute illness or chronic health care needs.

CCSHCN has funded total expenditures using 32% from the State General Fund, 27% from Federal Funds and 41% from Agency Funds. During FY2017, the total expenditures of CCSHCN are broken down as follows:

- 53% on Direct Services such as personnel, physician contracts, Care and Support
- 6% on Foster Care Program
- 13% on Augmentative services such audiology and therapy services
- 12% on First Steps Interpreters services
- 15% on Administrative expenses

Kentucky's fiscal responsibilities in the face of rising pension costs and decreasing state revenue has created a need to review processes within MCH and with LHDs to find mechanisms of change to improve efficiencies with care coordination, program provisions, and utilization of community resources. Even with minor reductions, CCSHCN has made a commitment to preserve infrastructure and continue to serve those who are most in need. This requires careful prioritization, reliance upon partnerships, and a heightened awareness of community resources. In addition to MCH Title V Block Grant dollars, the CCSHCN receives funding from the state general, agency funds, a CDC grant, and two HRSA grants. The agency funds are generated by collaboration with other sister agencies, dividends, a Cost Report settlement, and third party/patient billings for direct patient care and care coordination.

III.D.2. Budget

The Kentucky Title V Block grant is spent in compliance with the federal requirements for utilization of those funds. KDPH retains 65.1% of Block Grant funding and allocated 41.9% of the FY2108 budget to support primary and preventive care for children. Administrative costs are less than 10% of the Block Grant funding budget. Per statute, 34.9% goes to the Commission for Children with Special Health Care Needs.

The total required $4 federal/$3 state match for KY is $8,222,317 (based on $10,963,089 award), which includes the CCSHCN and MCH. The CCSHCN is responsible for their portion of the match (34.9%, or $2,869,589) and the remainder ($5,352,728) is the responsibility of MCH. Both agencies have more than adequate funds from state general funds to meet the match requirement. KY's total maintenance of effort from 1989 is $22,552,700. As is evident on Form 2, KY's MCH effort far exceeds the match and maintenance of effort requirements. Maintenance of effort and match are made up of State General Funds and Agency Funds.

MCH's total budget for State FY18 dropped 6% since FY17. For FY18, the total MCH budget was funded from:

- 13% State General Funds ($23,079,400)
- 12% Agency Funds ($20,011,800)
- 4% Federal MCH Block Grant ($7,136,971)
- 71% Other Federal Funds ($122,983,288)

MCH feels certain that the state and agency funds required for the 1989 maintenance of effort level of $22,552,700 and the match of $8,222,317 will continue to be available in the conceivable future.

For the FY19 budget, it is anticipated $6,205,108 of the MCH Title V Grant allocation will go to LHDs to provide direct, enabling, and public health services/system-building, depending on needs of the local MCH populations. The state assures these funds will be used appropriately through a select list of MCH Evidence Informed Strategies as options, and some of the funding remains categorical. The remainder of the MCH allocation is budgeted for public health services and systems. These include surveillance (maternal mortality, child fatality review); regionalized perinatal care; information technology systems for data collection; workforce development and trainings; and technical assistance to LHDs and other agencies for pediatric injury prevention.

Other Federal funding MCH receives includes:

Federal Grants	Grant Amounts
State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPP) SJBW-0170000L	$ 386,146
ACA Maternal, Infant and Early Childhood Home Visiting Program SJTC-013000	$ 7,076,041
State Systems Development Initiative (SSDI) SJPJ-0177000L	$ 100,000
Women, Infants and Children (WIC) SJRC-011600 and 011700	$107,407,609
Early Identification and Intervention Infants/Toddlers (First Steps) SJPB-015200	$ 6,057,324
Sudden Unexpected Infant Death (SUID) Case Registry SJPS-015300	$ 76,700
Pregnancy Risk Assessment Monitoring System (PRAMS) SJBT-019600	$ 208,312
Birth Surveillance (SJPU)	$ 210,000
KY Healthy Communities, Tobacco Control, Diabetes Prevention and Control (SJCB)	$ 1,127,751
Increasing QUIT NOW KY Reach & Sustainability thru Media Strategies, Stakeholder (SJCL)	$ 333,405
TOTAL	**$122,983,288**

Non-Federal program funding MCH receives includes:

Non-federal Programs	Amounts
Maternal and Child Health SJB	$ 2,029,300
Oral Health SJB4/SJBR	$ 1,059,400
KEIS Gen. Funds ONLY SJPA/SJPB	$ 8,966,600
Genetics SJPF	$ 177,800
Newborn Screening SJPL/SJPK/SJPE/SJPF	$ 1,654,000
HANDS GF SJTE	$ 6,692,300
Healthy Start S4TA	$ 1,000,000
ECD Mental Health S8TA	$ 1,000,000
ECD Oral Health S9TA	$ 500,000
TOTAL	**$23,079,400**

CCSHCN's total budget for FY2018 was neutral in comparison to the FY2017 Budget year. CCSHCN expects to fund the total budget from:

- 33% State General Funds
- 23% from Federal MCH Block Grant
- 2% from other Federal Funds
- 42% from Agency Funds

CCSHCN is certain that the State General Funds and Agency Funds will continue to be made available to support the required match amount and required maintenance of effort level.

Other Federal Funding CCSHCN received in FY2018:

Federal Grants	Grant Amounts Awarded in PP16
Family to Family Health Information Centers	$ 90,000
Kentucky Infants Sound Start (HRSA/MCHB)	$ 89,125
Early Hearing Detection and Intervention (EHDI)	$145,821
TOTAL	**$324,946**

III.E. Five-Year State Action Plan

III.E.1. Five-Year State Action Plan Table

State: Kentucky

Please click the links below to download a PDF of the Entry View or Legal Size Paper View of the State Action Plan Table.

State Action Plan Table - Entry View

State Action Plan Table - Legal Size Paper View

III.E.2. State Action Plan Narrative Overview

III.E.2.a. State Title V Program Purpose and Design

As noted in other sections, KY is primarily a rural state with varied cultural, geographic, and economic barriers for assuring the mission to promote positive health outcomes for the MCH population. KY has strong alliances with LHDs, universities, and other community organizations and stakeholders to guide policy development and program efforts to support the needs of women, children, and families in KY.

As a leader in public health, the MCH Title V Program promotes evidence informed strategies (packages) for use in programming at the community level (through partnerships with the LHDs) to address the needs identified in the five-year needs assessment and any emerging needs identified by ongoing program evaluation and review, surveys, and surveillance. The goal of KY's Title V Program is to assure continuity of improved health indicators across the life course and to reduce chronic health outcomes, disparity, and mortality. These strategies are designed to support KY's chosen performance measures, while allowing the LHD to be innovative in approaches that best serve the individual community. LHDs are able to select 2-5 packages with a requirement one chosen package must address infant mortality. Through utilization of package funds, LHDs are able to leverage both Title V grant funds and local funds for promotion of activities related to:

- Abusive head trauma in infants/children
- Safe sleep education for families, childcares, and community partners
- Bullying and suicide programs
- Tobacco cessation policy in schools/community
- Access to oral health assessments and dental varnish for school aged children
- Resource and referral for prenatal services
- Education to birthing facilities to reduce early elective deliveries
- Child fatality review
- Promotion of building healthy communities
- Addressing family centered care, nurturing fathers programming and more.

LHDs are encouraged to utilize evidence-based and informed approaches to mold the packages to best fit the community needs. Title V programming through LHD efforts reaches families deep into the community through school-based programming, local clinics and community partners, faith-based organizations, and providers. Innovative programming in the packages have included community changes for establishment of walking trails, promotion of awareness activities to prevent child abuse, community service projects for teenagers for safety awareness while driving, cribs for kids, engagement of FQHCs for access to care, development of school based dental hygiene programming, and engagement of local prison systems to provide nurturing father curriculum and AHT training. Ongoing reporting of activities and programs allows for quality assurance of programming and supports accountability of funding to the LHD.

MCH collaborates with local universities for provision of assessment, screening, and treatment of premature infants, newborn screening disorders, growth and development programming, early childhood growth and development assessments, referral for evaluation, and mental health screenings for mothers and children. Collaborations with the March of Dimes, Prevent Child Abuse of Kentucky, Kentucky Hospital Association, Kentucky Injury Prevention and Research, and many other state and community agencies allows for an expanded workforce and scope to review and develop programming at the community levels to address performance measures.

At the state level, MCH workforce actively participates in multiple collaborations with DPH partners within the Department for Education, Department for Behavioral Health, Developmental and Intellectual Disabilities, Workforce Development, Council for Developmental Disabilities, Medicaid, Autism Awareness Council, Prevent Child Abuse KY, Child Fatality and Near Fatality Review, Perinatal Association, March of Dimes, Dental Health partners, CCSHCN, and other agencies. Throughout the year, staff engage community partners and organizations for education opportunities or technical assistance review of programming to promote activities to support the identified priority needs of KY. To address an emerging issue of suicide in children in KY, programming has been specifically focused on bullying and prevention trainings for school staff and community partners along with strong collaboration with the state suicide coordinator.

KY has focused on critical issues affecting the population across the full life course. By so doing, MCH recognizes there are critical periods from prior to conception throughout the lifespan that influences the health and wellbeing of the individual. Topics of vital importance for KY include substance abuse, tobacco use, oral health, obesity, and health insurance. As described in the crosscutting domain annual report and application year sections, these topics

have significant impact on KYs population.

The CCSHCN and MCH leadership collaborate and participate on state initiatives to address the needs for the MCH population. They share resources and workforce capacity for data analyzation, assessment, referral for care, and utilization of care coordination and CCSHCN functions as a point of entry for First Steps.

CCSHCN strives to address the rural needs of KY's children with special health care needs by providing access to care through regional based clinics that include care coordination, referral for services, partnerships in service delivery, and offering providers the use of space and telehealth equipment at CCSHCN locations – especially those in rural areas.

III.E.2.b. Supportive Administrative Systems and Processes

III.E.2.b.i. MCH Workforce Development

Kentucky's health care workforce was extensively studied in preparation for the Kentucky Health Benefit Exchange (KHBE) and Medicaid expansion. A Health Care Workforce Capacity Report (Deloitte Consulting, 2013) was completed in 2012. A maldistribution of providers, both physicians and dentists, is an issue as KY is primarily a rural state. Many LHDs are collaborating with the FQHC or contracting with local providers for care vs. providing direct patient services when possible.

The KDPH Education and Workforce Development Branch is responsible for ensuring a well-trained competent public health workforce at the state and local level. This branch provides training opportunities via a national public health web-based training system (TRAIN), used by MCH programs. TRAIN completes a statewide public health workforce assessment on an ongoing basis. LHDs use the results for accreditation purposes. To understand training needs, MCH participates on the KDPH accreditation team for workforce development.

MCH employs 107 public health practitioners focused on improving the health, safety, and well-being of all MCH populations. In the past year, MCH has had many vacant positions secondary to retirements/resignations impacting the capacity of the workflow and management of programs. For FY2019 MCH established two additional nurse consultant position to assist with MCH activities.

MCH supports local MCH professionals with trainings and technical assistance; funds assure an MCH coordinator at 58 LHD administrative units. The MCH workforce at the state and local level access workforce development trainings via several modalities including federal, regional, and state face-to-face meetings, webinars, and virtual learning networks such as the Social Determinants of Health CoIIN and Child Safety CoIIN. MCH programs that provide statewide services, such as HANDS and KY's Part C Early Intervention System (First Steps), have training coordinators dedicated to ensuring that all providers within their program have the critical competencies to complete their work. MCH also contracts with university partners for specialized trainings such as clinical training for well child assessments and prenatal services for LHD staff.

In order to improve MCH workforce capacity for the state, MCH established an MCH Institute at the UK College of Public Health in the fall of 2009 that included Graduate Certificate in MCH. This program has had 27 graduates, one graduate hired in MCH has promoted to Epidemiologist II. Seven students from the program received acceptance to the Graduate Student Epidemiology Program (GSEP). UK has suspended the certificate program due to staff changes. However, via independent study, the final two students will be able to complete the certification.

MCH also participates in a workforce project led by the Division of Epidemiology and Health Planning called Building Epidemiology Capacity in KY (BECKY). State and university partners train current public health students so they can provide assistance on state projects. In the past year, students have assisted with review of NBS parent education materials and the development and data analysis of a report card for birthing facilities to raise awareness of each hospital's preterm birth rate, early elective delivery, and other pertinent data.

As new staff are entering the MCH workforce, they are encouraged to attend local, state, and national trainings to build expertise in the specific program needs and critically review program processes, data management, and parent engagement opportunities to improve the scope and reach of the program. A successful example of this process is KY's Child Fatality Review and Prevention Program in which a newly hired nurse consultant has engaged an additional 20 local CFR teams and has renewed the focus of the previous teams to guide the teams to prevention efforts. A newly hired epidemiologist in the Childhood Lead Poisoning and Prevention Program has diligently reviewed current data management programs, updated the surveillance methodology, and has begun education efforts for ongoing case management and prevention through collaboration with LHD childhood lead programs.

CCSHCN has increasingly partnered with universities – initially, UK's College of Public Health and subsequently UL's – as well as MCH epidemiologists, to assist in developing data capacity for the CYSHCN domain.

CCSHCN employs 137 staff, including 38 who are funded through Title V. Consistent with the Title V mission, CCSHCN has historically provided gap-filling direct services, as well as an array of enabling services such as care coordination. Direct medical services are provided to children with defined medical conditions throughout the state in 11 regional offices. For the past several years, CCSHCN has been working toward expanding non-direct services. As of August 2015, CCSHCN employs an Assistant Director charged with achieving this goal in a deliberate and planned manner. CCSHCN goals for non-direct services include:

- Building community partnerships throughout the state
- Expanding targeted outreach
- Coordinating expansion of the telehealth program
- Strengthening family partnerships
- Providing support services for the non-English speaking immigrant population
- Establishing advisory committees
- Observing quality improvement
- Implementing data collection
- Promoting family centered care

An Access to Care Plan pursuant to SPM #3 is attached in the supporting documentation.

CCSHCN collaborated with the MCH Workforce Development Center to increase staff knowledge in preparation for future strategic planning sessions. Representatives from the Workforce Development Center came onsite to train staff and managers selected to be part of the strategic planning process. There was representation from each CCSHCN office. The sessions focused on how to serve more CYSHCN, how to shift the CCSHCN services model toward systems-building, and identified areas where staff need further training. The strategic planning process will take place on day-2 of the CCSHCN statewide meeting. Day 1 of the statewide meeting will include sessions on Adverse Childhood Experiences, KY Strengthening Families, Improving Systems of Care for CYSHCN, Agency Processes, Outreach Methods, Implicit Bias Training, and an overview of the employee health program. Presenters for the statewide meeting include local, state, and national figures.

CCSHCN makes every effort to improve workforce capacity. New employee orientation includes required trainings. Using materials available on the MCH Navigator as guidance, leadership staff created an MCH Primer which is posted on the staff intranet and is a required training for new employees. The primer has been revised to reflect changes associated with the block grant transformation and continuing education has been provided to all CCSHCN staff. Core competencies training is provided through TRAIN National, a free service of Public Health Foundation. Staff are provided with a training budget to pursue personalized opportunities for growth in their field as pertained to job duties. For example, social workers may choose to attend trainings related to resource brokering or advocacy; nurses may pursue training in case management. CCSHCN staff also receive informal training on important issues (such as Transitions, Medical Home, insurance, care coordination, billing, etc.) through presentations at monthly statewide manager’s meetings.

Executive staff attend the annual AMCHP conference and other relevant opportunities to stay abreast and learn from other states. CCSHCN reviews all available TA opportunities, formal and informal, and attempts to expand the knowledge base of staff. With the assistance of various CYSHCN experts, the ultimate goal is goal is to develop and promote systems of care and improve access for CYSHCN.

III.E.2.b.ii. Family Partnership

Kentucky's Title V program is committed to partnering with families and consumers. These partnerships provide a unique perspective that strengthens the quality and effectiveness of MCH programs. Title V strives for services to be provided in a culturally competent manner that extends beyond medical interpretation due to language barriers and differences in health beliefs and behavior patterns of various cultures. MCH employs a family consultant who assists stakeholders to host Parent Cafés and provide trainings for nurturing families and other programs through work on KY Strengthening Families (KYSF). She represents the family voice in policy, planning, and development of resources.

CCSHCN attempts to be reflective of the population served, and greater cultural representation is sought in order to broaden the reach of programs and services. Geographic diversity has increased due to the implementation of video conferencing for council meetings. Support groups were implemented to reach the Hispanic population, and the agency is looking to add representation on groups which could cross the language barrier. Parents of all perspectives are asked to become involved, including those from varying racial and socioeconomic backgrounds. In addition to services provided at onsite CCSHCN clinics, the Family to Family Health Information Centers (F2F) initiative is embedded into select community clinics (including a Spanish-speaking practice) and in more rural parts of the state (such as an Autism clinic in Corbin).

Advisory Committees

Established CCSHCN advisory committees include the Hemophilia Advisory Council, the Parent Advisory Council, and the Youth Advisory Council, which provide opportunities for family leadership. Eligibility for the Youth Advisory Council is open to all CYSHCN (not just CCSHCN enrollees). CCSHCN includes parent representatives on ad hoc groups (such as the Data Advisory, Healthy Weight committees, strategic planning, periodic Action Learning Collaboratives, etc., and it is attempting to grow parent involvement beyond a committee presence and toward front-end collaboration. The more family members are involved and prepared, the more they can contribute. Training is provided as needed or requested, and efforts have been made to better orient interested parents and youth to agency operations. F2F has funding available for training, and peer-to-peer parent match program provide mentoring. CCSHCN attempts to help families understand what is going on with their child's care and empower families in leadership roles to strengthen their abilities to advocate for their own and other CYSHCN. Leadership attempts to ensure a family perspective at the state level and invites the F2F project director to present at monthly statewide manager's meetings.

Stipends are offered for F2F and Parent Advisory members to compensate their time. CCSHCN reimburses for travel and provides a child-care stipend. Technical assistance to the advisory councils includes staffing, guidance, orientation, logistical planning, and hosting of meetings. Opportunities are sought to provide F2F support parents with the ability to attend national conferences and training events and opportunities. Partial reimbursement may be provided, subject to available funding. For example, F2F support parents belong to Region IV Genetics Collaborative and participated in the making of several videos, including care coordination and information for parents of newly-diagnosed children with genetic disorders. F2F helped with the development of two resource booklets called *Partnering with Your Doctor, The Medical Home Approach* and the *Journey through Diagnosis.*

CCSHCN invites Parent Advisory members to staff training events, which are of a limited frequency agency-wide. An orientation training document for new providers discusses the agency's mission and the vision of family involvement. The co-directors of F2F are both parents of CYSHCN. These co-directors are valued and hard-working CCSHCN staff who are involved in a variety of aspects of agency operations on behalf of the CYSHCN population. Furthermore, a network of capable support parents assists with statewide initiatives and serve on external boards such as the UK Human Development Institute. The executive director of the agency is also a parent of a son with special health care needs.

The KYSF Leadership Team includes agencies that serve families, family organizations, and family advocates who are committed to promoting strength-based, family-driven values and principles in agencies that adopt the KYSF Framework. KYSF has a parent-family workgroup that serves to advise all the workgroups and has developed a virtual network of parents who have experience with KY systems for children. This group has:

- Developed the Parent Café model for KYSF
- Created guidelines for how to conduct a KYSF Parent Café, including:
    - Key concepts
    - Facilitation guidelines

- Branding to be consistent with KYSF model

As of March 2018, KYSF has:

- Hosted 2 Parent Café Train the Trainer summits with:
  - Total of 304 KYSF Parent Café Train the Trainer participants
  - Approximately 120 KYSF Parent Café Experience opportunities
  - Over 1,200 participants

The KY Early Intervention (Part C) System (First Steps) has six parent representatives on the Interagency Coordinating Council. The mission of the Council is to maximize the potential of infants and toddlers (birth through two) having, or at risk of having, developmental delays and disabilities through a comprehensive statewide system, and it advises and assists the state lead agency in the ongoing development of the early intervention system. Additionally, First Steps has a parent consultant as a central office staff person to assure family perspectives on service delivery and programming. The Part C program surveys families, at least annually, to assure the program is meeting their needs. Survey results consistently indicate First Steps provides needed support so that parents know their rights, communicate their children's needs, and help parents learn how to help their child learn and grow.

Parents participate in task specific workgroups, such as those to improve the family assessment process used by the Part C program. Parents were members of the two workgroups convened to develop quality standards and core competencies for service coordinators and early intervention services providers. The quality standards provide guidance for program improvement and development of a tiered reimbursement rate.

Strategic and Program Planning

Families and consumers are included in efforts to develop family-centered programs. HANDS solicits input from the perspective of parents and service providers through completion of two different satisfaction surveys, on an annual basis, impacting program planning.

- The HANDS Parent Satisfaction Survey is distributed to participants actively receiving services and those who have exited from the program over the past twelve months.
- The HANDS Site Satisfaction Survey is distributed annually about:
  - Support received from technical assistance services
  - Value of training opportunities
  - Areas of program implementation that need additional support
  - Materials, and resources

First Steps uses the results of the annual family survey to improve services for families. In addition, as part of the State Systemic Improvement Plan (SSIP), new families view a short video that depicts what early intervention services look like and then are asked to respond to a short survey. Re-administration of the survey occurs after early intervention services begin. This data collection will help to determine the effectiveness of the provider coaching/mentoring professional development that First Steps is piloting.

Quality Improvement

MCH collaborated with the KPA to launch the first KY Perinatal Quality Collaborative (KQPC) project on NAS. This collaborative involved over 20 hospitals and teams, all using PDSA cycles to improve care for this population. Because of lack of funding, the initiative has been placed on hold. MCH has applied for funding from the CDC to provide support for this perinatal quality collaborative. This application was approved, but not funded, and it currently is on hold by the CDC for one year (until September 2018) should funding become available.

Block Grant Development and Review

Families and consumers had numerous opportunities to provide input on the 2015 Needs Assessment as well as the Title V application in KY. Two key components of the needs assessment were consumer surveys that were distributed through LHD and CCSHCN sites. Family members participated in the follow-up stakeholders meeting in December 2015 to develop strategies for the State Action Plan. Ongoing reviews are completed during meetings, program review, surveys, and discussions.

Materials Development:

In 2014- 2015, the Early Childhood Comprehensive Systems (ECCS) staff identified a gap for social and emotional resources. Based on suggestions and needs assessment data from multiple audiences, a three-hour Social and

Emotional training module was created for:

- Early Care and Education teachers
- Early Childhood Professionals
- Parents of children 2 to 5 years

This training concentrates on three aspects:

- Increasing adult awareness about why children exhibit challenging behaviors
- Building social and emotional skills of the adults who work with children birth to age 5
- Providing tangible, quick reference tools for use by teachers and parents about how to continue building these social and emotional skills in young children

KY Partnership for Families timeline of successes with this endeavor are as follows:

- July 2015: Family participants assisted with the initial testing of the preschool teacher module
- December 2015: Parent focus groups assisted with the modification of the social emotional module for parents of children 2 to 5 years
- March 2016, 26 parents and other early childhood professionals became Train the Trainers of the parent module
    - Approximately 300 parents have received training
- June 2016, a webpage with downloadable resources was built to disseminate key module concepts for parents and teachers
- October 2016, the social emotional module for parents of children 2-5 was adapted and tested for integration with early childhood professionals working with families in one-on-one situations
- January 2017, families and providers began receiving a quarterly newsletter highlighting
    - Quick access tools for addressing challenging behaviors and building social and emotional skills
    - Links to national social and emotional resources
- February 2017, 96 early care and education trainers have been approved to train and 1,165 preschool teachers have received the training
- March 2018, 164 active trainers across 54 cities were approved to host Connect the Dots (CTD) trainings for teachers, providers, and parents
    - 201 training sessions delivered to 3,127 staff from early education centers have been trained across all 4 steps
    - Approximately 369 CTD training sessions were held reaching nearly 5,697 total caregivers

In response to a growing demand, CTD supplemental resources are being created and piloted to meet specific needs of vulnerable populations. Current CTD pilot groups for 2018 include: fathers graduating substance abuse recovery programs, caregivers of children with Autism Spectrum Disorder, and caregivers of children with Down Syndrome. Consideration for next pilot groups include caregivers of children in foster care and children with trauma and grief experiences. The Connect the Dots ASD Pilot, through Kentucky Autism Council funding, began March 28, 2018.

Connect the Dots training effectiveness was evaluated through pre- and post-testing surveys. The revised Connect the Dots evaluation includes a measure of caregiver competence and knowledge increase as a result of the training. The results indicated approximately 88% of training participants increased at least 2 levels in confidence when asked if they could identify how a predictable schedule, organized routines, transition tools, and visual aids improve a child's behavior. Nearly 100% of participants indicated they knew how to use proven skills to help a child link positive behavior to positive experiences and feelings, compared to around 77% before the training. Over 98% of training participants indicated their knowledge of reducing challenging behaviors and promoting social and emotional development increased. After CTD training, nearly 100% of participants agreed or strongly agreed they could handle the next outburst without losing their temper, compared to less than 85% of caregivers before the training.

III.E.2.b.iii. States Systems Development Initiative and Other MCH Data Capacity Efforts

State Systems Development Initiative

KYs State Systems Development Initiative (SSDI) is involved with all MCH domains. The purpose of this grant is to enhance the data analytic capacity within MCH in order to address three goals:

- Build and expand KYs MCH data capacity to support Title V efforts and the utilization of data for MCH programmatic decisions
- Increase the linkage of key MCH datasets to improve the quality of data available for policy and program development
- Develop and enhance surveillance systems to address emerging MCH issues in Kentucky.

The SSDI grant provides KY an opportunity to build on existing data infrastructure and enhance the quality of data. SSDI program staff, comprised of MCH epidemiologists, have assisted in the ongoing needs assessment process, monitored progress on NPMs, SPMs, and structural/process measures, completed analysis of all state reported data in the block grant, and contributed to various parts of the MCH block grant narrative.

In the upcoming year, SSDI staff will continue to participate in ongoing needs assessment activities and provide ongoing evaluation of selected measures. In addition to activities around the block grant, SSDI staff provides data for the National CoIIN to Prevent Infant Mortality for the Social Determinants of Health CoIIN. Staff will be receiving training on geographical mapping techniques to further assess infant mortality and the role of social determinants in KY. Recently SSDI staff successfully transitioned the Neonatal Abstinence Syndrome mandatory reporting system from a hard copy fax and data entry system to an on-line, fully electronic reporting system. Now reporting facilities submit ongoing reports of NAS cases electronically through REDCap. This transition will allow for more timely and efficient reporting of NAS cases and minimize data entry errors.

In March 2018, after almost 20 years devoted to KY MCH programming, Dr. Joyce Robl retired from her position as the Chief Data Officer. Dr. Robl served as the PI for the SSDI grant which has transitioned to Tracey Jewell, the Senior MCH Epidemiologist. Mrs. Jewell will oversee the activities of the SSDI grant, submission of all documentation, applications and project reports as required by the grant.

KY MCH epidemiologists mentor HRSA Graduate Student Epidemiology Program students. Ms. Emily Ferrell mentored Ms. Rachel Garg in the fall of 2017 who created culturally appropriate fact sheets about birth defects, which are now available in English and Spanish for families. Ms. Emily Ferrell also served as a data mentor during the fall of 2017 for Ms. Jeanruth Albano, a student hosted by CCSHCN, and provided technical assistance in creating maps of needs and resources for the CCSHCN population.

Other Data Capacity Efforts

MCH collects and evaluates data through many data bases that are protected by the Kentucky Online Gateway. Data bases used are either designed and built by state developers, or are national data bases used by the programs. Each of the data bases are specific to the program to provide either surveillance data, case management/care coordination, or program evaluation. In the upcoming year, MCH has a goal to transition from current reporting methods for MCH evidence based strategies to REDCap.

III.E.2.b.iv. Health Care Delivery System

Title V Role in Health Reform

In 2013, Kentucky implemented the ACA provisions with a state-based health insurance exchange and expansion of Medicaid. As the healthcare landscape evolves, and as the state share of costs increases, KY transitioned to the federal exchange.

In January 2018, CMS approved 1115 waiver (KHW). KHW was set to begin July 1, 2018. However, a federal ruling blocked the KHW. The plan as written eliminated vision and dental benefits, had premiums up to 4% of income with a minimum of $1, in lieu of copayments; required community engagement (employment, volunteer work, education) for beneficiaries ages 19-64. KHW excludes children and pregnant women from the above requirements benefits for this population did not change. Beginning in 2019, if beneficiaries are eligible for Medicaid and have access to health insurance through their employer, beneficiaries may be eligible for the premium assistance program. With this program, the Commonwealth will pay for beneficiaries and their families to enroll in the beneficiary's employer plan for only $1-$15 per month. Department of Medicaid Services held 10 Town Hall meetings to review Home and Community Base waiver information to gain comments of stakeholders.

In the initial rollout of health reform, the primary role of Title V in support of health reform has been in the form of outreach and enrollment activities. As a way to ensure that all families and CYSHCN have adequate sources of insurance, CCSHCN parent consultants and social workers have received training on the 1115 waiver. Support parents also assist with clarifying information. Statewide Needs Assessment survey data shows that CCSHCN respondents are less likely than others to experience problems with obtaining insurance than other groups.

Moving forward, it is likely that the Title V program and CCSHCN will continue to provide information to families on changes in the Medicaid program and assistance to assure continuity of coverage. For those families enrolled in KHW, they will have two member-controlled healthcare spending accounts, one to cover deductible expenses, and a *My Reward* account to accrue savings that can be used for the purchase of enhanced benefits. The Foundation for Healthy Kentucky will work with Medicaid eligible recipients to comply with the new community engagement rules. The overall goal of KHW is to help recipients have improved health outcomes. The plan for roll-out of KHW will begin slowly beginning in Northern KY, and then to other areas of the state.

Services That Advance Implementation of ACA

In previous years, Title V funds were used for the LHD to provide education about the ACA and its benefits to MCH clients and assure that they know how to enroll in coverage. While there is not a MCH package specifically to fund these activities, LHDs continue to assist clients.

In addition, CCSHCN care coordinators and social workers work with direct-service enrollees to determine insurance adequacy on an individual and family level. The agency also continues to contract with a trusted nonprofit, Patient Services, Inc., to provide insurance case management and premium assistance solutions for those with eligible conditions – specifically, bleeding disorders and cystic fibrosis. Policies assure objective criteria for assistance, directing assistance to those persons in the most need.

Title V Gap Filling Services

The Title V program continues to provide gap filling and except for a few departments, LHDs transitioned use of Title V funds from direct services to population health. In some cases, direct services are still needed as many areas of rural KY exist in pockets of little-to-no health or dental care providers. To meet this need, LHD's are partnering with their local FQHC's for direct services to provide assurance that key services are available in their communities for the MCH population.

KYs CCHSCN recognizes the effect that the relatively recent shift to managed care has had on CYSHCN, with changes in the way care is financed. Through discussions and an initial orientation period with the recently established MCOs, CCSHCN was able to educate as to the services the agency provides, which has allowed for partnerships and integrated practices. For example, nursing assessments were developed to align documentation with the needs of the existing MCOs, and nursing care plans were created to demonstrate an individualized plan of care is developed in partnership with the patient and family to accomplish goals. Documentation of case management provided by CCSHCN nurses is shared with the MCOs to avoid duplication of service. The entrance of multiple MCOs has affected CYSHCN enrolled in multi-specialty clinics (such as craniofacial anomalies and cleft lip and palate), as not every provider is enrolled in every MCO network, and this has the potential to fracture the team

approach when providers are substituted on to teams. An example of cooperation is CCSHCN's work with the dental administrator for three MCOS to create policy specifically for CYSHCN enrolled in craniofacial anomalies and cleft lip and palate clinics to go beyond a once-in-a-lifetime orthodontia benefit and permit phased treatment.

Another success was in negotiating with two MCOs to assure that no pre-authorization for therapy services would be required. For other MCOs which do require pre-authorizations, therapists are educated on consistently documenting medical necessity when requesting pre-authorizations on the front end. However, variability exists among the MCOs in terms of the authorizations required for durable medical equipment such as ear molds and hearing aids. When facing such barriers to securing prescribed interventions, CCSHCN staff and parent peer consultants continue their diligent effort to work with families to resolve issues on an individual basis (or obtain Medicaid waivers for needed services where appropriate).

Cultural and linguistic competence

The Office of Health Equity provides training to state and local public health professionals on cultural competency sensitivity including vulnerable populations. Training is provided in person and TRAIN modules are available. The Louisville Healthy Start administrator is the leader for KY's National CoIIN Social Determinants of Health workgroup in which MCH participates.

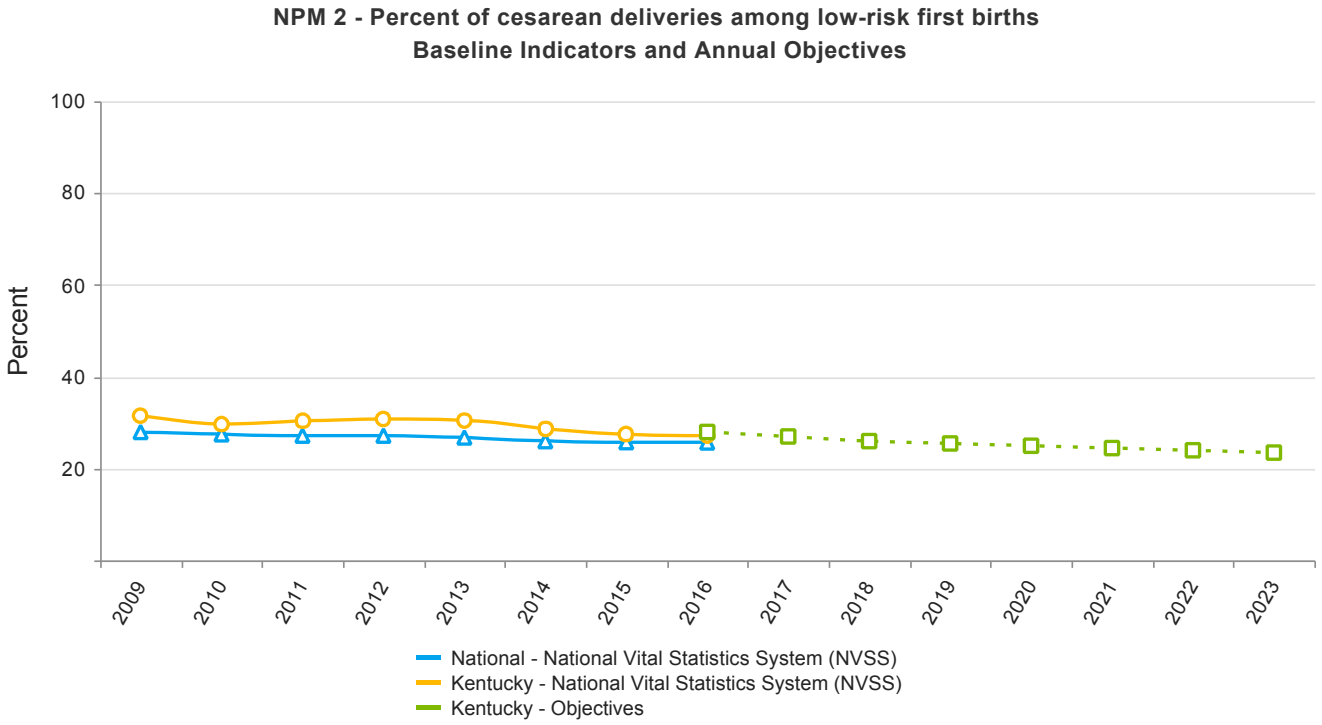
III.E.2.c State Action Plan Narrative by Domain

Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2015	116.3	NPM 2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2012_2016	22.9	NPM 2

National Performance Measures



Federally Available Data		
Data Source: National Vital Statistics System (NVSS)		
	2016	**2017**
Annual Objective	28	27
Annual Indicator	27.4	27.2
Numerator	5,018	4,819
Denominator	18,321	17,748
Data Source	NVSS	NVSS
Data Source Year	2015	2016

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	26.0	25.5	25.0	24.5	24.0	23.5

Evidence-Based or –Informed Strategy Measures

ESM 2.1 - Number of outreach activities (data reports, presentations, and technical assistance) on the topic of cesarean deliveries among low-risk first births.

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		9
Annual Indicator	7	9
Numerator		
Denominator		
Data Source	State specific data	State Specific Data
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	11.0	13.0	15.0	17.0	19.0	21.0

State Action Plan Table

State Action Plan Table (Kentucky) - Women/Maternal Health - Entry 1

Priority Need
Maternal Morbidity

NPM
NPM 2 - Percent of cesarean deliveries among low-risk first births

Objectives
Decrease by 10% the proportion of low risk first time cesarean sections by September 30, 2020.

Strategies
Increase the availability of Kentucky-specific data on cesarean sections and early elective deliveries through reports and/or presentations
Provide targeted outreach to offer technical assistance to birthing hospitals with high cesarean section rates
Incorporate information about cesarean sections and early elective deliveries into provider educational opportunities
Develop a data analysis plan to estimate the use of 17-OH progesterone among Medicaid clients
Promote the Healthy Babies are Worth the Wait MCH-Evidence Informed Strategy in local health departments

ESMs	Status
ESM 2.1 - Number of outreach activities (data reports, presentations, and technical assistance) on the topic of cesarean deliveries among low-risk first births.	Active

NOMs
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations
NOM 3 - Maternal mortality rate per 100,000 live births

III.E.2.c. State Action Plan Narrative by Domain

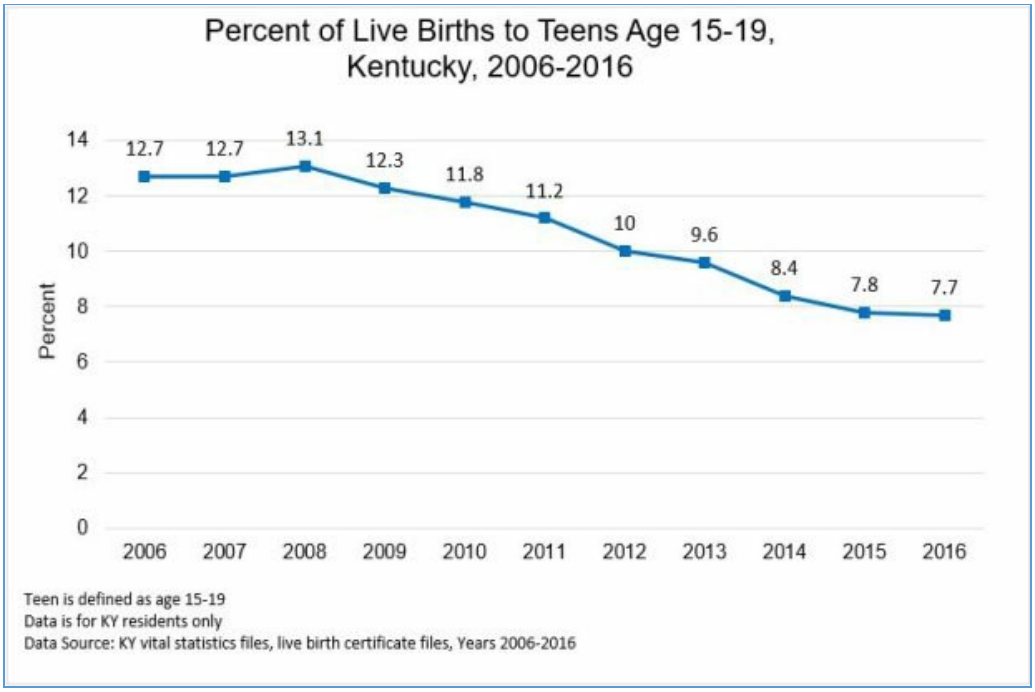
KY utilizes many strategies to address the identified needs and outcomes noted in the 5 year needs assessment and any emerging needs or ongoing initiatives that arise. One successful measure is through promotion of MCH Packages. At the local level, MCH Title V funding is provided to LHDs to implement Evidence Informed Strategies (described in attachment 1), and LHDs select strategies based on community needs. LHDs are given the opportunity to opt-in and select 2-5 packages the LHD determines will have the greatest impact based upon the community needs with at least one package chosen addressing infant mortality. Funding is allocated to the LHD based upon a formula that that addresses a base rate, number of children in poverty, and number of the MCH population served by Medicaid. LHDs are encouraged to use the guidelines as a point of reference and encouraged to be innovative with initiatives to reach the MCH population. Other stakeholders and collaborative partners are engaged for the work at the local and state level. MCH collaborates with an extensive group of partners both internally and externally to address issues related to women/maternal health and like the national effort to “Put the M back in MCH” with goals to improve the health and wellbeing for this population.

Women/Maternal Health Domain Annual Report

Despite all the advances in science, maternal morbidity and mortality has not decreased in recent years. KY’s priority need in this domain was to address maternal morbidity. Top concerns for stakeholders in the 2015 Needs Assessment in this domain were substance abuse, health problems related to pregnancy, and maternal obesity, all of which contribute to maternal morbidity. The factor most amenable to improvement related to maternal morbidity is KYs higher percentage of first time cesarean sections and overall cesarean deliveries compared to the national average. As the measure for this domain, KY has selected *NPM #2: Percent of cesarean deliveries among low-risk first births*.

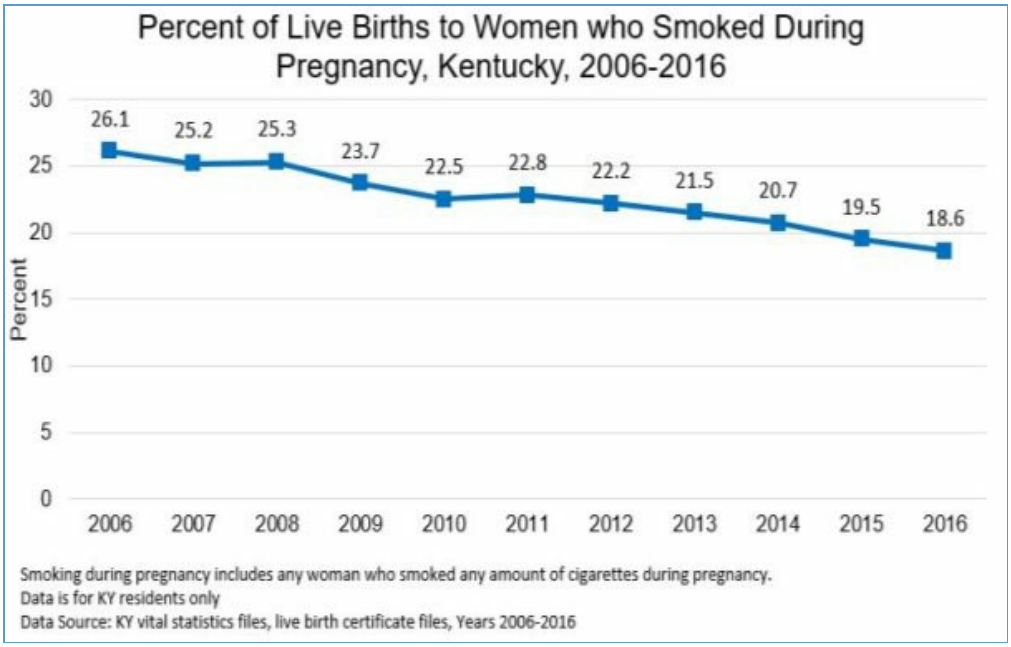
The health care delivery system in KY has undergone significant changes in the past few years through Medicaid expansion and the implementation of components of the ACA, the number of individuals in KY without insurance has decreased dramatically. According to a progress report on Medicaid expansion based on the first years’ experience, Medicaid expansion recipients are distributed evenly between males and females. This is in contrast to the traditional Medicaid recipients who were more likely to be female based on being the primary caretakers of low-income children (Deloitte Development LLC, 2015). Less than 50% of the Medicaid expansion population was between the ages of 18 and 35 in comparison to more than 70% in the comparative traditional Medicaid group (Deloitte Development LLC, 2015). The women who have health care coverage are now able to access preconception and interconception care. The 1115 Kentucky Health Waiver does not reduce the benefits for this population.

KY MCH continues to provide safety net clinical services to pregnant women without health insurance coverage. MCH agency funds may be used as a payment source in many communities for those women who do not have insurance, and Title V funding may be used to support education, outreach, or enabling services for this population. Prenatal care as a direct service provided by the LHD has declined over the past few years. Two local health department sites still provide “in-house” prenatal care services where there is a lack of providers in their communities. LHDs not providing in-house prenatal services are required to provide assurance that women can access prenatal care in their community, whether by referral to local obstetricians or contracts with local providers. The number of women receiving maternity services through the LHDs has a slight decline from 1,994 in 2016 to 1,439 in 2017. These numbers reflect both the increased number of women with coverage, and the transition of many LHDs from clinical services to population-based services. Since 2008, Kentucky has experienced a steady decline in teen birth rate of fifteen to nineteen year olds. In 2008, the teen birth rate was 13.1% and has consistently decreased each year to 7.7% in 2016.



Preconception services delivered in the local health departments have also decreased, although public health services like the distribution of folic acid continue, both through MCH and the CCSHCN. The Folic Acid Program housed within the Division of Women's Health provides counseling and folic acid supplementation to women of childbearing age through LHDs, contract agencies, and the CCSHCN. In state fiscal year 2017, a total of 21,245 women were served statewide through the folic acid supplementation program. The CCSHCN's Folic Acid Multivitamin program provides vitamin supplements and preconception health education free of charge to any woman of childbearing age (regardless of enrollment status with CCSHCN). Multivitamins are distributed with preconception education in CYSHCN clinical settings and in the community at various outreach events where the target audience may be present. During the reporting period, CCSHCN reached 438 women through 11 regional offices covering the state.

KY data shows a continued decline is smoking in pregnancy. While the percentage of pregnant women has fallen to 18.6%, this is still far above the US rate of 7.2%.



To address this need, LHDs could participate in the past three years in a smoking cessation package targeted to pregnant women. The Giving Infants and Families a Tobacco Free Start (GIFTS) has had marginal success within this population. Calls to the state QUIT Line for pregnant women have been very small and most LHDs report few women engage when this is discussed. Eight LHDs chose the program, with 229 pregnant women and 53 postpartum women reached by the program. Additional outreach included 7,360 people in contact with the pregnant woman. The Louisville Metro Health Department highlighted the GIFTS program on local television. Education and outreach in the community continues with some LHDs offering classes at treatment centers for substance abuse.

Kentucky's priority need of maternal morbidity for this domain is reflected in many of the ongoing activities of the MCH Title V program. The programmatic activities for which MCH has a leadership role that will be highlighted include HBWW, Maternal Mortality Review, and Progress on Action Plan Strategies in order to reduce infant mortality. Continuing the efforts to eliminate early elective deliveries, the state action plan for this domain, related to maternal morbidity, focuses on activities related to *NPM #2: Percent of cesarean deliveries among low-risk first births*.

Healthy Babies Are Worth the Wait (HBWW):

KYs prematurity prevention activities began through a pilot project to reduce preventable preterm birth with funding from the MOD and Johnson & Johnson Pediatric Institute. This community-based, multi-layer approach to prematurity prevention in three intervention communities with a range of health care settings was successful in showing that a partnership between hospitals, health departments, and communities could reduce preterm birth from EED. KY demonstrated success in the program as results indicate a statistically significant 12 percent decline in the preterm birth rate in the intervention sites. KY now has nine hospitals along with seven LHDs as members of the HBWW Collaborative. Partnerships involved in the Collaborative include the MOD, state and LHDs, hospitals, and community organizations. Creating the HBWW Collaborative made it possible for all hospitals and health departments in the state to participate, collectively working to reduce preterm births and EED. All sites participate on monthly calls to share information and strategies. In addition, in-person meetings occur twice a year, once in conjunction with the MOD Prematurity Summit that is held for a wider audience of professionals. An initial evaluation of the Collaborative found that the two interventions among all partners were education around the brain information card and smoking cessation education and/or programs. A second evaluation was completed which concluded that community collaboration was the key to success for the program. The HBWW program requires five different components for success:

- Partnerships and Collaboratives
- Patient support
- Provider Initiatives such as Grand Rounds and on-going education
- Public engagement
- Progress Measures

The one item that appears to reduce the rate of early elective deliveries is adherence to a hospital hard stop policy. The Advisory Board is another component that is extremely important – this team ensures that the program is data driven. In addition, and of equal importance, is the site team at each individual hospital that monitor and ensures that the hard stop policy is being carried out appropriately. When the HBWW pilot project began in Kentucky the preterm birth rates was well over 15%. Per the MOD, the 2017 preterm birth rate is 11.4%. Educational resources from the MOD website are available for all collaborative partners to distribute to clients. During 2017, approximately 12,068 pregnant women and approximately 2,000 professionals were reached through the MOD and HBWW initiatives. Eight organized educational events were held, and one grand round offering was held. Barren River health department utilized funding to work with the mayor's office and held a proclamation for World Prematurity Day at the Bowling Green City Hall. A press release was disseminated, with links to six social media messages to provide another resource for educating this population.

Primary and Preventative Services for Women and Mothers:

As KY broadens the scope of MMR and designs prevention efforts, the goal would be to adapt current prenatal packaging for more prevention efforts. FY2018 packages focused on linkage of the client to prenatal care at point of entry, reduction of early elective delivery and smoking reduction/cessation. In an effort to address the need for wrap around services to promote a positive pregnancy and reduction of morbidity, FY2019 prenatal package will have focus of linkage to wrap around services for the pregnant mother. One preliminary pilot, Healing, Empowering and Actively Recovering Together (HEART) of Floyd Count, is working to provide wrap-around services to ensure the

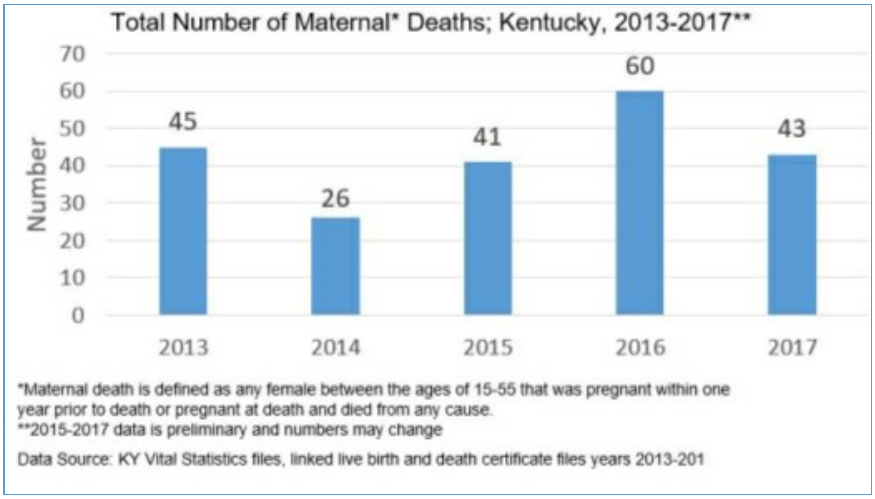
ongoing care of mother and child. The Crosscutting narrative has more information about the HEART program.

Maternal Mortality Review:

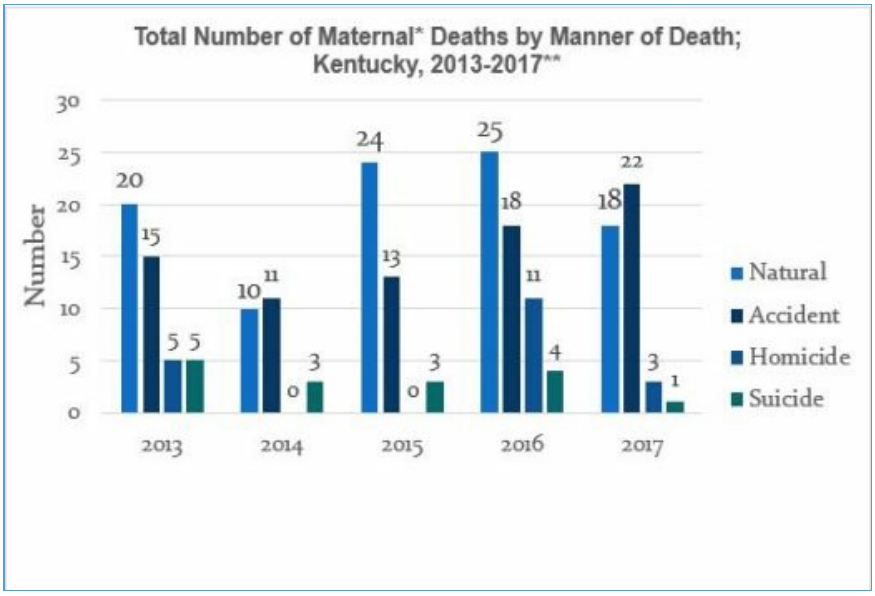
According to Federally Available data, the maternal mortality rate for KY from 2011 - 2015 was 19.4 deaths per 100,000 live births. For 41 years, MCH Title V contracted with the University of Louisville Maternal-Fetal Medicine Department to support a maternal mortality review committee through the Kentucky Medical Association. This review was completed by a group comprised of 14 OB/GYN, and maternal-fetal medicine specialists under general public health surveillance statutes. Cases for review were ascertained from review of all death certificates occurring to women ages 13 to 50 years who was pregnant within the year prior to death, identified by a check box on the birth certificate. Homicides, suicides and MVAs were not reviewed. KY's investment of Title V funds for maternal mortality review is important to identify and review trends in maternal mortality and morbidity so that actions can be taken to improve practice and reduce such events in the future. Including additional causes of death allows for exploration of the impact ACES and the SDOH factors may have on preventing maternal death.

In the fall of 2017, in response to maternal deaths increasing secondary to reasons other than pregnancy related causes, discussion with UL MMR chair began regarding changing the scope of MMR review to be inclusive of previously excluded deaths, obtaining specific legislation to support review and prevent discoverability, and align with CDC and ACOG MMR best practice for MMR. MCH MMR began to review the current MMR process to align the program with the standards as provided from the CDC's technical support. In April 2018, an amendment to KRS 211.684 mandated maternal mortality review, development of a maternal mortality review team, and an annual report to be submitted to the Governor, Legislative Research Commission and the Chief Justice of the Kentucky Supreme Court. At this point, MCH with the support of the Senior Deputy Commission, Dr. Connie White has begun transitioning the program back to the state level.

The newly revised MMR program will expand the scope of reviews as per CDC technical guidance to include review of maternal deaths due to medical reasons, homicide, suicide, poisoning, or other causes. Reviews will include women age 12 to 55 years of age. A review of available data was completed, and a volunteer chair identified for the Maternal Mortality Review Committee (MMRC). Education of the changes began with state partners, KY perinatal association, and state obstetric physicians and nurses. During the 31st Perinatal Educational Conference in June 2018, Jan Bright presented "Trends in Maternal Mortality" to 90 obstetric stakeholders from across KY. This presentation focused on the CDC guidance for MMR as well as presented data related to maternal death in KY. This restructuring of the program is still in the beginning stages. Data presented during this training, illustrated in the following graphs, noted a rise in maternal deaths in 2016, with over half of those deaths attributed to drug overdose.



As KY began reviewing maternal death data, the possibility of deaths due to homicide, suicide or other accidental reasons appeared to have root causes in the opioid crisis in KY. As shown, the number of homicides, suicides, and accidental deaths all increased during this time.



Accomplishments/Progress:

In the past year, there have been seven data reports and/or presentations developed on cesarean sections and/or EEDs. A MCH Data Brief on cesarean sections is being distributed to all 46 birthing hospitals in KY. A “report card” designed to inform birthing hospitals of MCH outcomes, including low-risk cesarean deliveries, will be provided to each hospital in the upcoming year.

MCH collaborated with the KY Chapter March of Dimes for the 2017 Prematurity Summit. MCH identified three counties in Western Kentucky that continue to have higher rates of preterm birth and early elective deliveries; Christian, Daviess, and McCracken Counties. Staff from the local health departments and hospitals, as well as community agencies, attended the November meeting. Staff from MCH presented data for each county on their preterm birth and early elective delivery rates. March of Dimes encouraged each agency to apply for a March of Dimes community grant that would address reduction of preterm birth and early elective deliveries.

MCH has developed an initial report on MCH indicators for all birthing hospitals to increase their awareness of birth outcomes in their facility. These reports include data on first time, low risk cesarean births, preterm births, late preterm births, low birth weight, smoking during pregnancy, first trimester entry into prenatal care, and breastfeeding initiation. The reports provide an opportunity to increase awareness of decision-makers in the birthing hospitals on MCH issues. The data and reports are currently under review and, when distributed, will include an offer for technical assistance to address any areas of concern. Efforts will also focus on targeted outreach to those hospitals that have high rates of cesarean sections and early elective deliveries.

DPH contracts with a university to provide an annual prenatal/postpartum training for new LHD nurses, as well as an annual update for all nurses working in-house prenatal clinics at the LHDs. Due to the variance in new hires and turnover, the attendance at the trainings has varied from four to twenty-five staff in attendance over the past several years. Every few years the sessions are taped to provide the most recent and updated information that aligns to the ACOG guidelines. Each year, several LHD nurses view these online courses for their annual update. Subject matter includes fetal development, physiology of pregnancy, genetics, obstetrical complications, routine assessments, procedure and labs, perinatal nutrition, diabetes, prematurity, perinatal infections, breastfeeding, substance use and domestic violence. The training and MOD materials provided to LHDS have emphasis on prevention of preterm births and EEDs. Additional opportunities to reach providers have occurred at professional organization meetings including the MOD Prematurity Summit and the Kentucky Perinatal Association annual conference.

During the legislative session, KRS 214.160 was revised to include Hepatitis C screening for all pregnant women in KY rather than for those with risk factors. If a pregnant woman is positive for Hepatitis C virus antibodies or RNA, it is advised for the child from that pregnancy receive serologic testing for the presence of Hepatitis C antibodies at the 24-month well child check.

In FY2018, 23 LHDs chose to use Title V funds for the MCH Evidence Informed Strategy entitled Prenatal Care

Tracking. During FY2017, 35 LHDs implemented this package and 8,859 women received assistance in obtaining and continuing prenatal services. This strategy helped LHDs improve their internal process of tracking the initiation and continuity of prenatal care. Pregnant women receive referrals for services such as Women, Infants and Children (WIC), HANDS, breastfeeding peer counseling, and other services as appropriate. The specific strategies include coordinating care for pregnant women with local providers, ongoing contact with pregnant women, assistance with enrollment in Presumptive Eligibility (PE) and Medicaid, and referral of women denied Medicaid to providers for the Title V Public Health Prenatal Program. Through this package, LHDs are tracking these women to see if they initiate prenatal care within the first two weeks of a positive pregnancy test, thus increasing the chances of improved perinatal outcomes. While following up with patients about initiation of prenatal care, LHD staff may also assess for barriers to care such as a payor source and assist with the application process for Medicaid, PE, or the Public Health Prenatal Program.

One result of this strategy was increased collaboration with HANDS. Some LHDs have joined forces with high schools to improve prenatal care access to teenagers who are pregnant. LHDs will often distribute March of Dimes and HBWW materials about prenatal care and preterm birth prevention to pregnant women in the community. By assuring that women are obtaining early and ongoing prenatal care, there are many opportunities to educate these women about the risks associated with cesarean sections and EEDs. MCH will distribute a brief on primary cesarean sections at the Kentucky HANDS Academy in May 2018, which will include over 400 HANDS staff from across Kentucky.

Rates of EED has continued to decrease since 2011. At that time, the percentage was 30.3%, which decreased to 27.2% in 2016 (National Vital Statistic System (NVSS). This reduction is likely due to many factors including the CoIIN EED team, HBWW, and KHA activities. KHA conducted quality improvement activities with 33 hospitals to reduce EED. Their results included a 63% reduction in EED from the baseline year of 2011 through the completion of Hospital Engagement Network Activities in September 2016. The MOD and KHA collaborated through 2016 on a banner program to recognize hospitals that demonstrate an EED rate of 3% or less for 6 months or more. Over half of KYs birthing hospitals have received the KHA March of Dimes Banner to recognize their achievement. All of the HBWW hospitals have rates of less than less than 5% Early Elective Delivery rates, some less than 3%, except for University of Kentucky Hospital, which serves the highest risk and indigent populations.

In FY2018, five LHDs are implementing the HBWW MCH Evidence Informed Strategy. During FY2017, six LHDs implemented this package and 1,894 pregnant women, providers, and professionals were reached. Activities included hosting grand rounds at medical centers, attendance at the National HBWW conference, distributing HBWW material to communities and obstetric providers, newspaper articles, and TV interviews regarding preterm birth prevention. Implementation of this package promotes increased collaboration between LHDs, providers and hospitals with a common goal of preventing EEDs. LHDs have provided HBWW presentations to pregnant women, WIC participants and obstetric providers. Presentations were made by LHD staff to local obstetricians and midwives, as well as community members regarding the benefits of waiting to deliver until the baby is 40 weeks' gestation. The Louisville Metro Health Department organized a grand round presentation on the use of 17P for the prevention of preterm birth for local OB providers on May 14, 2018. The Barren River District HD hosted an educational presentation for OB providers in June of 2018.

Challenges:

Access to prenatal care is enhanced by presumptive eligibility (PE). PE is a Medicaid-based program that enables qualifying pregnant women to receive prenatal care for a short duration of time while their eligibility for full Medicaid benefits is determined. In June of 2015, the paper application process was updated to an electronic portal application system. MCH worked closely with KY Department for Medicaid Services to provide necessary guidance and updates to providers and local health departments during this transition. In some instances, the Public Health Prenatal Program in MCH was the safety net to provide early prenatal care in the situation where PE was delayed. The MCH Prenatal Program coordination with the local health departments was instrumental in continuing to link women to early prenatal care during this transition period.

Other Programs Affecting Women and Maternal Health:

KY has also shown tremendous progress related to maternal morbidity through the Health Access Nurturing Development Services (HANDS) home visitation program. HANDS began in 1998 as KYs voluntary home visitation program designed to assist overburdened expectant and first-time parents, prenatally through age three. HANDS focuses on fostering early childhood development and learning and serves more than 12,000 families statewide. It has become one of the largest early childhood home visitation programs in the nation. The paraprofessional and

professional HANDS home visitors build relationships with the parents of young children and work on positive parenting and family self-sufficiency skills using a strengths-based curriculum. These protective factors build resilience and positive outcomes for both the child and parents. On September 30, 2015, HANDS received notification that it meets the criteria established by the Department of Health and Human Services for an "evidence-based" early childhood home visiting service delivery model based on a thorough and transparent review by HomVee (Home Visiting Evidence of Effectiveness) of HANDS research and the evidence of the effectiveness of HANDS services.

The HANDS program has also shown success in improving maternal and child outcomes with the latest data showing:

- 26% less premature births
- 46% less low birth weight births
- 47% less child abuse and neglect
- 14% more adequate prenatal care
- 49% less pregnancy-induced hypertension
- 40% less maternal complications during pregnancy

Previous outcomes studies report the infant mortality rate was 74% less likely among HANDS participants than statewide.

KY was a recipient of formula and competitive grant funds through the Maternal Infant Early Childhood Home Visiting (MIECHV) program. The program goals for KY MIECHV include: (A) to expand the evidence-based model of maternal and early childhood home visiting to serve overburdened multigravida parents in high risk communities, and (B) to enhance coordination of comprehensive early childhood services at the local level to improve outcomes. At full implementation, 78 counties received expanded services (in addition to the core HANDS program, which is in every county). Due to changes in the federal MIECHV, currently only 29 of Kentucky's highest at risk counties are supported by MIECHV Formula funds. The benchmark results from this program found improvements in maternal and newborn health; school readiness and achievement; increased screening for domestic violence and referrals for victims of domestic violence; family economic self-sufficiency; referrals for other community resources; decreased mother and child visits to the Emergency Room, and, decreased incidence of child injuries requiring medical attention.

The MIECHV grant requires grantees to demonstrate improvement in performance measure outcomes. Based on the performance report data submitted in October 2017, KY's MIECHV/HANDS demonstrated improvements with the following percentage of clients receiving:

- Screenings
    - Depression (73%)
    - Developmental (81%)
    - Behavioral (90%)
- Well Child Visits (70%)
- Depression Referrals (90%)
- Primary Caregiver's Education
- Early Language and Literacy Activities
- Children with Health Insurance Coverage
- Completion of HANDS Healthy Kids Childproofing Checklist

Moving Beyond Depression™ (MBD) is a 15 session In-Home Cognitive Behavioral Therapy (IH-CBT) focused on alleviating symptoms of depression and increasing coping skills. This method uses techniques introduced by a licensed therapist. The therapist travels to the mother's home, eliminating the need for transportation. An essential part of the success of the program is collaboration between the therapist and the home visitor. The therapy concludes with a joint session in which the therapist and home visitor verbalize all of the mother's accomplishments, utilization of coping skills, and future recommendations for treatment and success. Kentucky's MBD referrals are completed by HANDS home visitors who see signs of depression in mothers and complete an Edinburgh screening. Once completed, the home visitor gives a brief overview of the MBD program. Upon agreement from the mothers, therapists receive the referral and contact the family within 48 hours. An assessment is scheduled to determine if the mother qualifies for MBD services. If the mother meets the MBD program criteria, she is accepted to the MBD program where she will receive the 15 IH-CBT sessions and a final booster session. If a mother does not meet MBD program criteria, a referral to outpatient treatment, a primary care physician, or other mental health services occurs. Through March 1, 2018, 811 mothers received 8,611 treatment sessions.

Challenges:

Changes to the Federal structure of the MIECHV program have presented challenges for KY. The new federal structure has shifted more funding to the Formula Grant and less to the Competitive. Previously, KY received funding from both grants, which allowed the expansion of multigravida services in 78 of the highest at risk communities. Under the new structure, KY received $7 million from the formula grant with a budget period of 30 months. This change significantly reduced the amount of funding previously received by more than half. Fortunately, HANDS received $6.6 million in state general funds during the biennial budget to support the expansion of multigravida services to counties not included in the grant. However, even with the addition of the state general funds, loss of funding from MIECHV creates a challenge to providing statewide multigravida services.

MIECHV funds were also used in the past to fund a home visiting enhancement using an evidence-based model of in-home perinatal depression treatment, MBD, developed by Cincinnati Children's Hospital. Perinatal depression screening began in 2006, but there were many barriers for women who screened positive to receive treatment in their communities. The MBD program helped Kentucky to overcome these barriers by offering the opportunity for in-home mental health services to women in the HANDS program who screened positive for perinatal depression. Acceptance of treatment was high due to the "warm handoff" from a trusted HANDS home visitor as well as services provided in the home. However, the new MIECHV guidance will not allow for funding to be used on behavioral health services; therefore, moving forward, other funding sources must be identified to allow for continuation of the MBD program.

Women/Maternal Health - Application Year

In the upcoming year, KY plans to focus activities on *NPM #2: Percent of cesarean deliveries among low-risk first births*. Based on federally available data, 27.2% of low-risk first time KY births were delivered by cesarean section in 2016, a decline from 31.5% in 2009. However, a great deal of improvement is needed to attain the Healthy People 2020 goal of 23.9% (U.S. Department of Health and Human Services, 2010). In order to address this measure, KY plans to implement four strategies targeted to reducing cesarean deliveries among low-risk first time births and early elective deliveries. The strategies include increasing the availability of Kentucky-specific data on these topics, providing technical assistance to birthing hospitals with high cesarean section rates, increasing provider educational opportunities, and monitoring the use of 17-hydroxyprogesterone (17P) in the state.

One strategy for reducing cesarean sections aims to increase the availability of KY-specific data on this topic. This data will be distributed throughout Kentucky in the form of fact sheets, data reports, and presentations. Prevention partners including the March of Dimes (MOD), Kentucky Folic Acid and Perinatal Partnership (KFAP), LHDs, and the Kentucky Perinatal Association (KPA) will be encouraged to coordinate presentations on these topics and distribute these materials to health care providers.

In addition, MCH staff and prevention partners will collaborate to increase educational opportunities that are available to providers on cesarean sections and EEDs. MCH will collaborate with prevention partners to incorporate this information into presentations at professional meetings.

MCH will also work with the Department for Medicaid Services (DMS) to develop a data analysis plan to estimate the use of 17P among Medicaid clients. MCH epidemiologists, who have access to the Medicaid data system, will link Medicaid and live birth certificate data to obtain this information. A survey of several obstetricians in 2015 did not identify any known barriers associated with use of 17P.

Healthy Babies Are Worth the Wait (HBWW) is one of the strategies LHDs can implement through this funding. The objective is for the LHD to establish partnerships with local MOD representatives, prenatal providers, and hospital administrators to promote public awareness about ACOG recommendations to not induce labor or perform cesarean sections before 39 weeks unless there is a medical indication. Fewer early inductions will result in fewer cesarean sections. Specific activities for this strategy include:

- determining if their local birthing hospital has a hard stop policy in place regarding elective deliveries
- reviewing local baseline data for preterm birth, cesarean sections, and early elective deliveries
- establishing a HBWW team to discuss and implement the HBWW information and ACOG recommendations into existing practice.

If the local birthing hospital does not have an existing hard stop policy in place, the LHD will be encouraged to work with the HBWW team, MOD, and the local birthing hospital to establish a hard stop policy. The LHD will also train community partners on the HBWW Toolkit so they may present the HBWW information on preterm birth prevention to the local community, including pregnant women.

Regarding payment for early elective deliveries prior to 39 weeks' gestation, all five Medicaid MCOs in Kentucky established a policy that began on November 1, 2017. Any Medicaid claims submitted, labor inductions, or cesarean sections on or before 39 weeks' gestation that are not properly documented as medically necessary will be denied by Kentucky Medicaid, including the Kentucky Medicaid Managed Care Organizations. While this is a positive step forward, further work and education is needed.

In terms of addressing challenges, early entry into prenatal care remains a public health challenge and a core function of Title V. Per KY vital statistic data, 66% of KY's pregnant women had adequate prenatal care, with care initiated in the first trimester, and 10 or more prenatal visits during the pregnancy. In order to address this issue, a MCH Evidence Informed Strategy entitled Prenatal Referrals will continue to be offered and will include requirements for pregnant women to be provided wrap around services to promote smoking cessation/reduction, treatment referral for substance use, referral for intimate partner violence, referral for WIC/HANDS, and support for application for Medicaid.

Restructuring of the Maternal Mortality Review and prevention efforts will continue to align practice with CDC and ACOG guidance. The goal is to identify deaths in 2016 and 2017, perform abstraction of records, convene a multidisciplinary team to review the case, and guide efforts to reduce preventable maternal deaths and promote a healthy pregnancy.

In addition, KY MCH is working with local stakeholders in the Big Sandy Coalition and in Madison County on

development of a program for a plan of safe care for the infant that will also address follow-up for the mother and newborn utilizing the best practice guides developed in HANDS, MBD, MAT, and substance use counseling.

Perinatal/Infant Health

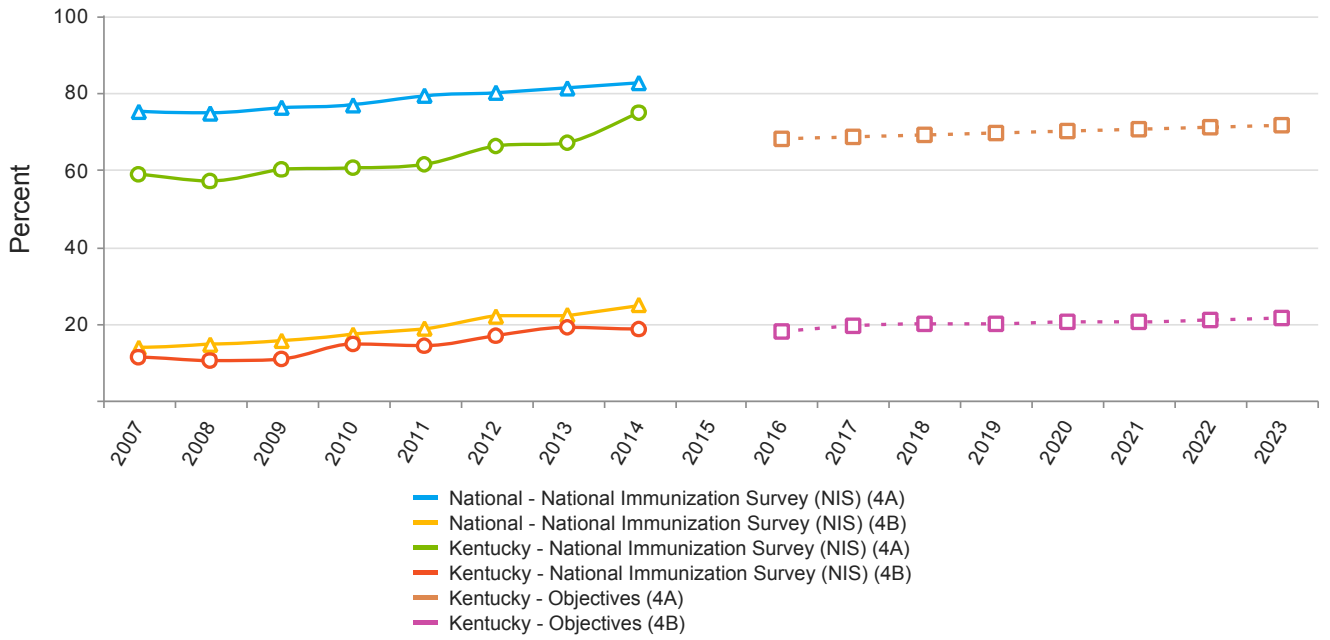
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2015	6.7	NPM 4 NPM 5
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2015	2.6	NPM 4 NPM 5
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2015	153.7	NPM 4 NPM 5

National Performance Measures

NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Baseline Indicators and Annual Objectives



NPM 4A - Percent of infants who are ever breastfed

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	68	68.5
Annual Indicator	66.9	74.9
Numerator	32,863	39,855
Denominator	49,132	53,240
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	69.0	69.5	70.0	70.5	71.0	71.5

NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	18	19.5
Annual Indicator	19.0	18.5
Numerator	9,175	9,330
Denominator	48,213	50,546
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	20.0	20.0	20.5	20.5	21.0	21.5

Evidence-Based or –Informed Strategy Measures

ESM 4.1 - Number of hospitals receiving Technical Assistance from Public Health towards becoming baby friendly

Measure Status:	Inactive - Replaced

State Provided Data		
	2016	2017
Annual Objective		34
Annual Indicator	32	30
Numerator		
Denominator		
Data Source	State breastfeeding program	State Breastfeeding Program
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

ESM 4.2 - Number of hospitals receiving technical assistance from public health (LHD or State Program) about the 10 steps to successful breastfeeding

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	32.0	33.0	34.0	35.0	36.0

NPM 5 - A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding
Baseline Indicators and Annual Objectives

NPM 5A - Percent of infants placed to sleep on their backs

FAD for this measure is not available for the State.

State Provided Data		
	2016	2017
Annual Objective	72	72
Annual Indicator	71.4	71.4
Numerator		
Denominator		
Data Source	KY PRAMS pilot project	KY PRAMS Pilot Project
Data Source Year	2010/2011	2010/2011
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	73.0	73.0	73.5	74.0	75.0	76.0

NPM 5B - Percent of infants placed to sleep on a separate approved sleep surface

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	none available
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	0.0	0.0	0.0	0.0	0.0

NPM 5C - Percent of infants placed to sleep without soft objects or loose bedding

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	No state data is available
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	0.0	0.0	0.0	0.0	0.0

Evidence-Based or –Informed Strategy Measures

ESM 5.1 - Number of cribs distributed through the Cribs for Kids for Community Partners MCH Evidence Informed Strategy

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		700
Annual Indicator	695	889
Numerator		
Denominator		
Data Source	LHD reporting data	LHD MCH Package reporting data
Data Source Year	FY2016	FY2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	900.0	910.0	920.0	930.0	940.0	950.0

State Performance Measures

SPM 1 - Reduce by 5% the rate of neonatal abstinence syndrome among Kentucky resident live births

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		23.8
Annual Indicator	24.3	22.6
Numerator	1,354	1,144
Denominator	55,714	50,716
Data Source	KY NAS registry and live birth cert files	KY NAS registry and live birth cert files
Data Source Year	2015	2017
Provisional or Final ?	Final	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	22.5	22.0	21.5	21.0	20.5	20.0

State Action Plan Table

State Action Plan Table (Kentucky) - Perinatal/Infant Health - Entry 1

Priority Need

Infant Mortality

NPM

NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Objectives

Increase by 25% the number of hospitals designated as baby friendly or that has implemented the ten steps towards becoming baby friendly by September 30, 2020.

Strategies

1.1 Educate the general public and health care providers on the importance and benefits of breastfeeding.

1.2 Partner with WIC to assist birthing hospitals in implementing Kangaroo Kare and working towards baby friendly designation.

ESMs	Status
ESM 4.1 - Number of hospitals receiving Technical Assistance from Public Health towards becoming baby friendly	Inactive
ESM 4.2 - Number of hospitals receiving technical assistance from public health (LHD or State Program) about the 10 steps to successful breastfeeding	Active

NOMs

NOM 9.1 - Infant mortality rate per 1,000 live births

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

State Action Plan Table (Kentucky) - Perinatal/Infant Health - Entry 2

Priority Need

Infant Mortality

NPM

NPM 5 - A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Objectives

Decrease by 5% the proportion of SUID cases that have a risk factor of non-back sleep by September 30, 2020.

Strategies

Increase the percent of infant deaths that are reviewed by a multi-disciplinary review team.

Continued implementation of state-wide safe sleep media campaign to educate the general public on safe sleep.

Implement targeted interventions at both the state and local level to identified populations/areas at greatest risk of non-back sleep.

ESMs	Status
ESM 5.1 - Number of cribs distributed through the Cribs for Kids for Community Partners MCH Evidence Informed Strategy	Active

NOMs

NOM 9.1 - Infant mortality rate per 1,000 live births

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

State Action Plan Table (Kentucky) - Perinatal/Infant Health - Entry 3

Priority Need

Substance Abuse

SPM

SPM 1 - Reduce by 5% the rate of neonatal abstinence syndrome among Kentucky resident live births

Objectives

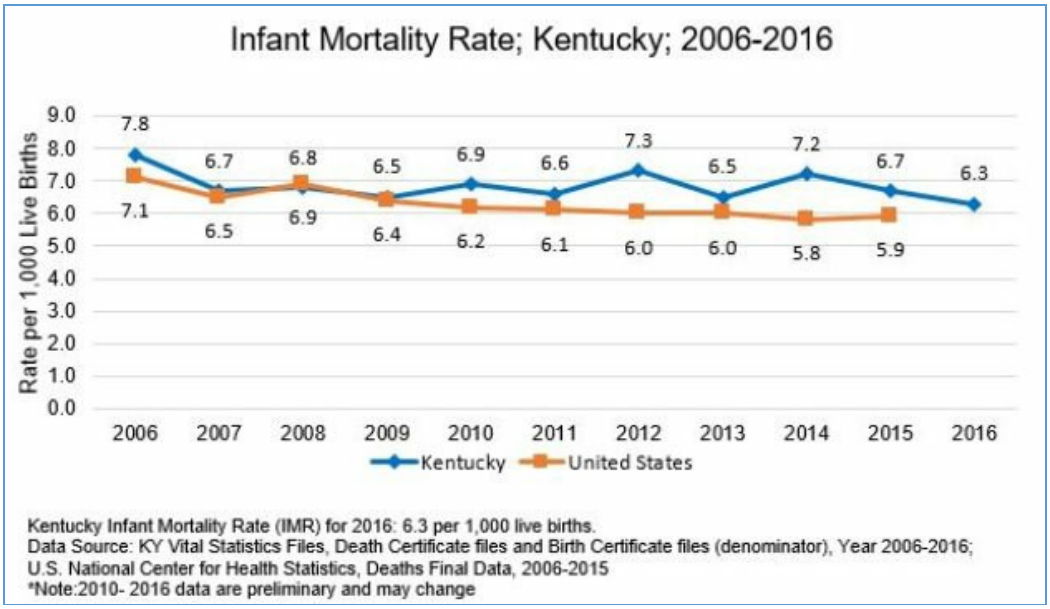
Decrease by 5% the number of new cases of neonatal abstinence syndrome (NAS) by September 30, 2020

Strategies

Maintain the current NAS surveillance system, complete at least one report on the findings, and continue to provide technical assistance to reporting facilities

Continue collaborations with other state agencies to address the opioid epidemic

Infant mortality remains the single best indicator of the health of an area, and in Kentucky, has been identified as a priority need for the perinatal/infant health domain. The infant mortality rate in KY has not shown the degree of improvement seen in the national infant mortality rate. Kentucky's most recent rate is 6.3, compared to the national rate of 5.9.



Title V continues to provide gap filling services for pregnant KY mothers and their infants during the perinatal period, including prenatal care as described in the previous section, and assuring access to appropriate levels of perinatal care for all KY mothers and infants. MCH has worked with the Cabinet Office of Health Policy to include the most recent recommendations from the National Guidelines for Perinatal Care in the State Health Plan. Since the state requires a Certificate of Need for Neonatal Intensive Care Unit (NICU) beds, any new NICU beds in the state will have to comply with the guidelines. In addition, MCH provides Title V funding to the state's two university-based regional perinatal centers to monitor outcomes of the highest risk infants and compare KY's outcomes to national data.

Nationally, the Infant Mortality CoIIN has identified risk appropriate care for high risk infants and mothers, safe sleep, breastfeeding, prematurity and EED prevention, smoking cessation, and social determinants of health as primary strategies for addressing infant mortality. KY MCH participated in each of these CoIIN projects in order to bring best practices to our state's efforts in these areas.

KY MCH Title V activities to reduce infant mortality, in addition to the efforts to improve birth outcomes associated with the Maternal Health Domain, were focused around the two National Performance Measures: improving breast feeding and reducing unsafe sleep.

Breast Feeding Promotion

KY elected to focus on *NPM #4A) Percent of infants who are ever breastfed* and *B) Percent of infants breastfed exclusively through 6 months*. Education to the general public and health care providers on breastfeeding is provided through various formats across the state. The general public receives education through materials, regional billboards, internet and movie theater advertisements, classes, and community events. Health care professionals and hospitals receive education through newsletters, online trainings, on-site trainings, and conferences. Three breastfeeding conferences were held to provide breastfeeding education to health professionals with approximately 175 people attending at least one of the three conferences.

KY worked with stakeholders to develop a statewide strategic plan for breastfeeding. This plan is updated regularly by MCH Nutrition Services Branch. A second revision of the strategic plan was completed to reevaluate progress. Objectives were added focused on increasing breastfeeding rates and to include outreach to early child care centers.

Ten Steps to Successful Breastfeeding:

The Baby Friendly Hospital Initiative is being supported across the state, in collaboration with the Regional Breastfeeding Coordinators. The Ten Steps to Successful Breastfeeding are evidence-based practices that will increase breastfeeding rates. Regional Breastfeeding Coordinators provide education, training, and support to hospitals about the Ten Steps to Successful Breastfeeding. A survey was distributed to birthing hospitals to determine what assistance the State WIC Office and Regional Breastfeeding Coordinators can provide to hospitals to increase the number of steps implemented and the number of hospitals that become Baby Friendly. In 2017, 30 hospitals were provided technical assistance towards achieving Baby Friendly designation. The goal is to encourage hospitals to increase the number of steps implemented to achieve the 10 steps to successful breastfeeding. The ESM associated with this was updated for the upcoming year to better reflect the goal.

The Regional Breastfeeding Coordinators provide training and education to hospitals, health departments, college students, and high school students on breastfeeding education and promotion. Trainings have been conducted at multiple hospitals with mother-baby, delivery and nursery nursing staff. Trainings and education topics have also been provided at multiple high schools and colleges.

The KY WIC Program state staff and Regional Breastfeeding Coordinators are supporting birthing hospitals to increase the number of hospitals implementing Kangaroo Care in their facilities. Currently, approximately 95% of KY's birthing hospitals have implemented Kangaroo Care. WIC participants may receive hospital grade, single user, and manual breast pumps to support breastfeeding duration. Education modules have been made available to local agency staff on breastfeeding promotion, education, and three-step counseling. Over 100 health professionals have viewed the current online modules on breastfeeding promotion, breastfeeding education, and three-step counseling. Approximately 150 individuals have completed an online breastfeeding module targeting childcare providers that was released in 2017.

KY continues to promote the Business Case for Breastfeeding in collaboration with the Partnership for a FIT KY and the obesity team, which included breastfeeding in the workplace as one of their strategies in the plan (Shaping KY's Future Policies to Reduce Obesity). The Kentucky WIC Program developed a Kentucky Worksite Toolkit, which is available to all Kentucky businesses.

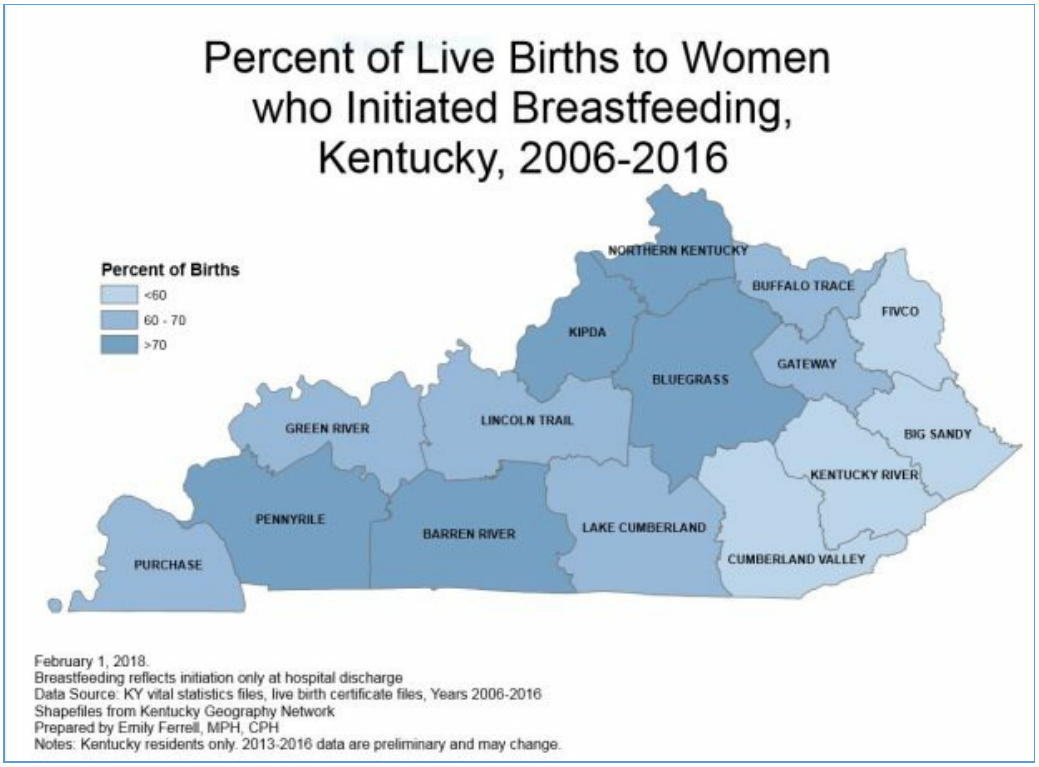
The Breastfeeding Peer Counselor Program consists of paraprofessionals who were previous WIC participants and have successfully breastfed at least one infant. These peer counselors provide basic breastfeeding information and encouragement to WIC pregnant and breastfeeding mothers. There are currently 28 agencies covering 72 counties that have a Breastfeeding Peer Counselor Program. There are four regional coalitions that have promoted breastfeeding through social media, educational conferences, health professional and hospital education, outreach, media events, and community events.

Breast Feeding Accomplishments/Progress:

The rates of mother's breastfeeding their 6 month old babies have increased from 25.3% in 2005 to 35.3% in 2016 based on the National Immunization Survey conducted by the CDC. This represents a 27% increase over the eleven-year period. In addition, breastfeeding initiation rates increased from 52.7% in 2005 to 70.4% in 2016 (KY Vital Statistics Files, Live Birth Certificates).

Breastfeeding Challenges:

Even though improvements in breastfeeding have been made over time, KY still remains well below the nation (51.8%) in terms of the percent of mothers who breastfeed their infants at six months of age. KY currently has four Baby Friendly hospitals that deliver 20.3% of the babies born in KY. Breastfeeding is fully supported in those hospitals that implement Ten Steps to Successful Breastfeeding and become Baby Friendly. Kentucky has a limited number of International Board Certified Lactation Consultants. With this limited number of consultants, mothers may have difficulty finding help if a breastfeeding problem arises. In KY, not all workplaces are fully supportive of breastfeeding mothers, and that could be a barrier upon their return to work. Improving peer counselor availability should improve breast feeding support and duration.



There is a considerable amount of controversy among breastfeeding advocates around bed sharing to promote breastfeeding, which contradicts recommendations for room-sharing, but not bed sharing, for infant safe sleep. MCH promotes the ABCs of safe sleep and recommends room sharing.

Healthy Start

Louisville Healthy Start is one of 100 HRSA-funded programs throughout the U. S. working to eliminate disparities in perinatal health. Through home visitation services and multi-sector collaborations to improve policies and practices, Louisville Healthy Start reduces infant mortality and adverse perinatal outcomes in urban west Louisville. All Healthy Start programs are responsible for meeting goals within 16 benchmarks, which include “the percent of child participants who are placed to sleep following safe sleep behaviors” and “percent of children who were ever breastfed or fed breast milk” and “percent of children who were breastfeed or fed breastmilk at 6 months.” Additionally, annual measures track progress in reducing infant mortality, low birth weight, and preterm birth among participants. Healthy Babies Louisville operates as the collective impact group working to ensure that Louisville has a perinatal system that is responsive to the health and social needs of the MCH population. Strategic focus areas have included both safe sleep and breastfeeding. In 2017-18, community partners were asked to standardize the way they ask families about where they will have their infant sleep (instead of “do you have a safe place for your baby to sleep?”) and offering a safe sleep kit and education to families in need. The Breastfeeding Committee is assessing spaces for breastfeeding at employers and standardizing messaging about breastfeeding options at work.

HANDS

The HANDS program continued improving infant outcomes and reducing infant mortality overall in the families served. In addition, families served through our MIECHV grant continue to show improvements in maternal and newborn health, school readiness and achievement, increased screening for domestic violence and referrals for victims of domestic violence, family economic self-sufficiency, referrals for other community resources, reductions in mother and child visits to the emergency room, and incidence of child injuries requiring medical attention. On September 30, 2015, HANDS received notification that it meets the criteria established by the Department of Health and Human Services for an “evidence-based” early childhood home visiting service delivery model based on a thorough academic review by HomVee (Home Visiting Evidence of Effectiveness) of HANDS research and the evidence of the effectiveness of HANDS services.

Safe Sleep Surveillance Annual Report

In 2012, MCH conducted a review of all SUID cases from death certificate records and medical examiners reports to identify the presence of risk factors including the sleep environment. An MOU specific to this project was developed between the DMCH and the Office of the Medical Examiner (ME). This opened the door for a separate MOU, which continues today, to allow MCH program staff to review and copy pertinent records from all ME cases in children under the age of six years thereby improving surveillance efforts and data capacity for child death review in Kentucky. Data continues to support that SUID cases have at least one sleep-related risk factor in over half of these deaths. This is consistent with national data.

The CDC broadened the focus on infant deaths that occur while sleeping to include not only SIDS, but also accidental suffocation and strangulation in bed, and undetermined causes. These causes of infant death all fall under the designation of Sudden Unexpected Infant Death. In September 2015, KY was awarded a Sudden Unexplained Infant Death Case Registry grant from the CDC to further examine these deaths. Using this broader category of SUID, in 2016 in KY, 103 infants died suddenly of no immediately obvious cause. As a result, sudden unexpected infant deaths became the second leading cause of death among KY's infants.

The SUID grant promotes the early identification of SUID cases, as well as a comprehensive death scene investigation (DSI) and multidisciplinary case review in order to identify opportunities for prevention. SUID Case Registry work in KY has focused on enhancing the capacity for local teams to conduct SUID case reviews in addition to the development of a state level multidisciplinary review team to review all SUID cases that are not reviewed at the local level. A data system has enabled staff to monitor the timeliness of all data sources as well as the risk factors associated with each case and has served as a foundation for the discussion of quality improvement. Six multidisciplinary trainings held across the state focused on DSI, comprehensive case review, and photo documentation. Resources such as SUID re-enactment dolls, point and shoot cameras, and DSI process documents were provided at both formal trainings and continue to be provided during one on one technical assistance. These activities have resulted in a prompter and thorough DSI and review of SUID cases across the state.

Safe Sleep Campaign:

KY also chose to focus efforts on *NPM #5: Percent of infants placed to sleep on their backs.* In response to surveillance data and information from KY's External Panel for the Review of Child Fatalities and Near Fatalities, noting an alarming number of deaths from co-sleeping/bed-sharing often with the caregiver being impaired by drugs, alcohol, or marijuana, a Safe Sleep Kentucky Educational Campaign was developed. Through an AMCHP Birth Outcomes grant, funding was obtained and utilized for development of a Safe Sleep campaign. Western Kentucky University's School of Journalism (ImageWest) was contracted to assist with the development of the campaign. They conducted focus groups around the state, assisted with co-branding of NICHD materials as well as formatting of Kentucky specific materials. Interviews with two families who were affected by the loss of a child were done as well as photo shoots with families of infants for use in our materials. A pre-survey was developed to ascertain the knowledge, attitudes, and beliefs of Kentucky adults regarding infant sleep practices and over 3000 surveys were completed.

The Safe Sleep campaign utilized television, radio, and newsprint adds to reach adults 18-54 who were either parents or were raising infants. First Lady Glenna Bevins promoted the campaign in the media. The geographical reach included all of KY with concentrated media integration in Louisville, Lexington, Bowling Green, Pulaski, Owensboro, and Northern and Eastern KY. Pediatric offices in 47 locations utilized the physician office waiting room patient TVs to play safe sleep messaging.

Posters and window/mirror clings were placed in business in Eastern KY where there were concerns that digital media could fall short.

KY was able to place 12 full-page, color print messaging in La Prensa and El Kentubano reaching a distribution of over 130,000 Hispanic Kentuckians. Radio spots aired for 12 weeks on the El Mananero Morning Show.

During the campaign a Safe Sleep KY Facebook page was created. At the end of the campaign, this page has remained active. Responses tracked on this page showed during the campaign noted 11,312,653 individuals viewed the information, and 3,130 individuals shared the messaging on their individual pages. The safe sleep videos were viewed in full entirety by 551,648 individuals. Ongoing, a DPH nurse monitors the Safe Sleep KY Facebook page and email address to respond with best practice information as created from the Safe Sleep Task Force and was established in collaboration with the KY Chapter of the American Academy of Pediatrics, CHFS Communications staff, and other stakeholders in 2015. More information can be found at www.safesleepky.org.

KY participated in the Safe Sleep CoIIN aimed at promoting infant safe sleep practices with the overall goal of reducing infant mortality. The CoIIN project ran concurrently with the Safe Sleep Task Force and development of our Safe Sleep Campaign. In a review of KY GIS mapping of SUID and NAS data, SUID rates appeared to mirror locations of increased NAS (see map as pictured in Technical Assistance section). This information, along with other details, was used to determine areas for the regional plan of safe care meetings and pilot projects that will be discussed later in the cross cutting section.

Dr. Bada, MCH Director, traveled throughout Kentucky and conducted 6 regional meetings for LHDs, birthing hospitals, and providers on the newborn with Neonatal Abstinence Syndrome (NAS), linkage to care post hospital discharge, and birth through two years of age with a goal to establish a plan of safe care. Additional presenters spoke regarding treatment of mothers with opioid dependence, the non-pharmacologic management of infants with NAS, discharge teaching for infants with NAS, and incorporating the Plan of Safe Care as well as Safe Sleep. From these meetings, Floyd County was identified to be the first pilot program titled "Healing, Empowering and Actively Recovering Together (HEART)" and plans to promote the program as "The HEART of Floyd County." This group of multidisciplinary stakeholders will initiate a small group experience to provide wrap-around services for mothers and babies in recovery to include peer counseling, parenting classes, MAT, modeling of safe sleep, well child exams, and connection to other public health services such as WIC, smoking cessation, and family planning. From these regional meetings additional pilot sites are being identified for future programming. A broader description of the HEART program will be discussed in the Crosscutting Sections.

Social Determinants of Health CoIIN

KY participates on the Social Determinants of Health CoIIN. This CoIIN is aimed at incorporating evidence-based policies/programs and place-based strategies to improve equity in birth outcomes by building state and local capacity and testing innovative strategies to shift the impact of social determinants of health. Over the past year, KY has participated in several webinars, learning labs and action calls to build its knowledge and understanding of social determinants and the impact on population health and to identify areas of intervention that is most conducive to achieving equity in birth outcomes in KY.

MCH Evidence Informed Strategies at LHD's

With Title V Funds, LHDs are offered options of MCH Evidence Informed Strategies to select those best suited to their community's need. LHDs are required to choose at least one infant mortality strategy: Period of Purple Crying (AHT Prevention) for Community Partners; Safe Sleep (National Institute of Child Health and Human Development [NICHD] materials) with Community Partners and agencies; Safe Sleep (NICHD materials) for Child Care; and Cribs for Kids. Each LHD is encouraged to be creative with the packages to adapt and fit these to their local communities. Evidence Informed Strategies chosen by LHDs:

- Safe to Sleep for Community Partners: 26
- Safe to Sleep for Child Care Providers: 18
- Prevention of Abusive Head Trauma package: 27
- Cribs for Kids for Community Partners: 22
- All Safe Sleep Packages: 8

The Cribs for Kids package requires the LHD to find a match with a local community stakeholder to purchase an equal number of cribs. Lincoln Trail and Lake Cumberland successfully partnered with Passport and Anthem MCOs for a $10,000 match each to purchase crib kits. To date in FY2018, 6,702 parents/caregivers received safe sleep education, 564 crib kits distributed, 7,775 childcare providers and 17,277 community partners received safe sleep education.

Areas choosing all safe sleep packages and those focused on community engagement likewise had a lower number of SUID cases.

KY Pregnancy Risk Assessment Monitoring System (PRAMS)

KY received funding through a cooperative agreement to become a CDC PRAMS state in May 2016. PRAMS is a population based, random survey of women who have recently had a live birth. PRAMS data collects information on maternal attitudes and experiences before, during, and shortly after pregnancy and serves to fill gaps in existing MCH data sources. KY has recently entered

into the third year of a five-year cooperative agreement for PRAMS. PRAMS data collection began in 2017 and KY has completed one full year of surveying and is in the process of submitting the data to the CDC for weighting. The percentage of survey returns was higher than averages reported across other states, an admirable performance for a surveillance program in its first year. Once the weighted data set is received, KY will analyze the data and disseminate the results.

The KY PRAMS program continued to maintain all required elements established in the model surveillance protocol for data collection and successfully obtained IRB approval for continuation of PRAMS in KY. The Kentucky PRAMS program also successfully completed its first full year of data collection and has begun data collection for the next year, which will cover births in calendar year 2018. Market Decisions Research Inc. was offered a contract renewal to provide continued data collection activities for KY PRAMS. The contract renewal has been submitted for Cabinet approval and signatures and will cover the time frame July 1, 2018 through June 30, 2020. MDR will continue to administer the surveillance components of PRAMS (mail and telephone survey, data entry and mailing of rewards) adhering to the established protocols and will provide ongoing monthly monitoring and reports to the KY PRAMS program.

Promotional materials of various types were developed and printed to help raise awareness of the KY PRAMS survey. These materials are in the process of being distributed to local partners, community providers, stakeholders, and select professional organizations.

Challenges PRAMS:

The Division of the CDC that funds the state-level PRAMS programs received a funding reduction by Congress. Therefore, all CDC funded PRAMS states received a 10% reduction in funds for year two of the grant. Kentucky, along with the other PRAMS funded states, had to reduce its budget by 10% for grant year two. It is unknown at this time whether funding cuts will continue in the future. In addition, due to these budget cuts, contracted staff at the CDC serving as state project officers were let go and states they were serving were re-assigned to non-contracted staff for program management and technical assistance. KY was one of these states that was re-assigned and has begun working with its new project officer.

Perinatal/Infant Health - Application Year

KY MCH planning for the coming year will continue to focus on *NPM # 4: A)Percent of infants who are ever breastfed, B) Percent of infants breastfed exclusively through six months* and *NPM # 5: Percent of infants placed to sleep on their backs*.

Breastfeeding

Federally available data for KY show improvements have been made in the percent of mothers breastfeeding their infants at six months of age, therefore, KY will continue to build upon this success and focus on breastfeeding as a priority. Measurement will also focus on the percent of infants who are ever breastfed and the percent of infant's breastfed exclusively through six months of age.

Efforts to increase breastfeeding initiation and duration rates in the upcoming year will focus on the following activities:

- Supporting Regional Breastfeeding Coordinators to promote and support breastfeeding through public outreach, community events, health services planning, and organization of continuing education opportunities
- Providing breastfeeding education to WIC health professionals through webinars
- Promoting the 10 Steps to Successful Breastfeeding with birthing hospitals while providing technical assistance as needed
- Providing breastfeeding education to pregnant and breastfeeding women through education materials and community events
- Promoting the WIC Breastfeeding Peer Counselor Program to WIC clients
- Offering breastfeeding education to health professionals and hospitals through conferences and trainings

A project planned for the upcoming year is to evaluate current practices regarding breastfeeding at the community, hospital, and parent level. Coffective© (New York, NY) has been selected as the vendor to assist with evaluation, training, and breastfeeding promotion activities. Coffective© (Community + Effective) strives to empower the community to help families reach their breastfeeding goals. Coffective© defines community as a composition of mothers, nurses, providers, peer counselors, home visitors, leaders, hospitals, and more. Coffective© will assist with ongoing messaging for breastfeeding promotion.

Breastfeeding education materials and training (in-person and online) will be provided to LHD health professional staff, Regional Breastfeeding Coordinators, Breastfeeding Peer Counselors/Supervisors, birthing facility staff and lactation specialists. The goals of the training are to increase breastfeeding knowledge of staff and of pregnant or breastfeeding women. By training in advance of delivery, pregnant women will be more prepared for breastfeeding best practices upon admission for the delivery. Special emphasis will be placed on increasing the number of hospitals that have implemented Kangaroo Care and moving toward becoming baby friendly. Regional Breastfeeding Coordinators work with each birthing hospital in KY to help implement and maintain Kangaroo Care.

Online education modules and educational materials on breastfeeding and nutrition will be developed for LHD staff training. The Kentucky Worksite Toolkit will be promoted throughout the state by the Regional Breastfeeding Coordinators. The Coordinators will distribute and train local businesses on the toolkit and how to support breastfeeding women. This toolkit will also be uploaded to the website, featured in the breastfeeding newsletter, and promoted in communities through conferences.

Collaboration with the MCH Obesity Team and Partnership for a FIT KY will support the dissemination of educational materials to promote breastfeeding and nutrition through participation in health fairs and conferences. Likewise, other MCH programs promote this topic at local events as well as cross promote prevention activities related to childhood injury prevention, lead poisoning, and the linkage for prenatal services. The initiatives for the Strategic Plan to Increase Breastfeeding Rates in KY include: collaboration with Partnership for a FIT KY, UK, UL and other public and private partners and development and distribution of a breastfeeding module for early child care providers to educate them regarding breastfeeding friendly childcares and feeding the breastfed infant.

Safe Sleep

The Child Fatality Review nurse will monitor social media. The CFR program will promote the safe sleep programs on the Facebook feed for local community partners and health departments. The program will continue review of child deaths related to unsafe sleep practices and support local teams with prevention planning and promotion. Data will be collected on these cases with ongoing technical assistance and support provided to local teams as part of the ongoing statewide child death review program. Prevent Child Abuse KY, the KY Hospital Association, and KDPH are collaborating to create a comprehensive education video concerning safe sleep and AHT for new mothers to view

prior to discharge. The KDPH, KSPAN, KPRIC and Northern KY Health Department are collaborating to create a high school curriculum to educate students on AHT and safe sleep.

Social Determinants of Health

KY will continue to participate on this CoIIN. The Louisville Healthy Start Program continues as a major collaborator in this endeavor. An MCH conference is planned for November 2018 to promote education about Social Determinants in KY, along with cultural diversity, in collaboration with the KY March of Dimes chapter and the Kentucky Perinatal Association.

MCH Evidence Informed Strategies at LHDs or Packages

KY plans to continue to offer MCH Evidence Informed Strategies through the MCH packages as described. The packages offered include Safe Sleep for Child Care Providers, Safe Sleep for community Partners, Prevention of Abusive Head Trauma, and Cribs for Kids for Community Partners.

PRAMS

KY will continue with the PRAMS survey as described in the annual report. Once the weighted data set is received, KY will analyze and distribute the results. Because KY PRAMS survey addresses other areas of MCH population health, the data will provide very pertinent information about the needs of the MCH population in KY. PRAMS could prove to be insightful for programming for the perinatal population in terms of mental health, care, and safe sleep outcomes.

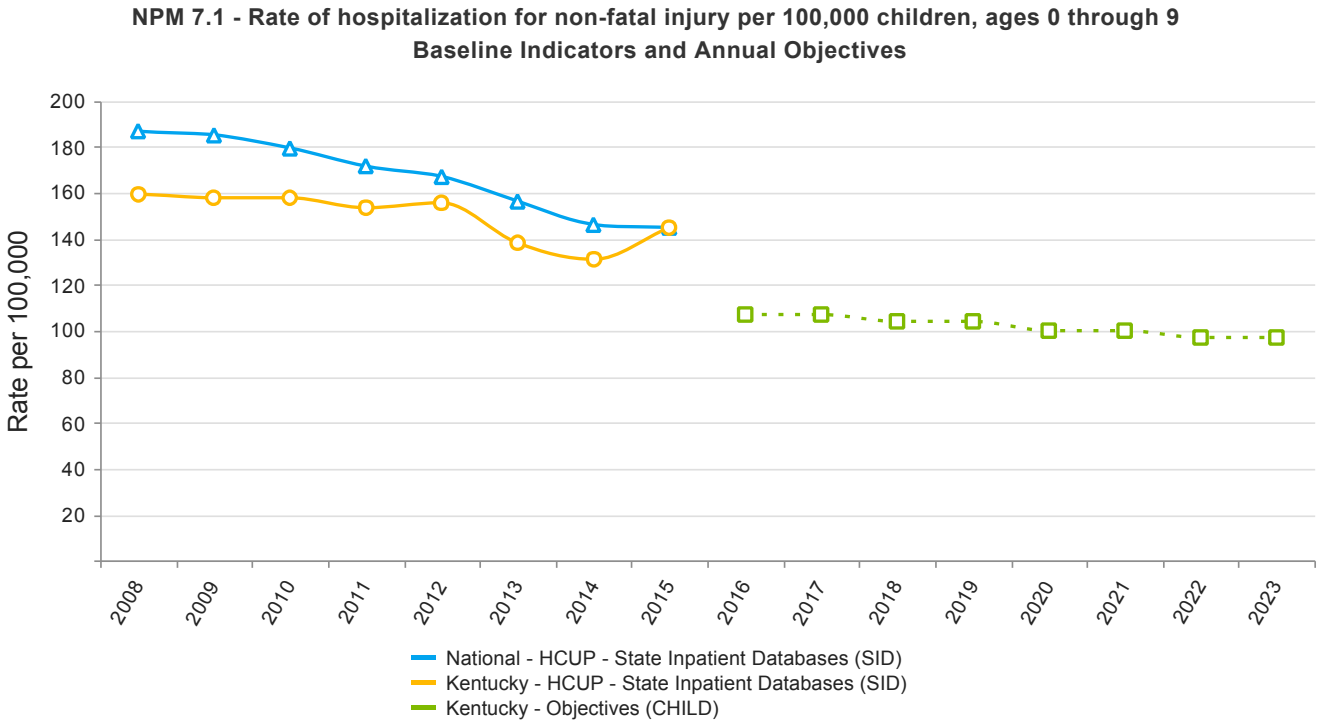
Child Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2015	116.3	NPM 14.2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2012_2016	22.9	NPM 14.2
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2016	9.1 %	NPM 14.2
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2016	11.4 %	NPM 14.2
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2016	28.3 %	NPM 14.2
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2015	6.5	NPM 14.2
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2015	6.7	NPM 14.2
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2015	4.1	NPM 14.2
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2015	2.6	NPM 14.2
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2015	178.7	NPM 14.2
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2015	153.7	NPM 14.2
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2016	12.4 %	NPM 13.2
NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000	NVSS-2016	21.6	NPM 7.1
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000	NVSS-2016	45.3	NPM 7.1
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2014_2016	16.9	NPM 7.1
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2014_2016	11.9	NPM 7.1

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2016	89.2 %	NPM 8.1 NPM 13.2 NPM 14.2
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH-2016	19.7 %	NPM 8.1
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2014	13.3 %	NPM 8.1
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	YRBSS-2015	18.5 %	NPM 8.1

National Performance Measures



Federally Available Data		
Data Source: HCUP - State Inpatient Databases (SID)		
	2016	**2017**
Annual Objective	107	107
Annual Indicator	108.4	145.0
Numerator	606	605
Denominator	558,942	417,308
Data Source	SID-CHILD	SID-CHILD
Data Source Year	2014	2015

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	104.0	104.0	100.0	100.0	97.0	97.0

Evidence-Based or –Informed Strategy Measures

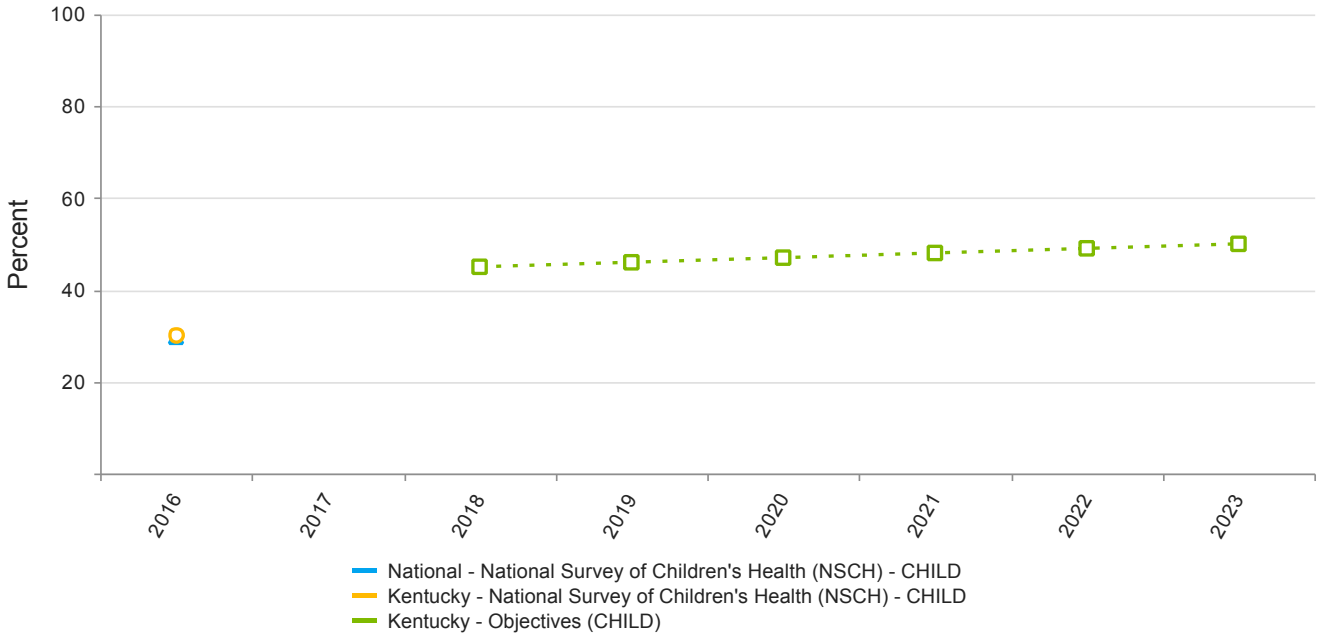
ESM 7.1.1 - Implementation of Child Passenger Safety Strategies in local communities

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		25
Annual Indicator	19	30
Numerator		
Denominator		
Data Source	Catalyst reporting system	Catalyst Reporting System and Safe Kids Coordinato
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	30.0	32.0	34.0	36.0	38.0	40.0

NPM 8.1 - Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day
Baseline Indicators and Annual Objectives



Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - CHILD		
	2016	**2017**
Annual Objective		
Annual Indicator		30.2
Numerator		90,306
Denominator		299,110
Data Source		NSCH-CHILD
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	45.0	46.0	47.0	48.0	49.0	50.0

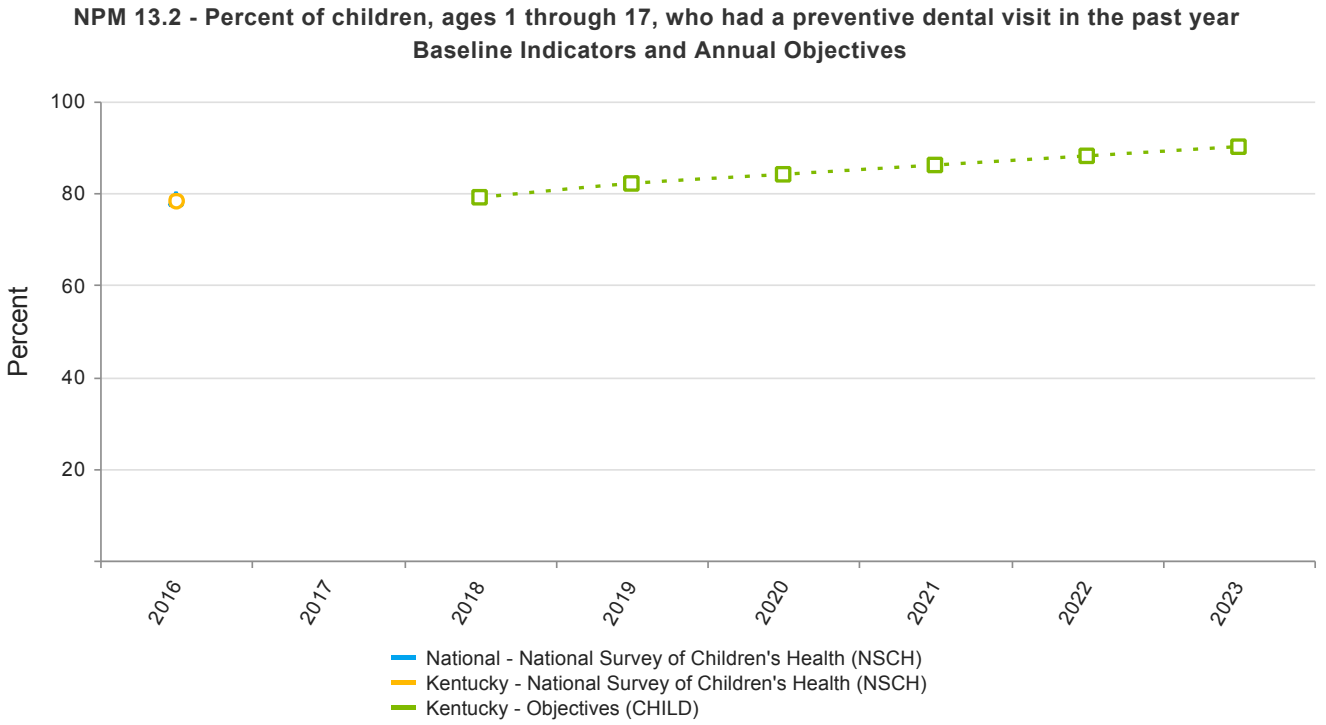
Evidence-Based or –Informed Strategy Measures

ESM 8.1.1 - Number of early care and education professionals completing online training modules

Measure Status:	Active

State Provided Data	
	2017
Annual Objective	200
Annual Indicator	2,122
Numerator	
Denominator	
Data Source	UK HDI
Data Source Year	2017
Provisional or Final ?	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	2,200.0	2,300.0	2,400.0	2,500.0	2,600.0	2,700.0



NPM 13.2 - Child Health

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH)		
	2016	**2017**
Annual Objective		
Annual Indicator		78.3
Numerator		746,012
Denominator		952,247
Data Source		NSCH
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	79.0	82.0	84.0	86.0	88.0	90.0

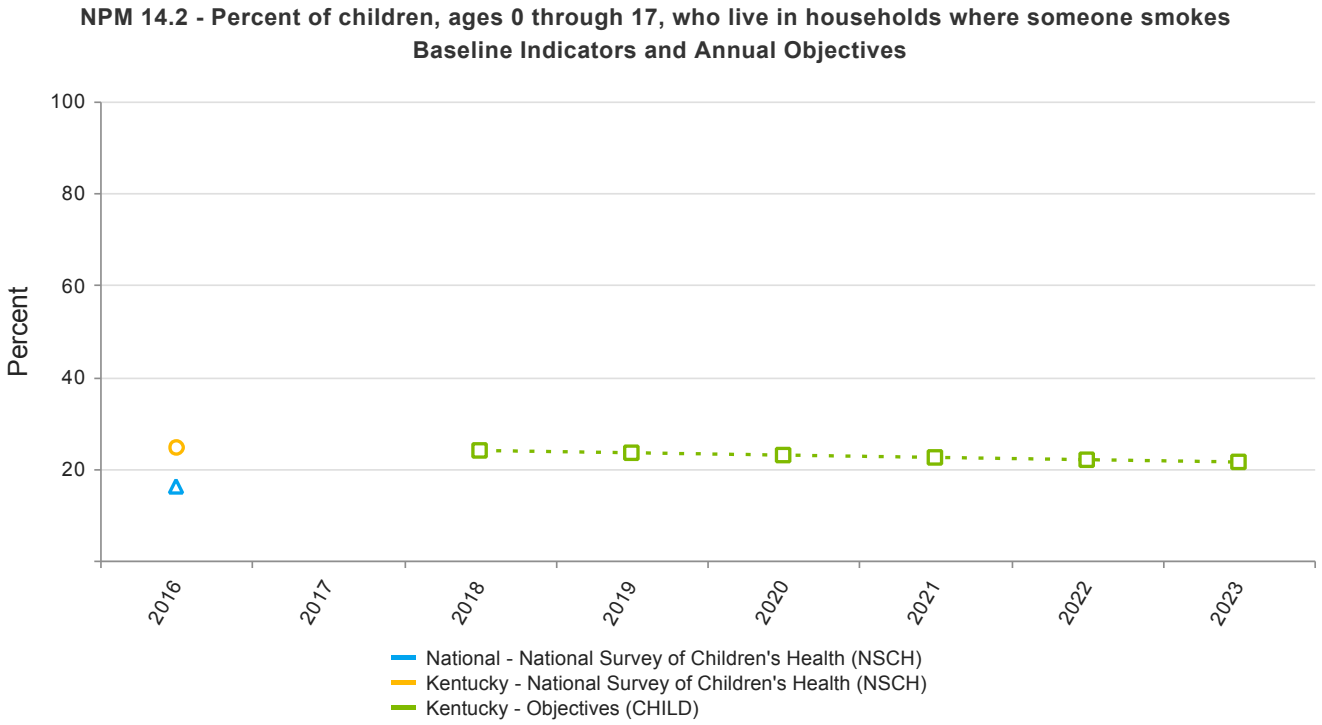
Evidence-Based or –Informed Strategy Measures

ESM 13.2.1 - Fluoride varnish applications for children in local health departments

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		
Annual Indicator	15,580	28,000
Numerator		
Denominator		
Data Source	CDP data system	CDP data system
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	28,500.0	29,000.0	29,500.0	30,000.0	30,500.0	31,000.0



NPM 14.2 - Child Health

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH)		
	2016	**2017**
Annual Objective		
Annual Indicator		24.6
Numerator		244,610
Denominator		992,768
Data Source		NSCH
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	24.0	23.5	23.0	22.5	22.0	21.5

Evidence-Based or –Informed Strategy Measures

ESM 14.2.1 - Implementation of 100% Tobacco-free School Policies

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		39
Annual Indicator	37	40.5
Numerator	64	70
Denominator	173	173
Data Source	KY Tobacco program	KY Tobacco Program
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	42.0	44.0	46.0	48.0	50.0	52.0

State Performance Measures

SPM 2 - Reduce by 5% the number of Medicaid recipients less than five years of age with pediatric abusive head trauma

Measure Status:	Inactive - Until data refinement is available, this measure is tabled until the future.

State Provided Data		
	2016	2017
Annual Objective		34
Annual Indicator	35	35
Numerator		
Denominator		
Data Source	KY Medicaid Management Information System	KY Medicaid Management Information
Data Source Year	2015	2015
Provisional or Final ?	Final	Final

State Action Plan Table

State Action Plan Table (Kentucky) - Child Health - Entry 1

Priority Need

Overweight and Obesity Among Teens

NPM

NPM 8.1 - Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day

Objectives

Reduce by 5% the percentage of 2-4 year old Women, Infant and Children participants who are obese by September 30, 2020.

Strategies

Create and launch two additional online training modules that support ECE professionals in health best practices.

Increase the number of early care programs that have written policies in place supporting health best practices.

Develop support package and materials for technical assistance providers to increase capacity and consistency of TA provided.

ESMs	Status
ESM 8.1.1 - Number of early care and education professionals completing online training modules	Active

NOMs

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

State Action Plan Table (Kentucky) - Child Health - Entry 2

Priority Need

Injury (Child Abuse and Neglect)

NPM

NPM 7.1 - Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9

Objectives

Decrease by 10% the rate of hospitalizations related to motor vehicle accident injuries among children ages 0-19 years by September 30, 2020.

Strategies

Increase the number of car seats that are installed and used appropriately and increase the number of CPS technicians in rural areas.

Increase the number of local health departments that participate in the child passenger safety package.

ESMs	Status
ESM 7.1.1 - Implementation of Child Passenger Safety Strategies in local communities	Active

NOMs

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000

State Action Plan Table (Kentucky) - Child Health - Entry 3

Priority Need

Oral Health

NPM

NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Objectives

Increase by 10% the number of fluoride varnish applications provided by the public health system by September 30, 2020.

Strategies

The KOHP will continue to train LHD nurses in the procedures required for a successful varnish application and evaluate the KIDS Smile curriculum to improve the outputs and outcomes

Promote and expand the public health dental hygiene program and referrals to dentists

Establish and sustain an oral health surveillance system for children

ESMs	Status
ESM 13.2.1 - Fluoride varnish applications for children in local health departments	Active

NOMs

NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

State Action Plan Table (Kentucky) - Child Health - Entry 4

Priority Need

Substance Abuse

NPM

NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes

Objectives

Increase by 5% the proportion of women who report no smoking in the third trimester of pregnancy by September 30, 2020

Strategies

Collaborate with stakeholders to increase the number of local communities with smoke-free laws and ordinances

Support the 100% Tobacco-Free Schools Evidence Informed Strategy to increase the number of schools that implement this policy

Provide education and technical assistance to the HANDS and WIC programs to increase referrals to Quit Now Kentucky

ESMs	Status
ESM 14.2.1 - Implementation of 100% Tobacco-free School Policies	Active

NOMs

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

NOM 3 - Maternal mortality rate per 100,000 live births

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

NOM 5 - Percent of preterm births (<37 weeks)

NOM 6 - Percent of early term births (37, 38 weeks)

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

NOM 9.1 - Infant mortality rate per 1,000 live births

NOM 9.2 - Neonatal mortality rate per 1,000 live births

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

Child Fatality Review

The Title V MCH Program has striven to improve the quality and timeliness of data in our Public Health Child Fatality Review Program to better inform our injury prevention strategies. MCH is the lead for this program, which was established in 1996 by statute. The program supports and encourages reviews of child deaths by local multidisciplinary teams to assist the coroner in determining an accurate manner and cause for each child death. The MCH Child Fatality and Injury Prevention Program currently receives notifications of any child death occurring in Kentucky from multiple data sources. In order to manage this data, the program has developed a tracking system to track the receipt and timeliness of all data received related to a child death and to track information pertaining to the review. KY utilizes an electronic death registration system as a primary source of data for child death reports. An annual report of child death data prepared by MCH is required by legislation to be submitted to the Governor, the Legislative Research Commission, and the Chief Justice of the Kentucky Supreme Court by November 1 each year. The most recent report can be found at: https://chfs.ky.gov/agencies/dph/dmch/cfhib/Child%20Fatality%20Review%20and%20Injury%20Prevention/CFR2017

MCH provides Title V funds to the 120 LHDs to support local CFR review teams and to implement Evidence Informed Strategies in alignment with state priorities. The Title V funding is provided for each county to support local CFR team meetings, to implement injury prevention community interventions when identified as a need by the local teams, and to cover the training for certifying Child Passenger Safety (CPS) technicians if there are none certified in the local community.

Child Fatality Review in KY has been a challenge due to turn-over in coroners, and LHD coordinators. While it was felt that 78 counties conducted reviews last year, upon assessment in October 2017, it appeared these counties were only reporting the deaths as required per statue. An active review with prevention measures/activities were not occurring in part due to a state level vacancy in leading this program. In October, Angie Brown, a nurse consultant with a passion for child safety, was hired. She began a detailed analysis and education of local counties and discovered only 5 counties and 1 district had strong review. Under her guidance, KIPRIC, DBHDID suicide coordinator, KY Chief Medical Examiner and KDPH began intensive training with local coroners at the KY New Coroner Training, Coroners Convention, and LHDs at sites across the state. KDPH linked those 6 areas with strong review, to new teams to help with technical assistance. Ms. Brown attends local reviews and helps guide the new facilitator on record abstraction, case presentation, and prevention response post review. To date, 92 counties are being mentored by this process. This change to the CFR program procedure has created stronger communication with KY Suicide Coordinator who is attending local reviews for any child suicides, and providing ongoing intervention to the community through the regional mental health centers.

Child Abuse Surveillance

In the needs assessment process, both consumers and stakeholders were particularly concerned about injury related to child abuse. Because of this, KY chose to focus on *NPM #7: Rate of hospitalization for non-fatal injury per 100,000 children ages 0 through 9.* While Title V does not have the leading role in child abuse prevention, KDPH actively participates in the Child Fatality and Near Fatality External Review Panel. The Child Fatality and Near Fatality External Review Panel was created and established by Kentucky Revised Statutes 620.055 for the purpose of conducting comprehensive reviews of child fatalities and near fatalities suspected to be the result of abuse or neglect. The Panel is a twenty-member multidisciplinary team of professionals including representatives from the medical, social services, mental health, legal, and law enforcement communities, as well as others who work with and on behalf of Kentucky's children. The MCH Title V Director and the MCH CFR nurse coordinator attend the Child Fatality/Near Fatality External Panel Review meetings. The MCH CFR coordinator reviews cases that are to be discussed by the External Panel for a final determination of the cause of death or injury, systems issues, preventable problems and recommendations for prevention. Local cases in which suspected abuse/neglect could be part of the final determination are referred to the External Panel through the MCH CFR coordinator.

Injury Prevention and Intervention

The MCH program partners with the Kentucky Injury Prevention Research Center (KIPRC) at the University of Kentucky, the bona fide agent for injury prevention for the KDPH. KIPRC applies for and coordinates the CDC Injury and Violence Prevention Cooperative Agreement for KY. Title V funds the pediatric injury prevention program at KIPRC, which includes a pediatrician with expertise in injury prevention and child death reviews. This pediatrician provides technical assistance and training to child-serving agencies including LHDs, health professionals, local CFR

teams, and community partners across the state on injury prevention activities and resources. In addition, she serves as the State Safe Kids Coordinator, facilitating the training and sustainability of a rural child passenger safety workforce.

MCH partners on prevention activities with KIPRC's statewide injury coalition, the KY Safety and Prevention Alignment Network (KSPAN). KSPAN is a network of public and private organizations, and individuals, dedicated to promoting safety and preventing injuries throughout the Commonwealth of KY. KSPAN is specifically working to improve the state's capacity to conduct injury prevention and control activities across a wide range of injury causes and types and risk factors and to increase the reach, efficiency and effectiveness of existing prevention efforts through greater coordination and alignment of resources. There are five major prevention emphasis areas for the KSPAN coalition and the Kentucky Violence and Injury Prevention Plan: Motor Vehicle, Child Passenger, & Teen Driver Safety, Prevention of Drug Abuse, Fall Prevention for Older Adults, Residential Fire Safety and Prevention of Child Maltreatment. MCH staff serves on three of the five different subcommittees that relate to the focus areas.

Child Safety CoIIN

Recognizing that more children and adolescents ages 1-19 die from injuries and violence than from all diseases combined, and injuries are a leading cause of emergency department visits, hospitalizations, and disabilities, KY joined an 18 state Child Safety CoIIN.

In the first cohort (from 2015 - spring 2017), the three topic areas of focus were: Child Passenger Safety, Teen Driving/ Graduated Drivers Licensing Program, and Interpersonal Violence (narrowed specifically to Abusive Head Trauma). This choice of topics was supported by state injury and death data, the priorities from the Title V needs assessment, and the priorities of the KSPAN state coalition. Because an existing infrastructure was already in place for these topics through KSPAN, the CoIIN leads engaged the working committees to adopt the CoIIN process and, with a few added people, the KSPAN committees became the CoIIN teams for all three topics.

In FY2017, the Child Passenger Safety CS-CoIIN group activities focused on efforts to better coordinate CPS activities statewide between local health and fire departments, MCH, two hospital-based Safe Kids Coalitions, and the State Office of Highway Safety to build a sustainable rural CPS workforce and to proactively assist rural CPS technicians, specifically those at LHDs, with maintaining their certification. This CoIIN team was also able to successfully meet the goal of training an additional CPS Technician Instructor to augment the underserved area of Northeastern KY. The Teen Driving/Graduated Drivers Licensing Program group of the Child Safety CoIIN will be discussed in the Adolescent Health Domain Narrative. The Interpersonal Violence (specifically AHT) workgroup of the Child Safety CoIIN worked toward onboarding all birthing hospitals to provide evidence based education on both AHT and safe sleep to for their mothers and families prior to discharge after the birth.

In FY2018, the CPS CoIIN/MCH team worked to assure that every child death in a motor vehicle crash was part of a local review to identify prevention activities. Multiple goals have been met through local car seat projects via Safe Kids. Title V funding is used to support and train new CSP techs in LHDs and to help establish sustainable CPS programs for families in need.

Primary Prevention-Home Visiting

HANDS is KY's statewide home visiting program for overburdened parents. Goals of the program include healthy pregnancies and births and for children to live in healthy/safe homes. Home visitors emphasize child safety checklists for appropriate ages; healthy child growth and child development, child abuse prevention; and family self-sufficiency. Family self-sufficiency includes goal setting, resource development, positive parenting, and even anger management, so that families are less likely to use harsh discipline or have violence in the home. In FY2017, there were approximately 211,492 home visits provided to overburdened parents in Kentucky. Every HANDS home visitor must complete:

- 1.5 hours of Cabinet-approved Pediatric Abusive Head Trauma training before they are allowed to bill for visits
- Continuing education hours in the areas of:
    - Child abuse and neglect
    - Problem solving & crisis intervention
    - Domestic violence
    - Temperament & discipline

KY has a mandatory reporting law and all home visitors report any suspicions to CPS. HANDS home visits include

using the Ages & Stages-3 and the Ages & Stages-SE2 questionnaires to identify children who are at risk of a developmental delay. These developmental screens act as a conversation starter between the home visitor and the parent about what activities and behaviors are developmentally appropriate in all children and prepares the parent for when their child transitions into new developmental stages.

HANDS evaluations continue to show success at reducing child abuse and neglect in this population of high risk families. The most recent outcome evaluation studies have found that HANDS participants experience 47% less child abuse and neglect than similar high risk families that did not participate in the program. This is consistent with earlier studies, which also showed a 50% reduction in child emergency room visits among HANDS participants compared to children statewide.

Early Childhood Obesity Prevention

Obesity and overweight remain a significant public health problem in KY. While very little data exists on young children, 2016 WIC data on children 2-5 years of ages reveals 13.5% of children are obese and 13.7% are overweight as compared to the national average of 9.4% (Centers for Disease Control and Prevention, 2016). Though these numbers have improved in the last decade, these data remain concerning due to the health risks associated with long term overweight and obesity and the impact on child development.

MCH goals to reduce obesity are:

- Broad goal: Reduce the likelihood of the onset of overweight and obesity in early childhood by increasing the initiation of healthy behaviors in young children for improved nutrition and increased physical activity
- Long-term goals: Promote healthy behaviors throughout the lifespan to decrease BMI and increase in physical activity
- Short-term goals:
    - Increase access to training on health practices and implementation of program policies in the environments where young children spend large portions of their day and consume a significant percentage of daily meals and calories
    - Increased access to training on health practices and behaviors for early care professionals and to increase capacity and consistency of technical assistance

In 2012, Kentucky established a 5-2-1-0 public awareness:

- Five: Eat five or more servings of fruits and vegetables daily
- Two: Limit screen time to no more than two hours daily
- One: Be physically active at least one hour daily
- Zero: Do not drink sweetened beverages

Designed for parents, early childhood professionals, and healthcare professionals, the campaign specifies a memorable method for caregivers to talk about key evidence-based behaviors and encourage parents to adopt obesity prevention strategies for children. The KDPH, Kentucky Chapter of the AAP, and Foundation for a Healthy Kentucky helped to establish the campaign. To support community agencies and technical assistance providers in sharing information about the behaviors, MCH developed a toolkit. The 5-2-1-0 campaign will continue through the next year.

Kentucky Strengthening Families Initiative

In a more socio-ecologic, preventive approach to injury prevention, specifically child maltreatment prevention, MCH Title V is leading the KY Strengthening Families (KYSF) initiative in collaboration with the Governor's Office of Early Childhood. KY's initial focus is children prenatal through five years and their families and follows a collective impact model, similar to the CDC "Safe, Stable, and Nurturing Environments" work. Kentucky is an affiliate of the national Strengthening Families Network which is a research-based framework of protective factors for child maltreatment prevention. KY's initiative is somewhat unique, in that KY developed a cross-sector, cross-agency, public-private framework so that families will be supported in strength-based environments no matter what systems or child-serving agencies they access within their community. It is an intentional approach to systems change and common messaging among all child-serving agencies to respond to the science of toxic stress and early brain development. MCH is raising awareness of ACEs and toxic stress and laying the groundwork for why Strengthening Families and building protective factors are critical to children's health and well-being.

In April 2017, the KYSF Initiative hosted a KYSF Summit for agency and community teams to create action plans for implementing the Initiative. In September 2017, the Early Childhood Advisory Council (ECAC) approved the KYSF

Leadership Team to serve as the ECAC Family Engagement subcommittee. In January 2018, the KYSF Leadership Team developed a two-year Strategic Plan that included the integration and development of the Youth Thrive Initiative which compliments the KYSF Protective Factor Framework with having Youth Protective Factors for youth 9 to 26 years old.

Help Me Grow Developmental Screening

Although Kentucky did not choose the NPM for developmental screening, MCH worked with the KY Chapter of the AAP to implement "Help Me Grow," an evidence-based, national program model for promoting developmental screening. The National Help Me Grow model has been implemented in 28 states and includes four core components:

1) Child Health Care Provider Outreach
2) Community Outreach
3) Centralized Telephone Access Point
4) Data Collection

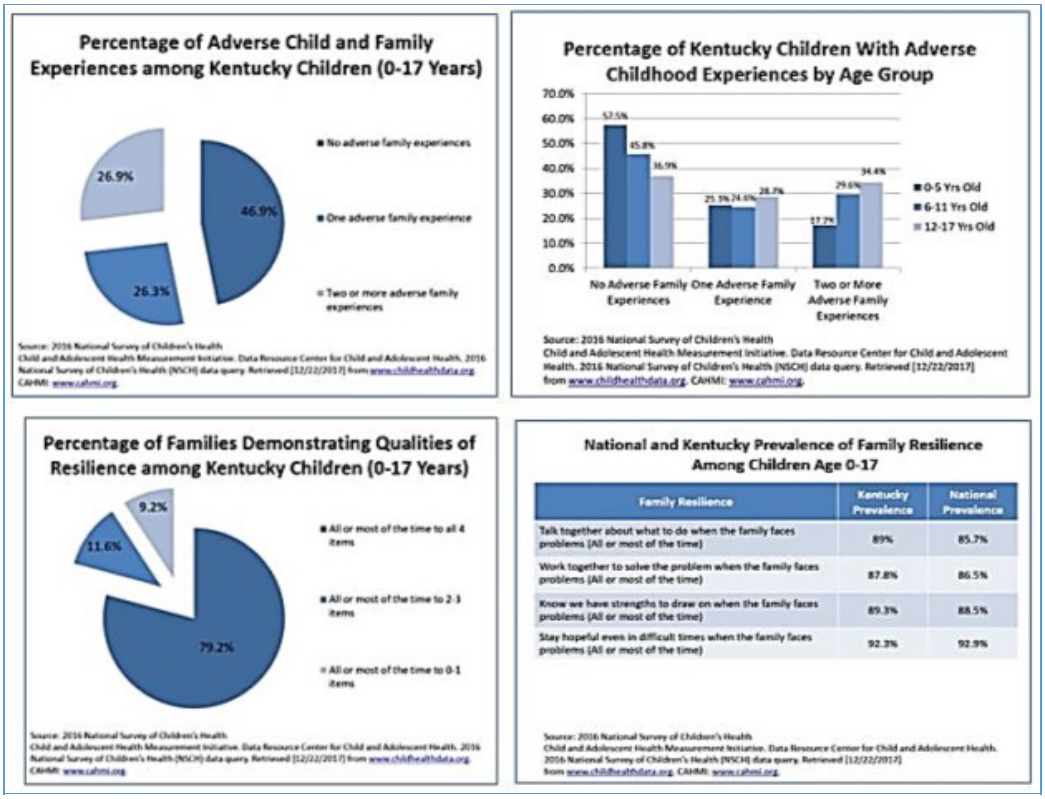
The Help Me Grow system provides free developmental screening and linkages for families to early intervention services and resources in local communities based on the results of the Ages and Stages Questionnaire and ASQ Social-Emotional Questionnaire. The initial KY project was a pilot site in Corbin, KY in collaboration with a pediatric office. Using lessons learned from that project, the KY AAP Chapter identified 4 pediatric practices to implement Help Me Grow Kentucky (HMGKY) beginning January 2, 2016. MCH staffs the HMGKY call center and has worked out the communication protocols to assure the offices receive the results in a timely manner.

As of March 31, 2018:

- 2,661 Ages and Stages Screenings have been completed for 1,711 children in 1,564 families
    - Average of 59 new children screened monthly
    - Average of 54 families enrolled monthly
    - Average of 91 screens processed monthly with over 200 follow-up activities completed by the HMGKY call center each month. Of the total screenings completed there are three possible results from the Ages and Stages screenings:
        - 1688 no concern, (63%)
        - 327 monitor (12%)
        - 293 concerns (11%). Of the 293 concerns, 148 referrals (49%) were made to the following providers: 97 First Steps Point of Entry, 39 local school system, and 12 local behavioral health providers. In addition, 145 parents declined initial referral

Adverse Childhood Experiences

Recent data released for KY has shown KY children and families have higher ACEs scores than seen nationally. Per the ACEs study, the higher the ACEs score is the greater the risk for poor health outcomes later in life. Some ACEs information is shown below from the 2016 National Survey of Children's Health as it relates to children in KY.



The ACEs and epigenetics also help explain the multigenerational issues related to poor outcomes, and the KYSF leadership team is promoting the “two generations” approach. Audiences have been eager to receive this information and have included Kids Are Worth It, Early Childhood Institute, Behavioral health staff, Administrative Office of the Courts statewide meeting, Family Youth Resource Service Centers, the Early Childhood Advisory Council, the State Interagency Advisory Council (SIAC) for Children with Emotional Disorders, HANDS, Community Early Childhood Councils, and many smaller organizations.

Multiple viewings of the film, RESILIENCE is being provided for KDPH to further educate all programming about ACEs and the impact. Dr. Connie White frequently speaks to a variety of audiences about this topic and consistently reminds those present of the ongoing need to address ACEs from occurring and to build resiliency at the earliest points for children.

Accomplishments/Progress

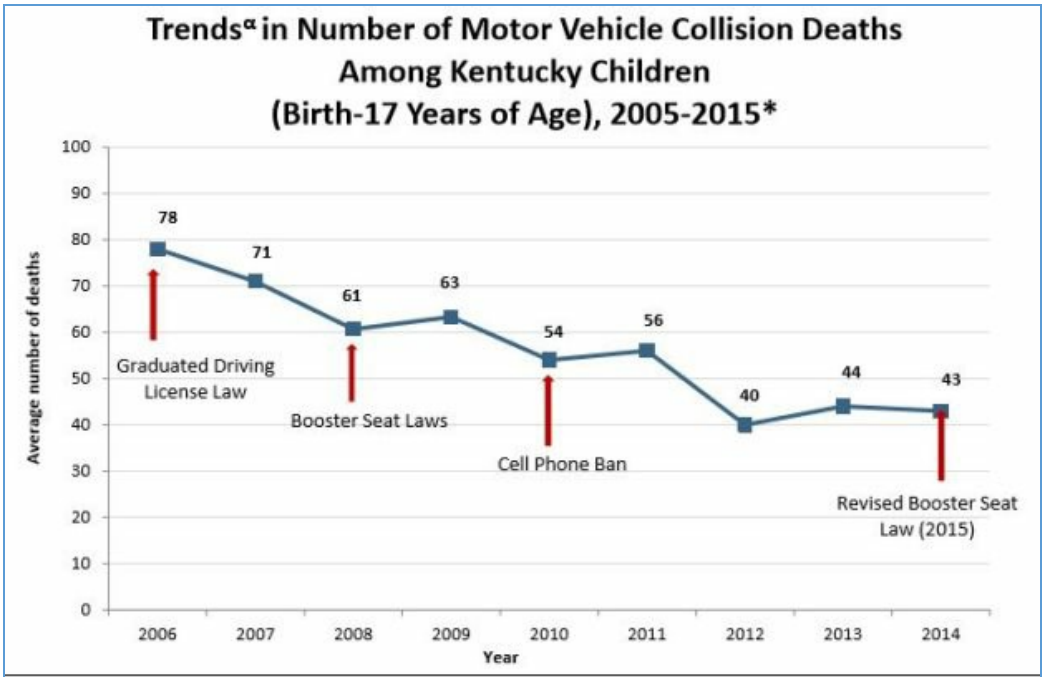
MCH Packages:

In FY2018, 24 LHDs chose the Healthy People, Active Communities Package. Work in this package was innovative to build strong community engagement of partners to create walking trails, improve or add sidewalks to promote walking, bicycle programs where the general public can rent a bicycle at a location for a nominal fee $1-2, and return it at any designated spot in the downtown area of a large urban city, cooking classes in local schools to promote nutrition, creation of plans to promote water consumption by children in school, farm to school activities for children to learn about actively growing fresh fruits/vegetables and have an opportunity to eat some of the produce. Breckinridge County engaged with a local gym to host a family event. This event focused on education for parents of children with special health care needs. The event provided education about nutrition and physical activities and hands-on cooking demonstrations in which the families and children participated as they learned about My Plate and healthy portioning. This program partnered with the local farmer’s market and a gym, and it culminated with a full day of swimming at the community center.

Child Passenger Safety:

In reviewing the Health Status Indicators from the 10 years, KY has made steady progress in reducing the death rate due to unintentional injuries for children 14 and younger. In the 2015 legislative session, KY improved its booster seat

bill to meet national recommendations, increasing the height requirement to 57 inches and the age requirement to 8 years. As illustrated in the graph below, legislative support has aided KY with steadily decreasing deaths of children in motor vehicle collisions.



[α]**Note:** A three-year rolling average has been plotted to present the trend in Kentucky's motor vehicle collision deaths from 2005-2015. Therefore, the data point at 2006 is a yearly average of 2005, 2006, and 2007, the data point for 2007 is the yearly average of 2006, 2007, and 2008, and 2008 is 2007, 2008, and 2009 and so on and so forth.
***Note: 2009-2015 data are preliminary and may change**
Data Source: Kentucky Vital Statistics, Death Certificate Files 2005-2015.

However, improper use of child safety restraints is common, and was one of the things identified by our client survey in the 2015 Needs Assessment. One of the Evidence Informed Strategies offered for LHDs to implement is a child passenger safety package to assess the availability of installation checkpoints and develop community education and events to promote car seat checks. Title V funds can be used to allow LHDs to send staff for training to become a certified car seat installation technician if there are none available in their area.

Child Maltreatment Prevention/Intervention:

The KIPRC Child Maltreatment Subcommittee, MCH, Prevent Child Abuse Kentucky, the Division of Pediatric Forensic Medicine at UL, a pediatrician champion from the KY AAP, and representatives from the two children's hospitals in KY worked to promote evidence-based parent education on AHT in birthing hospitals. A training was developed, hospitals were offered all the needed materials, and team members offered to provide technical assistance and training for interested hospitals at no charge. Several hospitals have received individual training by a KSPAN member on using evidence-based methods of providing AHT education.

The increased awareness of child abuses as a public health issue, and particularly AHT, has resulted in legislation and action at the highest levels. Preventing AHT has been a priority for several legislators. Kentucky passed a law requiring staff of all child serving agencies to be trained on AHT recognition, including law enforcement, social workers, first responders, nurses, owners and staff of childcare centers, and guardian ad litem attorneys. On June 24, 2015, this requirement was extended to health care professionals including pediatricians, radiologists, family practitioners, trauma physicians, emergency room physicians, and Urgent Care staff. The mandatory effective date is December 31, 2017. The training is done by Dr. Melissa Currie, the chief of the Division of Pediatric Forensic Medicine at UL. MCH supports this by making the training available on the Public Health Web-based Training (TRAIN) system so that it is available without charge. The major educational gap left to fill is to assure hospitals use the evidence-based practice of teaching new parents about prevention of AHT. This is still a voluntary process, but training and materials have been offered to all birthing hospitals through MCH and our partners.

In an effort to meet concerns voiced by birthing hospitals that parents are not engaging in education prior to

discharge, the KY Hospital Association in partnership with Prevent Child Abuse of KY, WellCare MCO, and KDPH held a focus group in April 2018 with leadership from the mother/baby and NICU leaders of all birthing hospitals. With over half of the birthing facilities represented, these representatives noted they have mandatory guidance for staff to train new parents on AHT and safe sleep prior to discharge. This group plans to create a video for use in birthing hospitals to educate new parents/caregivers on AHT and safe sleep that is comprehensive vs. multiple 14-20 minute videos that, because of length, parents do not watch. They voiced various measures used to encourage parents to watch the videos and barriers that will need to be overcome. Likewise, they noted that often they see handouts and brochures, provided as a resource, in the garbage cans upon discharge. This group actively discussed the creation of a web application that parents could download at the point pregnancy is known that would provide push messaging for mother's health and infant/toddler growth and development stages and needs through age 2.

LHDs often provide AHT training alongside safe sleep education for families and the community. In 2017, AHT education has been provided to over 20,224 Kentuckians. Based on current reports this number is expected to double in the 2018 report. In the 2017 report, Buffalo Trace partnered with the Mason/Robertson County court system to implement a nurturing father curriculum. This has been ongoing and Buffalo Trace HD will mentor Lake Cumberland District HD in the next year to mirror this successful program. The Northern KY District HD has been working with KSPAN, KDPH, high school education staff, and childcare consultants to develop a high school curriculum. The curriculum focuses on AHT and prevention practices, and it incorporates messaging about a safe sleep environment.

Early Childhood Obesity Prevention:

Kentucky has completed fourteen Collaboratives since 2014 (with four added in 2017) as part the National Early Care and Education Learning Collaboratives. The project entails 8-10 months of training and technical assistance supporting best practices in health behaviors in early care settings. Over 210 Early Care Programs have completed the project with 50 programs completing this training in the past year. Lessons learned include the need for increased attention on staff wellness and staff knowledge of their impact on child health behaviors, the lack of available training and technical assistance across Kentucky supporting best practices in health behaviors, and the need for collaboration to increase capacity and consistency of training and technical assistance provided. As part of the Nemours project, programs were encouraged to develop a family engagement event tied to their best practices action plan. MCH funding supported this project as programs could use funds to support the event through materials and staff time. Family engagement around health behaviors is an important link between early care settings and families. The program has had multiple anecdotal comments noted in which either individuals or childcare programs made change to reduce consumption of sweetened beverages and increase activity.

In 2017, Kentucky was selected to participate in the Association of State Public Health Nutritionists (ASPHN) Mini-Collaborative Improvement & Innovation Network (CoIIN). The state team was comprised of representatives from Department for Public Health, Child Care Aware of Kentucky, and Child Care Health Consultation. The team's pilot project focused on training to support and deliver consistent nutrition technical assistance in early care settings. Based on results of the pilot, a training package has been tailored to support multiple agencies in this work. The revised training technical assistance package will be delivered in July 2018 to a group of Child Care Health Consultants.

The KY obesity program participated in the CDC-1305 State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health Grant. Work completed for the grant helped to build capacity and partnership engagement for policy and environmental change in the area of physical activity as evidenced by the scope of stakeholders participating in Partnership for a Fit KY (PFK). The PFK physical activity committee created a P.L.A.N. training curriculum for non-technical audiences so that health coalitions and a broad range of community partners can begin developing local pedestrian plans.

After providing a workshop with the PFK physical activity committee in 2015, America Walks described our capacity with the following quote: "The collaboration between Kentucky's Department for Public Health and Transportation Cabinet is transforming communities across the state. Their pedestrian plan training program is a national model, which we hope to see replicated in other states." Through CDC-1305, the number of plans in Kentucky went from 23 to 60, the Transportation Alternatives Program has funded more projects due to higher quality of pedestrian plans from our training, and the Highways District Offices have reported an increased demand for sidewalk projects. In addition, our "Step It Up, Kentucky!" campaign to build demand for walkable communities has gained support from nearly 300 organizations, businesses, individuals, and state leaders, including Governor Matt Bevin.

Kentucky Strengthening Families:

KSF has continued to grow with funding for projects from several sources including Kentucky's Race to the Top Early Learning Challenge Grant, Family Youth Resource Service Centers, and behavioral health grants. MCH continues in a leadership role for this group, along with the Governor's Office of Early Childhood. A Train the Trainer KYSF Overview has been developed, including pre- and post-tests, and was well-received, with over 206 trainers from various disciplines and agencies trained. The KYSF Overview Face-to-Face Training has been delivered to 5,552 Early Care and Education teachers and to at least 5,500 other early childhood professionals and parents as of March 2018. The KYSF Training and Technical Assistance Workgroup also launched an online trainer's community of practice through Adobe Connect for KYSF trainers to ask questions, share training ideas, download training documents, and review latest KYSF information and resources. The Messaging Workgroup finalized the marketing pieces to highlight some of the work being conducted by partner organizations and posted various tools including a KYSF Starter Kit to the KYSF webpage. In addition, there have been over 117 presentations on KYSF, 56 booth displays, and over 16,000 brochures distributed as of March 2018.

Kentucky Strengthening Families has a parent-family workgroup, the Family Informed Systems Workgroup, which advises all the workgroups and has established a virtual network of parents who have experience with KY systems for children. They not only provide parent input for projects of all the other workgroups, but they are leading the outreach to parents from all across the state. This group sponsored a forum on the Parent Café model facilitated by Be Strong Families Illinois in order to learn the model, and it has developed the KY-specific guidelines for a KY Strengthening Families Parent Café. The primary focus of the Parent Cafés centers around the six research-based protective factors identified and serve as the reference points for discussion. The six protective factors include: parental resilience, social connections, knowledge of child development, concrete support in times of need, social and emotional competence of children, and nurturing and attachment. In February 2016, the Family Informed System Workgroup completed and hosted the first KY Strengthening Families Parent Café Train the Trainer with 38 participants. As of March 2018, 304 participants have attended the KYSF Parent Café Train the Trainer. In addition, at least 120 KYSF Parent Café experience opportunities have occurred with over 1,200 participants. Through the work of the Systems Integration workgroup, several agencies have embedded the protective factors framework into their daily work, such as Family Youth Resource Service Centers and the Community Early Childhood Councils. Child Protective Services now collects protective factors as well as risk factors. The Systems Integration workgroup has created system and agency integration tools including a KYSF Level of Involvement tool, KYSF Agency Readiness Survey, and KYSF Theory of Change document. In addition, several agency assessment tools are being tested by partners in KYSF for broader agency and community use.

In January 2016, MCH staff partnered with the Early Childhood Mental Health program and facilitated the award of eight mini grants to LHDs to develop community-based projects to increase the awareness of ACEs, promote community resiliency, and implement Strengthening Families Protective Factors in community agencies. Each project was required to choose an evidence-based or evidence-informed practice to increase awareness of ACEs by strengthening families and promoting community resiliency. Each project incorporated the Collective Impact Approach through community partnerships to foster healthier families and communities. Results and lessons learned from the implementation of the mini grants running through June 2017 were incorporated into the KY Strengthening Families Initiative.

Another project developed from the Strengthening Families work is the development of a training to promote social-emotional development of children, "Connect the Dots." This project was designed to identify and narrowly focus on common barriers of providers and families in building adults' capabilities to ensure the social and emotional wellbeing of Kentucky's children. Connect the Dots trainings and supplemental resources highlight 4 easy-to-remember steps for adults to follow as outlined below.

1. Ensure Supportive Environments
2. Encourage Positive Behaviors
3. Emphasize Positive Discipline
4. Embrace Unique Strengths

The four steps encompass both the "well-being" and the "well-doing" of young children. To date, 164 active trainers across 54 cities are approved to host Connect the Dots trainings for teachers, providers, and parents. As of March 2018, 201 training sessions and 3,127 staff from early childhood education centers have been trained across all 4 steps. We approximate a total of 369 CTD training sessions have been held reaching nearly 5,697 total caregivers (training numbers outside of ECE are an estimate at this point).

In response to growing demand, CTD supplemental resources are being created and piloted to meet specific needs of vulnerable populations. Current CTD pilot groups for 2018 include: fathers graduating substance abuse recovery

programs, caregivers of children with Autism Spectrum Disorder, and caregivers of children with Down Syndrome. Consideration for next pilot groups include: caregivers of children in foster care, and children with trauma and grief experiences. Connect the Dots ASD Pilot through Kentucky Autism Council funding began March 28, 2018.

The Connect the Dots evaluation has been updated to measure caregiver competence and knowledge increase as a result of the training. The results indicated that approximately 88% of training participants increased at least 2 levels in confidence from pre to post training survey when asked if they could identify how a predictable schedule, organized routines, transition tools, and visual aids improve a child's behavior. Nearly 100% of participants indicated they knew how to use proven skills to help a child link positive behavior to positive experiences and feelings, compared to around 77% before the training. Over 98% of training participants indicated as a result of the CTD training, their knowledge of reducing challenging behaviors and promoting social and emotional development increased. After CTD training, nearly 100% of participants agreed or strongly agreed that could handle the next outburst without losing their temper, compared to less than 85% of caregivers before the training.

Challenges

Child Passenger Safety:

KY's CPS program is hindered by turnover in CPS technicians and resources. Many families present to child seat safety stations with a need for a car seat or booster for their child. Through grants and local donations, many are provided with a seat.

Child Fatality Review/Child Maltreatment:

Given that there is not a national standard for surveillance of child maltreatment from public health data, developing a consistent methodology so that we can track trends remains a challenge.

The CFR System is challenged by local coroner turnover with every election cycle, and the lack of understanding of the importance of local reviews. Likewise, there is frequent turnover of LHD child fatality coordinators who are to report child deaths and help with coordination of the local review. This requires the state program to update and re-train often. These challenges are not unique to KY, and we continue to seek best practices and learn from other states.

ACEs:

A major challenge to improving outcomes for children in KY and an emerging issue is the number of children experiencing ACEs. These are potentially traumatic events that can have a lasting impact on the health of an individual once they are experienced. Based on data from the 2011/2012 NSCH, 55.3% of KY's children are reported to have one or more adverse family experiences compared to 47.9% nationally (National Survey of Children's Health). Based on data from the 2016 NSCH, 53.2% of KY's children are reported to have one or more adverse family experiences compared to 46.3% nationally (National Survey of Children's Health). In addition, data from the 2015 Behavioral Risk Factor Surveillance System (BRFSS) indicates that 59% of Kentucky's adults report having experienced at least one ACE.

KYSF:

Inherent in the KYSF cross-agency approach for integrating protective factors into systems, are a number of challenges as each agency has its own constraints and specific purposes. Evaluation of this cross-agency, multi-layered effort is also challenging, as measures and measurement are quite different across agencies and depend on whether agency outcomes, front-line staff changes in behavior, or outcomes for families are measured.

Early Childhood Obesity Prevention:

In Kentucky, young children are cared for in many settings including Head Start, Public Preschool, and regulated child care. Each setting has different strategies and goals to address the child's needs and support the family such as:

- School readiness
- Wrap-around services with more intentional health screenings
- Support parent employment or ability to attend school

Additionally, the various child care settings have different state agencies governing various settings and different regulations may apply to the various settings. Any effort to improve the health environments of young children in care

in KY requires intentional collaboration between these agencies and solidifying strategies that align with the goals for these agencies.

Currently, Kentucky's licensed child care centers mirror the minimum nutrition practices set by the Child and Adult Care Food Program (CACFP) and limit screen time for children based on national benchmarks. Although these guidelines ensure basic needs are met, Kentucky's children deserve more. According to a recent report (National Resource Center for Health and Safety in Child Care and Early Education, 2016), Kentucky was implementing licensing regulations that fully aligned with only 3 of 47 healthy weight practices in child care centers and family child care homes, as defined by Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd Ed. (CFOC3). Kentucky child care health and safety regulations were opened this year and multiple partners responded to the open comment period in support of improving best practices in regulations relating to nutrition, screen time, physical activity, and breastfeeding. None of the recommendations were implemented. The response stated the administrative regulation establishes minimum health and safety standards rather than best practices.

While research links optimal nutrition and physical activity with brain development and long-term health outcomes, these behaviors are not a consistent value among early care professionals, agencies, or technical assistance providers. KY has made progress increasing awareness of the impact and importance of health behaviors in young children through the 5-2-1-0 campaign, social media/blogs, and the Nemours Early Care and Education Learning Collaboratives. However, turnover at both the program level and agency leadership level make awareness and education on the importance of child health a continuing challenge.

Primary and Preventive Services for Children

The role of Title V, through Local Health Departments (LHDs), has been to provide safety net services and assure all children have access to well child, nutrition, and immunization services. Funding from the Title V Block Grant supports a university-based training program for public health registered nurses (RNs) to develop skills in pediatric assessment, which certifies them to perform preventive pediatric well-child examinations. Well child exams on children are performed at LHDs by these Certified Well Child Nurses. Direct preventive well child health services identify growth and development issues according to the standards recommended by the American Academy of Pediatrics (AAP). Services identify early dental problems, vision and hearing impairment, and risk factors including obesity and related poor nutrition. Preventive specialized health services are also provided including immunizations, screening for lead poisoning, and identification of risk factors leading to child abuse, neglect, and injury. Age appropriate health education and anticipatory guidance, referral for further diagnosis of health problems, appropriate referral services, and community-based education are integral components of these services. LHD well child protocols are provided by MCH and follow AAP Bright Futures recommendations. In addition, the Title V program contracts with the universities for annual professional development continuing education for LHD nurses that review current topics related to pediatric preventive services as well as school health. Through face-to-face training opportunities in 2017, 164 nurses received the following initial or update training: Pediatric Assessment Well Child training (104); Annual 1-day Pediatric Assessment Update training (60); and the Annual 1-day School Health Nursing Update training (54). The professional development trainings are archived and available online through Training Finder Real Time Affiliate Integrated Network (TRAIN).

Local school boards collaborated with 15 LHDs for the provision of child and adolescent preventive health services in the school setting utilizing the skills of these pediatric-trained nurses. The LHD School Health Program promotes access to preventive health services for school-aged children and adolescents and improves access to health information at critical times for influencing health behaviors. Depending on the local arrangement, nursing services may include preventive health services, education, emergency care, referrals, and management of acute and chronic conditions in a school setting. Services are provided for children aged pre-school through adolescence (up to age 21). MCH encourages children and adolescents to have a medical home, and where possible for schools to augment this service. KY has 111 FQHC school clinics that can provide well childcare for children.

The KDE has a full-time nurse who provides technical assistance to the public schools on health issues. In a collaborative approach to school health services, one-half of the salary for this position is funded by the KDPH.

The number of direct pediatric preventive services provided at the LHDs appears to be trending downward. More health departments are linking children to care in a medical home with community partners instead of providing direct services at the LHD. While still supporting basic safety net services, the Title V program is focusing more on population-based activities such as prevention of child injury, increasing activity, promoting a nutritious diet, and decreasing exposure to tobacco smoke.

Injury Prevention/Child Maltreatment

Injury is the leading cause of death among KY children over the age of one and was a priority for children in our statewide needs assessment. In particular, child maltreatment was the highest priority, but child passenger safety and teen driving were also concerns raised by the participating groups. Thus the NPM Kentucky has selected for this domain is *NPM #7: Rate of hospitalization for non-fatal injury per 100,000 children ages 0-9 and adolescents ages 10-19*.

Kentucky developed a *State Performance Measure (SPM) #2*: *Reduce by 5% the number of Medicaid recipients less than five years of age with pediatric abusive head trauma (PHAT)*. MCH has reviewed the methodology used for identification of child maltreatment and AHT and barriers for surveillance persist. The plan for FY2019 will be to continue refinement of the algorithm developed for measuring AHT, from Medicaid claims data, by comparing claims to actual patient records. Until this is complete, the SPM will be inactivated, although specific programming will continue. MCH will continue to work on projects with KSPAN, the Division of Pediatric Forensic Medicine at the University of Louisville, Prevent Child Abuse Kentucky, the KY AAP, and LHDs on developing materials for specific groups of providers.

Under the guidance of Dr. Melissa Curry with the Division of Pediatric Forensic Medicine at the University of Louisville, and in collaboration with Prevent Child Abuse of KY, KSPAN, KY AAP, and MCH, the Northern KY District HD began development of a high school curriculum to educate high school students about AHT and a safe sleep

environment. The curriculum has a pre-test to determine the knowledge base of the student, and a post-test for administration later in the school year to determine retention of materials. The curriculum has lecture, and interactive materials/visuals to permit the student the ability to understand the damage AHT can cause to the child's brain. The students will view videos with stories of child death secondary to AHT. Northern KY plans to pilot the AHT program at their local high schools in the fall of the upcoming school year.

Child Fatality Review

With local reviews improving, MCH plans to increase prevention efforts to distribute evidence-based injury prevention materials/toolkits for family serving agencies. With Prevent Child Abuse Kentucky and the KSPAN Committee on Child Maltreatment, we will work on expanding community-based prevention strategies for AHT and continue to provide prevention training and materials. With the safe sleep campaign, messages will continue to be promoted along with prevention of AHT, as new parents need information on both topics.

To address hospitalizations from MVAs, the CFR program, through the Child Safety Network CoIIN strategy teams and in partnership with KSPAN, will promote rural motor vehicle crash prevention, sustain the existing certified child passenger safety (CPS) technicians in those areas, and help rural health departments organize networks of local/regional CPS technicians who can work together. The CFR program continues to support Safe Kids Chapters and assist them in injury prevention efforts including providing education and technical assistance. Local health department CFR Coordinators and CPS Technicians will continue to initiate and maintain dissemination efforts for new AAP/Safe Kids/National Highway Traffic Safety Administration recommendations for rear facing until age 2 and booster seats until reaching adult height. The CFR nurse consultant will continue to build on current successes with strengthening the quality of child death review locally and guidance to prevention efforts.

KYSF

Cross-agency work to build protective factors and strengthen families will continue. For the next year, Kentucky Strengthening Families (KYSF) will focus on offering technical assistance to agencies, staff, and families to identify how they/their practices align with protective factors and values, as well as tools for systems integration, policy change, and evaluation of impact. The KYSF Leadership Team will continue to offer a collaborative cross-agency and cross-system forum to review new policy and practice approaches to mitigate toxic stress and offer networking among agencies and communities to help them implement a protective factor framework through family driven and strength-based strategies to mitigate adverse childhood experiences (ACEs) and toxic stress.

MCH staff will continue to work with partners toward implementing trauma-informed practices to address toxic stress. Under the guidance of the State Interagency Advisory Council (SIAC) for Children with Emotional Disorders, the Trauma Informed Steering Committee will continue to work through the SIAC to assess lessons learned, cultivate existing partnerships from this initiative and forum participants, and evaluate current implementation and future strategic planning. This Steering Committee is facilitated by the DBHDID, collaborating with MCH staff. One goal for the upcoming year is to revise the DBHDID Trauma Informed Care training to include the same foundational content on early childhood brain development, the ACE Study, toxic stress, and protective factors. The Help Me Grow developmental screening project with KY AAP continues to test and revise the initial pilot project with the hope to expand to other areas of the state.

Childhood Obesity Prevention

In the upcoming year, KY will continue focus on *NPM #8: Percent of children ages 6-11 and adolescents 12-17 who are physically active at least 60 minutes per day*. In order to address this performance measure, KY will focus on work with early childhood programs to increase the number of children establishing healthy behaviors in physical activity and nutrition. As discussed in the adolescent section, KY will continue to support and promote initiatives that range from education regarding nutrition and physical activity during well child exams, through LHD MCH best practice strategies, to establish healthier communities and use of the Whole School, Whole Community, and Whole Child model promoted by the KDPH and KDE CSH Program.

To further the work from CDC State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors, and Promote School Health. Kentucky has applied for the CDC 1807 grant opportunity. It is known, 1 in 3 children entering kindergarten are either overweight or obese. The work done in Early Care and Education is specifically tailored to birth to 5 years of age. The KDPH Obesity program will partner with Coordinated School Health to reach children over the age of 5 in the school setting. As well, the program will partner with the KY Transportation Cabinet to work on improving active transportation and developing pedestrian and biking

plans.

Behaviors established in early childhood carry into childhood and adolescence. Three primary strategies will be addressed including:

- Increasing access to training for Early Care professionals
- Increasing capacity and quantity of technical assistance providers
- Increasing the number of early care and education (ECE) programs that develop environmental change and policies related to health and wellness

KY requires child care professionals to obtain up to 15 hours of “clock hour” training annually. Currently, five online training modules, available at low cost to early care professionals, addressing best practices in health that are allowable for these required hours. Few early childhood credentialed trainers across the state have the background to address health best practices. Typically, these trainers have an early education background and are less familiar with health topics. The online modules support access by early care professionals across the Commonwealth to trainings on health best practices. Regionally, KY has located, in the LHDs, childcare health consultants (CCHC) who can advise and/or train on health, safety, and nutrition. These consultants are credentialed to provide “clock hours” for trainings, and they are generally nurses or registered dieticians. The program plans to work with agencies, CCHCs, and others to develop additional online training modules.

After an educational training is provided, ongoing technical assistance is needed to support early care professionals in developing best practice methods, programs, and strategies that are customized to fit their specific environment. In the coming year, the program plans to partner with other agencies, which interact with providers in various settings, to develop materials and guidance related to health practices that can be integrated across agencies with a goal of ensuring consistent messaging across agencies.

A third strategy for the upcoming year will be to incorporate use of the GO NAP SACC online tools. Go NAP SACC is the Nutrition and Physical Activity Self-Assessment for Child Care. Go NAPSACC is an evidence-based program that is a foundational component of a comprehensive statewide obesity prevention program ensuring the integration of early care and education (ECE). Across the United States, ECE centers serve nearly one-third of children under the age of six. Hence, ECE is an important setting through which to direct public health initiatives to build healthy eating and physical activity habits in young children. Developed over fifteen years ago, NAPSACC has been shown by multiple rigorous evaluations to have a positive impact on ECE policies, practices, and environment with an ultimate impact on child weight. A five-state pilot study of Go NAPSACC showed in pre/post self-assessments that participating ECE programs adopted five additional nutrition best practice standards and four additional physical activity standards after only 6 months.

Go NAP SACC is 7 separate self-assessment tools including: Breastfeeding & Infant Feeding, Child Nutrition, Farm-to-ECE, Oral Health, Infant & Child Physical Activity, Outdoor Play & Learning, and Screen Time. Technical assistants from multiple agencies will be invited to participate in a training on self-assessment tool use and resources available on the platform. The program has outlined a plan for use of Go Nap SACC to train CCHCs, Child Care Aware Quality and Health and Safety Coaches, Child and Adult Care Food Program Trainers, and KDE Preschool and Head Start Trainers to build capacity in utilizing the assessment tools to improve internal child care programming.

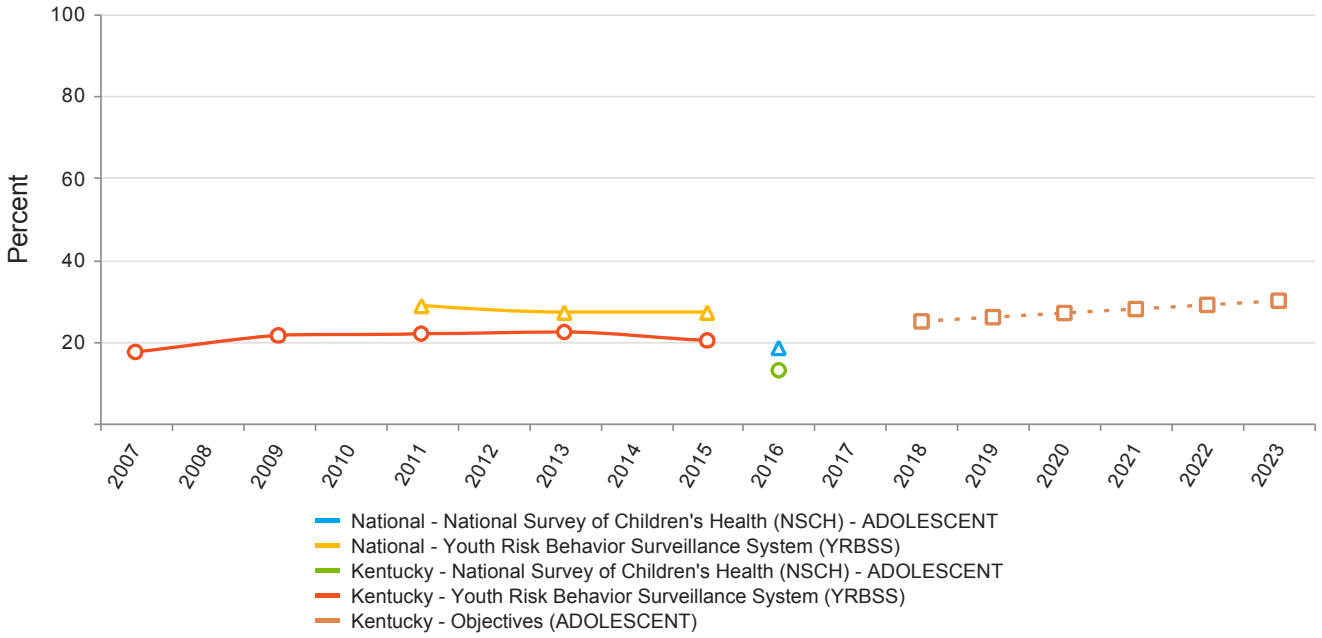
Adolescent Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2016	89.2 %	NPM 8.2
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH-2016	19.7 %	NPM 8.2
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2014	13.3 %	NPM 8.2
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	YRBSS-2015	18.5 %	NPM 8.2

National Performance Measures

NPM 8.2 - Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day
Baseline Indicators and Annual Objectives



Federally Available Data		
Data Source: Youth Risk Behavior Surveillance System (YRBSS)		
	2016	**2017**
Annual Objective	23	24
Annual Indicator	20.2	20.2
Numerator	37,629	37,629
Denominator	186,195	186,195
Data Source	YRBSS-ADOLESCENT	YRBSS-ADOLESCENT
Data Source Year	2015	2015

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - ADOLESCENT		
	2016	**2017**
Annual Objective		
Annual Indicator		13.1
Numerator		44,811
Denominator		342,824
Data Source		NSCH-ADOLESCENT
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	25.0	26.0	27.0	28.0	29.0	30.0

Evidence-Based or –Informed Strategy Measures

ESM 8.2.1 - Increase the proportion of school districts who participate in KY SHAPE Network and Physical Activity Leadership trainings

Measure Status:	Inactive - Replaced

State Provided Data		
	2016	2017
Annual Objective		65
Annual Indicator	64.2	64.2
Numerator	111	111
Denominator	173	173
Data Source	CSH data	CSH
Data Source Year	2016	2016
Provisional or Final ?	Final	Final

ESM 8.2.2 - Number of districts receiving training or technical assistance for strategies to create a healthy school nutrition environment, or evaluation of recess and multi-component education policies.

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	120.0	125.0	130.0	135.0	140.0

State Action Plan Table

State Action Plan Table (Kentucky) - Adolescent Health - Entry 1

Priority Need

Overweight and Obesity Among Teens

NPM

NPM 8.2 - Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day

Objectives

Increase by 20% the proportion of schools in Kentucky that have implemented a school wellness policy and a comprehensive school physical activity program (CSPAP) by September 30, 2020

Strategies

Conduct at least three (3) district trainings on development, implementation, and evaluation of the local school wellness policy

Partner with state and community agriculture resources to increase Farm-to-School Programs and Farmer's Markets

Provide LHDs the opportunity to select MCH Evidence Informed Strategies that promote physical activity among youth

ESMs	Status
ESM 8.2.1 - Increase the proportion of school districts who participate in KY SHAPE Network and Physical Activity Leadership trainings	Inactive
ESM 8.2.2 - Number of districts receiving training or technical assistance for strategies to create a healthy school nutrition environment, or evaluation of recess and multi-component education policies.	Active

NOMs

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Adolescent Health Annual Report

Primary and Preventive Services/Family Planning

Primary and preventive clinical services safeguard the health and wellness of all children and adolescents and are provided through LHDs across the state. Adolescents are less likely to come to LHDs for annual preventative visits, not only because more have pediatric medical homes and insurance coverage, but also due to the growth of retail-based clinics providing sports and camp physicals. There are, however, a number of services that adolescents still access at LHDs.

Among the primary and preventive services accessed by youth at LHDs are immunizations. The Kentucky Immunization Program distributes vaccines to LHDs and private providers enrolled in the federal Vaccines for Children Program. The vaccines distributed include diphtheria, tetanus, polio, Haemophilus influenza type B, hepatitis A, hepatitis B, human papilloma virus (HPV), measles-mumps-rubella, meningococcal, pertussis, pneumococcal, rotavirus, and varicella. The HPV vaccine is strongly encouraged in adolescents 13 to 17 years of age. In KY, 36.2% of female adolescents in this age group received the 3 or more doses of this vaccine compared to 41.9% for the Nation in 2015 (Reagan-Steiner et al., 2016). This represents an increase in these vaccination rates from 2014 when 26.8% of this KY population was vaccinated.

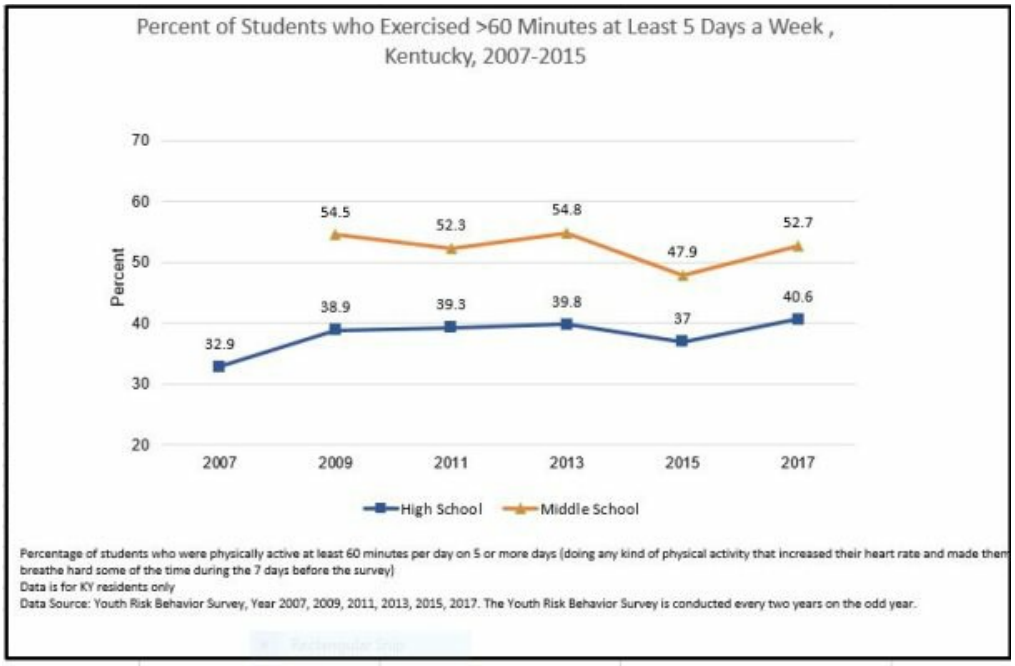
Another health service accessed by adolescents at LHDs is family planning. Services to adolescents for contraception, pregnancy, or childbirth can be accessed without parental consent per KRS 214.185. Diagnosis and treatment of sexually transmitted diseases or other conditions are also provided. KY's teen birth rates are high compared to US teen birth rates. KY's teen birth rate for 2015 was 31.4 per 1,000 females ages 15-19. This is a 44% decline from the 2008 rate of 55.8 per 1,000 females ages 15-19. While we are encouraged by this decrease in our teen birth rates, it is still 9 points higher than the 2015 national teen birth rate of 22.3 per 1,000 females ages 15-19. In addition, the teen birth rates for the Appalachian counties continue to be significantly higher than the overall state rate. This may indicate that teens in more urban areas of the state have easier access to services.

MCH collaborates with the Division of Women's Health and their adolescent health programs such as Teen Pregnancy Prevention, the University of Kentucky Young Parents' Program, and the Family Planning Program. The Adolescent Health Program continues to receive federal funding to prevent teen pregnancy and promote positive youth development through the Abstinence Education Grant Program (AEGP) and the Personal Responsibility Education Program (PREP) grant. The AEGP funds 34 sub-awardees who provide age-appropriate abstinence education to fifth through eighth graders in accordance with the KDE program of studies for sexual health education. Approximately 24,000 students and 3,500 parents of teenagers are educated each year with AEGP funding. The PREP grant funds 23 sub-awardees to provide personal responsibility education with "ready for adult subjects" to middle and high school students. The PREP program targets disengaged youth at high risk for poor healthy decision-making, academic failure, and poor adulthood outcomes. Approximately 7,000 students participate in PREP programing each year.

Obesity

Adolescent obesity was identified as the priority topic for the adolescent health population domain from the 2015 Needs Assessment. To address this need, KY has chosen *NPM # 8: Percent of children ages 6-11 and adolescents ages 12-17 who are physically active at least 60 minutes per day*.

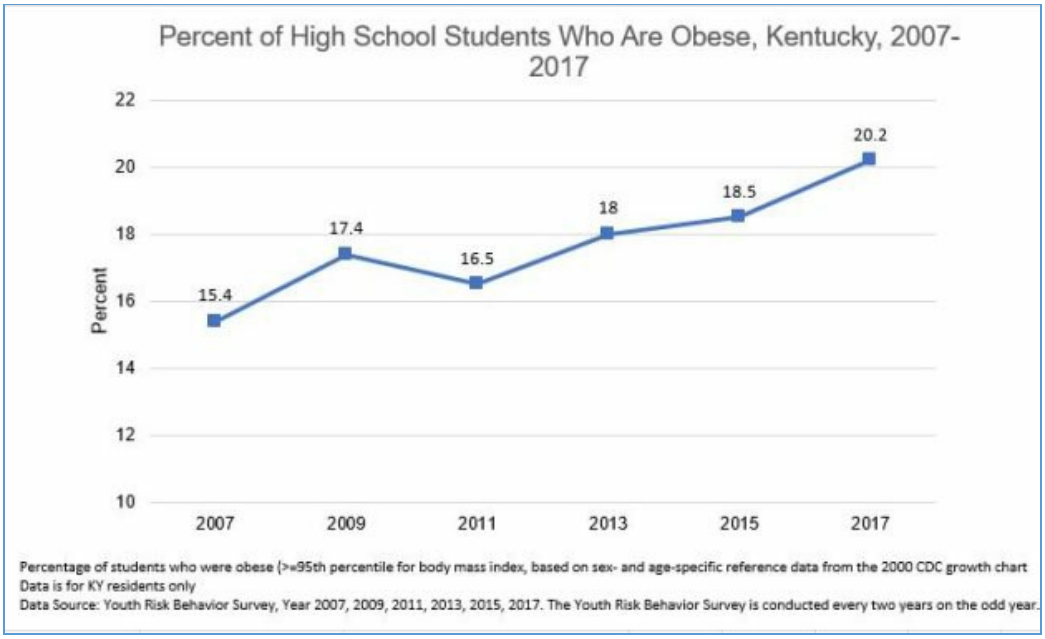
Data from the 2017 KY Youth Risk Behavioral Surveillance System (YRBSS) reported activity level is below the national average. Activity continues to be a focus for all programs with less than half of high school students reporting exercise for greater than 60 minutes, 5 days per week.



The percentage of high school students who are obese increased from 16.5% in 2011 to 20.2% in 2017 according to the KY YRBSS. When the data was reviewed by gender, high school males were more likely to be obese than female high school students. The 2017 data also showed students in grades 10 and 12 were more likely to be obese than grades 9 and 11. Black high school students were more likely to be obese. The data in the above graph was obtained using a different methodology to look at the activity level of Kentucky students. Because the methodology is different, this graph is not comparable to the graph in NPM 8.2, addressing adolescents ages 12-17 who are active for 60 minutes daily.

To reach all populations, KY must address the obesity concerns from all levels. Strategies must begin at birth with promotion of breastfeeding. Early childhood should lay the framework to establish healthy behaviors related to nutrition and activity. For the school age and adolescent population, the Whole School, Whole Community, and Whole Child model provides a wrap-a-round framework to continue encouraging this population to make healthy choices.

As illustrated below, the obesity rate for high school students continues to rise.



Coordinated School Health (CSH):

One program that is significantly involved with physical activity strategies in KY is the CSH program. This program is an effort funded by the CDC's 1305 State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity & Associated Risk Factors & Promote School Health Grant also known as the 1305 QUAD grant. The current 1305 CSH funding cycle ends June 2018; however, a new funding cycle has been awarded to Kentucky's Department of Education (KDE) to continue the work already established in prior school health funding. As a requirement of this funding, KDE has allocated a percentage of awarded funds to continue their partnership and collaborative school health efforts with the KDPH. These funds will be housed in MCH and continue to partially fund the KDPH Coordinated School Health Program Administrator. CSH is a major vehicle in schools and communities across the state, as well as the nation, to address obesity and overall youth well-being. CSH ties together adolescent services provided through the LHDs, schools, and school-based clinics. The traditional CSH model consists of eight components that recognize how health, wellness, environment, and learning are related. This traditional model was expanded to include two additional and more specific components addressing the Social-Emotional Climate and Physical Environment. This expanded model incorporates the components of CSH and the tenets of the Association for Supervision and Curriculum Development (ASCD) Whole Child approach to strengthen a unified and collaborative approach to learning and health. The Whole School, Whole Community, and Whole Child (WSCC) model includes the following ten components: health education, physical education/physical activity, nutrition environment and services, health services, counseling/psychological and social services, social and emotional climate, physical environment, employee wellness, family engagement, and community involvement. KY's goal through using this model is to promote preventive best practices to the support the needs of the whole child. The KY Department of Education (KDE) and KDPH work collaboratively to provide guidance to school districts and community partners to incorporate opportunities for students to create a healthier environment in which to live, play, and learn.

With the MCH Evidence Informed strategy focusing on increasing physical activity in the school and community settings, local health departments have succeeded in providing outreach and supplemental health education to students in their local school districts. As previously mentioned in the child health annual report, LHDs that participated in Healthy People, Active Communities are also working to promote full community engagement with activity and nutrition.

To increase access to physical activity, KY plans to increase the number of communities that have a pedestrian plan. A Community Physical Activity Committee was formed to include the Federal Highway Administration, Foundation for a Healthy Kentucky, Kentucky Association for Economic Development, KDPH, KDE, Kentucky Office of Adventure Tourism, KIPRC, KSPAN, Kentucky Office of the Americans with Disabilities Act, Kentucky Rails to Trails Council, Kentucky State Parks, Kentucky Transportation Cabinet, Kentucky Youth Advocates, National Park Service, and UK Cooperative Extension. Committee and local stakeholders were interviewed to identify assets, needs, and

barriers.

Information gathered helped develop the Access to Physical Activity Vision Document http://www.fitky.org/wp-content/uploads/sites/2/2015/04/PA-Vision-Slidedoc.pdf.
This document outlines three strategies that needed to develop pedestrian plans: community engagement, easy to use resources, and training TA and resources.

MCH has developed an Evidence Informed Strategy, Healthy People Active Communities Package, to make healthy eating and physical activity safe and easily accessible. The strategy supports policies that make environmental changes that are sustainable within communities. In addition, this package will serve to increase community engagement with organizations and local community members. Together, the LHD, community organizations, and community members will define the issue, address the barriers to meeting the 5-2-1-0 evidence-based healthy behaviors, and engage possible solutions. A collaborative action plan will be developed and implemented on one of the 5-2-1-0 behaviors.

The KDPH Health Promotions Branch and their state partners provide the training and technical assistance on access to healthy foods and physical activity, as well as to resources including community engagement, Early Care and Education, Farmers' Markets, and "Step It Up, Kentucky!"

One local health department used funding from the Healthy People Active Communities package to collaborate with local community agencies to provide children's activities, including First Friday Community Field Day, to promote physical activity, health awareness, and nutrition in conjunction with a 5K walk/run. First Friday is a local market that occurs the First Friday of every month from June-Sept. Local merchants, farmer's market stands, and artists set up. Another success from these funds includes a LHD collaboration with their local BRIGHT Coalition leaders. This collaboration increased promotion of "Step It Up Kentucky!" and access to fresh fruits and vegetables in vulnerable populations.

Obesity Challenges

According to the State Obesity Report, KY ranks 3rd in obesity for high school students drawing a keen focus to the issue of teen obesity (Trust for America's Health and Robert Wood Johnson Foundation, 2016). Some obstacles faced by the CSH team in the effort to decrease adolescent obesity are obtaining administrative buy-in at the district level. Kentucky is seeing more research around the correlation between healthier children and higher academic performance; however, there is inconsistency in this message and the practices surrounding physical activity opportunities and enhancing nutrition settings in schools.

Suicide

In KY, suicide is the third leading cause of injury-related death among those 10-24 years of age, and the numbers are increasing. Data has shown firearms and hanging/strangulation are the primary methods used in the state. The Kentucky Incentives for Prevention (KIP) Study published a report of information from a 2016 survey completed with students in grades 6,8,10, and 12. The survey is conducted bi-annually, on even numbered years, and has changed from the original intent of determining use of alcohol, tobacco, and other drugs to also surveying students about handguns, bullying, dating violence, suicide and mental health. Statewide, 8.2% of Kentucky 10th graders reported a past-year suicide attempt in 2016; rates have risen in eight out of fourteen regions since 2014. (https://reacheval.com/wp-content/uploads/2017/07/KIP-State-Regional-Trend-2016-final3July2016.pdf). Per this report, KY youth report use of substances, bullying, and suicide plans at a higher rate than reported nationally. This warrants immediate prevention activities with families and schools. In 2014, the KY Youth Bullying Prevention Task Force was established by Executive Order to address bullying in schools and recommend practices/policies to provide safer, harassment-free schools. In the past year, MCH and DBHDID collaborated with the Child Safety CollN to incorporate Sources of Strength in programming in the state.

While this CollN has ended, the efforts to reduce teen suicide remains a priority for MCH. Training programs across the state have been conducted with local school districts to promote peer-led youth resiliency programs. Nineteen LHDs partnered with schools and MCH in selecting the Bullying and Suicide Prevention MCH package to provide reinforcement and link school districts with resources for prevention through regional treatment centers or grief counseling. To date, this package has reached over 1600 students and school staff.

Using Title V Funding in the Bullying and Suicide Prevention Package, the Wedco District Health Department partnered with the University of KY Department Adolescent Medicine Clinic on a Beautiful Minds project. This district

is in year 3 of the project to serve 3 counties in assessments of children who have either self-identified as having mental health concerns and feeling overwhelmed. The program provides, at no charge, wrap-around mental health services in the school for students in grades 7-12. The goal of the project is to provide students with mechanisms to cope with daily worries and connect students/families to other services if needed. The program has heightened awareness for depression, anxiety, and self-harm behavior among students and their peers. The program also uses the opportunity to educate on mental health issues and risk taking behavior for parents. The severity of mental health in this area remains high and, in the past year, has:

- Performed 1,145 assessments using the Psychological Assessment Resources (PARS)
- Referred 366 students for further medical assessment and treatment
- Referred 1,284 students for more intensive mental health visits

Teen Driving

MCH is addressing teen driver deaths through collaborative efforts as a part of Child Safety Collaborative Innovation and Improvement Network (CoIIN), and by offering a Teen Driving CFR package to our LHDs.

For the year 2016, 61 of KY's child deaths were due to motor vehicle collisions occurred among ages 16-20 years of age (National Highway Traffic Safety Administration Table 112). Efforts in Kentucky to reduce the number of deaths of young drivers include the graduated driver's license initiative, a cell phone ban for drivers under 18, and driver safety programs that address risk factors for youth drivers.

Kentucky Traffic Collision Facts 2016 Report (KTCF 2016) data shows teen drivers (ages 16-19):

- Involved in 7% of the state's 143,708 collisions
- Teen driver crashes increased by 989
- Fatalities increased by 2 from 62 to 65
- Injury crashes increased by 195
- Property damage crashes increased by 741
- Fatalities from impaired crashes, 161
- Impaired teen driving made no changes and remained at 5 fatal crashes
- Serious injuries had a nominal increase of 3 from 100 to 103

In 2017, three LHDs (Knox, Mercer, Montgomery) selected the Teen Driver/Graduated Driver's Licensing Package. While the package may not have been selected by other counties, many continue to address the safety of teen drivers with community endeavors.

Breckinridge County LHD utilized Title V funding to address distracted teen drivers by collaborating with two local high schools and the local coroner, hospital, law enforcement, and community leaders to create a short video addressing outcomes with texting and driving. With 2,450 views, some nationally, the video has had a long reach in that community and promoted by KSPAN, KY Department for Transportation, and other community partners. The video is available at https://youtu.be/sWRXfXVsqu8. Anecdotally, teen viewers at the local high school shared how participation in this project, and viewing the video has steered them to make positive changes to their driving behaviors about distracted driving and cell phone use.

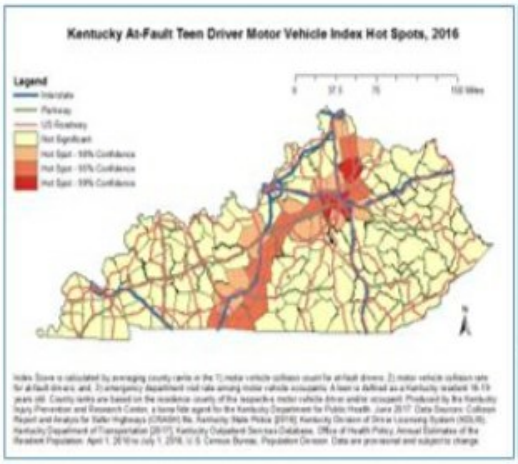
The Kentucky Violence and Injury Prevention Program (KVIPP), supported by CDC Cooperative Agreement Number, U17 CE924846, collaborates with the Kentucky Office of Highway Safety (KOHS), Kentucky Association of Counties (KACo), KIPRC, KSPAN, and KDPH to address teen motor vehicle safety education. The Checkpoints™ Program is an evidence-based, parent-oriented teen-driving intervention, originally developed by Dr. Bruce Simons-Morton of the National Institute of Child Health & Human Development, an agency of the U.S. Department of Health & Human Services, and is being piloted for statewide implementation in Kentucky. The program has been revised, including Checkpoints™ educational materials, to reflect KY's Graduate Driver Licensing program requirements and include KY injury data.

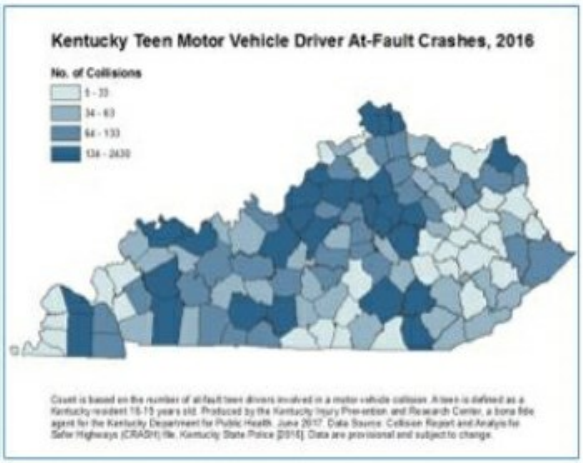
This project is to support implementation of the Checkpoints™ Program in 10 counties with a minimum of 20 High Schools. The Checkpoints™ Program provides parents and teens with information about:

- Risks Teens face when first licensed (e.g., facts and myths about Teen driving safety)
- Kentucky's Graduated Driver Licensing requirements
- Ways to improve the safety of the Teen driver
- Ways to effectively communicate with Teens about safe driving (video content)
- How to set Interactive Parent-Teen driving agreements that are customizable to the respective Parent and

Teen, establishing clear guidelines, expectations, and consequences for their Teens' early driving and adaption as the Teen progresses.

In November 2017, a specific Checkpoints™ Program strategy, website, and geographical review of data was completed. This was presented to KOHS officials and to the Governor's Executive Committee on Highway Safety. Heat maps were then developed to identify hot spots for teen MV-related injuries providing the ability to focus our limited resources on those counties. Sixty-one counties were selected for eligibility based on the 2016 Kentucky Teen Motor Vehicle At-Fault Crash Injury Risk Index Scores and Hot Spots. This information highlighted in the annual child fatality report submitted to KY legislatures, and leadership.





Teen Driving Challenges

With regard to teen driving, there are inadequate resources in districts that are experiencing the highest number of teen driving deaths. Personnel and training need to increase along with recruitment of additional community partners. The CoIIN and Teen Driver package will allow us to reach some of these areas and provide education and resources. To address these challenge, KDPH will utilize Child Fatality Review (CFR) along with KIPRC, OHS, and Safe Kids in assuring that all motor vehicle deaths involving teen drivers receive reviews in CFR teams throughout Kentucky.

Adolescent Health - Application Year

For the coming year, MCH will continue to support access for primary and preventive clinical services to safeguard the health and wellness of all children and adolescents. Adolescents are less likely to come to LHDs for annual preventative visits, not only because more have pediatric medical homes and insurance coverage, but also due to the growth of retail-based clinics providing sports and camp physicals. However, there are a number of services that adolescents still access at LHDs.

LHD services will continue to include immunizations and well child exams. As previously noted in the child health section, LHDs have nurses trained annually to perform well child exams in the school system. This program will continue in the upcoming year. It is anticipated LHDs will continue family planning services. Services to adolescents for contraception, pregnancy, or childbirth can be accessed without parental consent per KRS 214.185. Diagnosis and treatment of sexually transmitted diseases or other conditions will continue to be provided.

Obesity

Programming to improve activity and reduce adolescent obesity will continue to address the priority topic for the adolescent health population domain from the 2015 Needs Assessment. KY will continue to promote children and adolescents being physically active at least 60 minutes per day. One of the main objectives to be addressed is to increase the proportion of schools in Kentucky that have implemented a school wellness policy and a comprehensive school physical activity program (CSPAP) by September 30, 2020. In order to accomplish these objective, strategies will include training and technical assistance for school staff, district trainings on local school wellness policies, Evidence Informed Strategies for CSH and Healthy Families/Healthy Communities, and increasing the number of Farm to School programs and Farmers' Markets.

Coordinated School Health

The CSH team and state partners will continue to focus on providing ongoing technical assistance (TA) and education to school districts and staff on the implementation of a CSPAP and the importance of outlining nutrition, physical activity, and staff wellness in a Local School Wellness Policy. The CSH team and school health network will continue providing professional learning to school administrators, educators, and LHDs to improve policy language regarding the opportunity for students to engage in physical activity before, during, and after school. The partnership with the Kentucky Association of Health, Physical Education, Recreation, and Dance (KAHPERD) provides health and physical educators access to professional learning around quality physical and health education, supporting the whole child, and engaging the school environment to promote physical activity and healthy nutrition.

The CSH team provides statewide education on the importance of utilizing a Local School Wellness Policy (LSWP) to reflect practices in nutrition and physical activity within the school district. LSWPs are an important tool for parents, local educational agencies, and school districts in promoting student wellness, preventing and reducing childhood obesity, and providing assurance that school meal nutrition guidelines meet the minimum federal school meal standards. Implementation of the New Proposed Rule issued by the US Department of Agriculture Food and Nutrition Service requires the following guidelines for school districts: annual progress reports, triennial assessments, and minimum content of the policy must include specific goals for nutrition promotion, nutrition education, physical activity, and other school-based activities that promote student wellness.

To further support the needs of the whole child and align KY with the Every Student Succeeds Act and "Well-Rounded Education," MCH developed Evidence Informed Strategies for LHDs to focus their work. Within these packages, LHDs are encouraged to align their work with frameworks of evidence-based best practices to enhance efforts focused on the needs of individual students, schools, school districts, and communities. To align with our State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity, and Associated Risk Factors and Promote School Health 1305 QUAD Grant funding, these packages specifically focus on student health and wellness in the school setting and supporting efforts at the community level.

Included in this year's MCH evidence-informed packages, LHDs may also choose to participate Healthy People Active Communities. Critical partnerships within this package will continue to work to increase access to healthy foods and activity for adolescents, families, and communities to decrease overweight and obesity. The goal is to increase the number of farmer's markets in underserved areas and the number of farmer's markets that accept Supplemental Nutrition Assistance Program (SNAP), Women, Infants and Children (WIC) and Senior Farmers' Market Nutrition Program (SFMNP). A Farmers Market Committee was formed to include the Kentucky Department of Agriculture (Farmers' Market Program and SFMNP), KDPHs WIC Farmers' Market Program, KDPHs Food Safety Program, Community Farm Alliance, UK Cooperative Extension, and other food and economic development

advocates. Farmers' market stakeholders on the local and state level were interviewed to identify assets, needs, and barriers. Information gathered helped to develop the Access to Healthy Foods Vision for Farmers' Markets. This vision document outlines three strategies needed to support farmers' markets: Supportive Infrastructure; Training, TA and Networking Opportunities; and Community Engagement. The KDPH Obesity Program and Farmers' Market Committee will help promote the vision document and three strategies to engage stakeholders. This year the Physical Activity and Nutrition branch at the Department for Public Health will provide trainings to outline the steps for effective community engagement. Specifically, five local health departments will work one-on-one with their identified population to focus on improving health disparities within that specific community. In 2017, 24 local health departments selected this package and participated in a training in October for a hands-on workshop to walk through the community engagement workbook developed by the Physical Activity and Nutrition Branch.

Suicide

Although suicide is unrelated to the NPM chosen for the adolescent health domain, efforts in the upcoming year will continue to focus on this emerging issue. KY will continue to work toward identifying strategies to capture information about suicides, and to obtain more timely notification of these deaths. In collaboration with the DBHDID, KY has also chosen to work on prevention of suicides with the child safety CoIIN. Through this collaboration, we plan to incorporate the Sources of Strength, an evidence-based program that focuses on strengths, resiliency, and connectedness into schools across the state. We anticipate outreach to more school districts to promote implementation of the peer-led youth resiliency program by the end of the 2018-19 school year. Technical assistance and training resources will be provided for the delivery of gatekeeper trainings such as QPR (Question, Persuade, and Refer) and ASIST (Applied Suicide Intervention Skills Training) to community-level organizations.

Additionally, Kentucky has embarked on the Zero Suicide initiative with a goal of incorporating the Zero Framework into the policies and processes of the significant behavioral health care provision systems in the state. Community mental health centers, emergency rooms, and private providers are part of the effort.

MCH has expanded the Evidence Informed Strategy on bullying prevention to include suicide prevention efforts in FY2018. In this package, the LHD will serve as a key partner in the implementation of school-wide bullying and suicide prevention programs in elementary, middle, and/or high schools in their service area. The LHD will assess selected schools and their social/emotional climate to determine what age-appropriate prevention program will be most effective and engaging for students. These efforts will include prevention outreach and education on the topic of bullying. This support will provide expansion of outreach services and community partnerships that already exist in selected schools.

MCH will further this effort to address the increasing adolescent suicide rate by partnering with DBHDID Suicide Prevention Program to provide training and technical assistance to LHDs. The Department for Public Health Senior Deputy Commissioner and the MCH Coordinated School Health Program Administrator work alongside state education stakeholders on the Kentucky Board of Education's Health Subcommittee to address practice and policy recommendations to reduce health disparities in students and increase overall academic success for schools in the state of Kentucky.

To address mental health as a health priority, MCH will continue to include the evidence informed strategy on bullying and suicide prevention efforts. In this package, the LHD will serve as a key partner in the implementation of school-wide bullying and suicide prevention programs in elementary, middle, and/or high schools in their service area. The LHD will assess selected schools and their social/emotional climate to determine what age-appropriate prevention program will be most effective and engaging for students. These efforts will include prevention outreach and education on the topic of bullying. This support will provide expansion of outreach services and community partnerships that already exist in selected schools.

MCH will further this effort to address the increasing adolescent suicide rate by partnering with DBHDID Suicide Prevention Program to provide training and technical assistance to LHDs. The Department for Public Health Senior Deputy Commissioner and the MCH Coordinated School Health Program Administrator work alongside state education stakeholders on the Kentucky Board of Education's Health Subcommittee to address practice and policy recommendations to reduce health disparities in students and increase overall academic success for schools in the state of Kentucky.

Tobacco Free Schools

Previously Tobacco Free Schools was addressed in the cross-cutting section. There is an evidence informed

Tobacco Free Schools package to support the passage and implementation of tobacco free school districts. Beginning with next year's application this will be addressed in the adolescent section and work will be ongoing. The Coordinated School Health Administrator meets quarterly with partners to address effective strategies to promote the benefits of tobacco free schools. In 2017, the KDE Commissioner disseminated a letter to all superintendents addressing their support for policies. This was the first year the Kentucky School Board Association signed the letter to further encourage superintendents to pass these policies. As of June 2018, 69 districts passed a Tobacco Free School Policy that covers 708 schools and 55% of Kentucky's students.

Teen Driving

Along with activities related to teen driving, KY will also be working on *NPM #7: Rate of hospitalization for non-fatal injury per 100,000 children ages 0-9 and adolescents ages 10-19*.

MCH is working through our partners at Kentucky Injury Prevention and Research Center (KIPRC) and the KY Office of Highway Safety (OHS) in a collaborative effort through the Child Safety CoIIN to develop a working action plan to address teen driving. The aim of the collaboration is that, by June 2018, we will reduce deaths, hospitalizations, and emergency department visits resulting from a crash in which the victim was a driver or occupant of a motor vehicle and was between the ages of 15-19. Our goal is to decrease the teen fatalities and injuries related to motor vehicle collisions.

Strategies that are currently being discussed for inclusion in the action plan are: educating policymakers on evidence, create/expand teen driver coalitions, partner with health care organizations to implement standard procedures to provide anticipatory guidance on teen driver safety to teens and parents, enhance data collection efforts, and provide a primer to parents on teen driver safety. Local CFR teams are also being encouraged to determine the graduated driver's license level for all teen fatalities in order to inform future policies.

KY offers a Child Fatality Review Strategy on teen driving. The objective of this strategy is to make sure that every teen comes home safely through parent and teen knowledge of graduated drivers licensing (GDL) and the risks of inexperience, speed, excessive passengers, no seat belt usage, rural roads, and all types of distraction and impairment.

The activities that can be completed as part of this strategy are to establish a Kentucky-specific interactive Checkpoints™ website and to revise Checkpoints™ materials for Kentucky. The KOHS has completed a statewide assessment and are now looking for pilot site locations. Pilot site selections will be determined from the top 20 counties for teen driver deaths. KOHS will analyze Checkpoints™ data, and its results will allow targeted education through the schools as well as valuable feedback for participation in the GDL law. The KOHS, in collaboration with KIPRC, KSPAN, and MCH, will implement a statewide and community-based public awareness media campaign (PSAs). This will be the second year teen driving will be included in the statewide campaign through the KOHS.

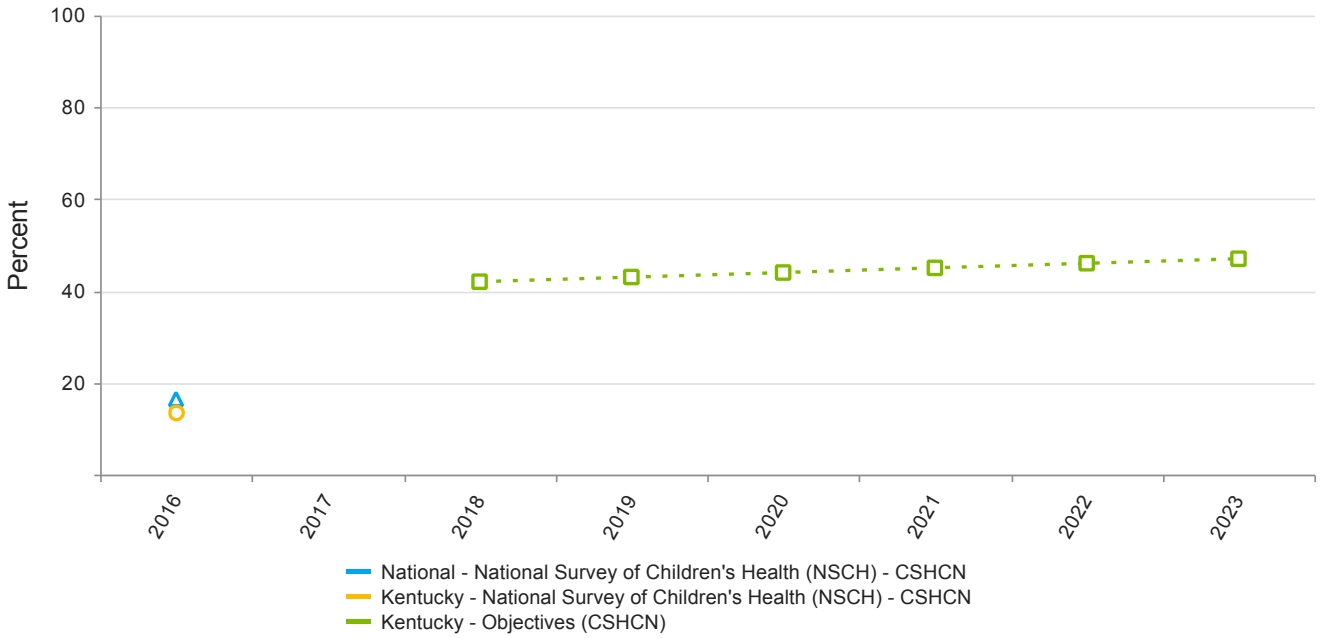
Children with Special Health Care Needs

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2016	16.1 %	NPM 12

National Performance Measures

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care
Baseline Indicators and Annual Objectives



NPM 12 - Children with Special Health Care Needs

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - CSHCN		
	2016	**2017**
Annual Objective		
Annual Indicator		13.6
Numerator		16,553
Denominator		122,086
Data Source		NSCH-CSHCN
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	42.0	43.0	44.0	45.0	46.0	47.0

Evidence-Based or –Informed Strategy Measures

ESM 12.1 - Employ Health Care Transitions (HCT) Process Measurement tool towards assessing progress on implementation of Six Core Elements of Health Care Transitions statewide

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		85
Annual Indicator	84	94
Numerator	84	94
Denominator	100	100
Data Source	HCT Process Measurement Tool	HCT Process Measurement Tool
Data Source Year	2016	2017
Provisional or Final ?	Provisional	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	86.0	87.0	88.0	89.0	90.0	91.0

State Performance Measures

SPM 3 - Percent of CCSHCN Access to Care Plan components completed

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		90
Annual Indicator	81.3	90.7
Numerator	61	68
Denominator	75	75
Data Source	CCSHCN Access to Care Plan	CCSHCN Access to Care Plan
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	100.0	100.0	100.0	100.0	100.0	100.0

SPM 4 - Percent of CCSHCN Data Action Plan components completed

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		60
Annual Indicator	53.3	65.6
Numerator	48	59
Denominator	90	90
Data Source	CCSHCN Data Action Plan	CCSHCN Data Action Plan
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	75.0	90.0	100.0	100.0	100.0	100.0

SPM 5 - Percent of children ages 0 through 17 who are adequately insured

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		78
Annual Indicator	77.9	80.5
Numerator	1,401	
Denominator	1,798	
Data Source	NSCH	NSCH indicator 3.4
Data Source Year	2011-12	2016
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	81.0	82.0	83.0	84.0	85.0	86.0

State Action Plan Table

State Action Plan Table (Kentucky) - Children with Special Health Care Needs - Entry 1

Priority Need
Transitions Services for CSHCN

NPM
NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

Objectives
By 2019, achieve a 5% increase, (from 63.8%) in Kentucky families of CYSHCN reporting community based services are organized for easy use (CYSHCN Outcome #5), as measured by the National Survey of Children's Health

Strategies
Initiate or continue access to medical and specialty care efforts as per CCSHCN Access to Care Plan
sure availability of provider networks as per the CCSHCN Access to Care Plan
Take specific steps toward the development & promotion of an easy to access system of supports & resources as per the CCSHCN Access to Care Plan

ESMs	Status
ESM 12.1 - Employ Health Care Transitions (HCT) Process Measurement tool towards assessing progress on implementation of Six Core Elements of Health Care Transitions statewide	Active

NOMs
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

State Action Plan Table (Kentucky) - Children with Special Health Care Needs - Entry 2

Priority Need

Adequate Health Insurance Coverage

SPM

SPM 5 - Percent of children ages 0 through 17 who are adequately insured

Objectives

By 2019, achieve an increase to over 70% (from 66.8%) in families of CYSHCN reporting that the youth has adequate insurance to cover needed services (CYSHCN Outcome #3), as measured by National Survey of Children's Health (supplemented internally with CUP or other patient survey data to capture subset of CCSHCN-affiliated CYSHCN families)

Strategies

Assist and/or educate increased number of children/families with regard to adequate insurance through CCSHCN, F2F, and community health worker efforts

State Action Plan Table (Kentucky) - Children with Special Health Care Needs - Entry 3

Priority Need

Data Capacity for CSHCN

SPM

SPM 4 - Percent of CCSHCN Data Action Plan components completed

Objectives

Achieve phased implementation of CCSHCN Data Action Plan, with improvement of at least 15% each year

Strategies

Develop and implement formal plan

State Action Plan Table (Kentucky) - Children with Special Health Care Needs - Entry 4

Priority Need

Access to Care and Services for CSHCN

SPM

SPM 3 - Percent of CCSHCN Access to Care Plan components completed

Objectives

By 2019, achieve a 5% increase, (from 63.8%) in Kentucky families of CYSHCN reporting community based services are organized for easy use (CYSHCN Outcome #5), as measured by the National Survey of Children's Health

Strategies

Initiate or continue access to medical and specialty care efforts as per CCSHCN Access to Care Plan

sure availability of provider networks as per the CCSHCN Access to Care Plan

Take specific steps toward the development & promotion of an easy to access system of supports & resources as per the CCSHCN Access to Care Plan

III.E.2.c. (5) CSHCN Annual Report

Kentucky's CCSHCN has leveraged technical assistance resources to strengthen and better integrate the overall system of care for CYSHCN. Kentucky's participation in the Learning Collaborative to Improve Quality and Access to Care in a prior reporting period resulted in a case study developed and published by Altarum during this reporting period.

CCSHCN planned an implemented a daylong all-staff conference in late August 2017, which included several breakout sessions and trainings on MCH issues and other topics, as well as a second day devoted to strategic planning to advance priorities for the CYSHCN population in Kentucky. CCSHCN worked with the National MCH Workforce Development Center to develop the approach to this project and assure readiness, using one-on-one intensive responsive technical assistance. This involved training of the core team and other stakeholders ensuring implementation planning and clear communication of the vision. The strategic plan is expected to be wider than improvement of operational efficiencies, and allow for stakeholders to think through future changes together. The intent is to develop a vision of where CCSHCN is moving over the next few years, given mandates, data, priorities, and realities. CCSHCN also brainstormed what a better system looks like, and what action steps are needed for successful implementation of a plan.

CCSHCN is endeavoring to bring state administrative regulations into compliance and has drafted regulations regarding requirements for medical staff, initial application to clinical programs, and billing and fee structures. Kentucky statute requires administrative agencies to promulgate regulations to set forth policies, and the agency is anticipating filing several regulations in 2019.

As is mentioned elsewhere in this report, CCSHCN's long-standing Board of Commissioners disbanded as a result of HB 276, which took effect July 1, 2017. While the board had a long history, it had been less engaged and relevant than in past years when CCSHCN was an independent government agency. As CCSHCN is now a structure organizationally under the Cabinet for Health and Family Services, the concept of a governing board became a redundant structure. Several advisory committees continue to exist, which have specific areas of interest in CCSHCN operations (e.g. Medical Advisory, Data, Early Hearing Detection and Intervention, Youth Advisory Council (YAC), and Parent Advisory Council (PAC)).

An area of need, which has been explored in some depth during past reports, is to accurately measure data beyond the provision of direct services. CCSHCN monitors data driven decision making through a State Performance Measure (#4). While the revised NSCH will provide a backbone for annual block grant reporting, CCSHCN has revisited data collection efforts for the purposes of developing more accurate local and regional management information and to guide program evaluation and program planning and development. During the previous 5-year cycle, CCSHCN substituted consumer- and agency-generated data in place of national survey data, in order to measure year-to-year changes in progress or lack of progress toward indicators, and to connect results to programs. However, this approach suggests a clinical focus, and pertains to a subpopulation of the larger population of CYSHCN in Kentucky. A successful GSEP proposal assisted the agency with reengineering the "comment card" data collection system in 2016, to collect needed feedback and correspond to questions on the NSCH. This survey was fully implemented during this reporting period. The next step is to ensure the inclusion of not only CCSHCN enrollees, but also non-enrolled CYSHCN, to capture additional dimensions of outcomes and process, and to conform to and supplement national data sources. The 2017 GSEP placement focused on mapping capacity and creation and dissemination of infographics to communicate the agency's work and mission.

CCSHCN submits the following updates organized around the six MCHB core outcomes for children and youth with special health care needs. Outcomes 3, 5, and 6 are linked to a state or national performance measure.

MCHB Core Outcome #1: Families are partners in shared decision-making for child's optimal health

Data from the National Survey of Children's Health shows that 73.6% of Kentucky's families successfully achieved this outcome, as compared to 70.3% nationwide (rank among states: 17 of 51). CCSHCN's agency's "comment card" initiative previously measured the perceptions of direct service enrollees regarding satisfaction and partnership, and these scores (typically 98% or higher) were reported in the prior 5-year block grant cycle. After 6 years, the comment cards needed to be updated, as families were asked to answer the same questions during every clinic visit. With the advent of MCH 3.0 and the revised NSCH, CCSHCN re-engineered the comment card

initiative with the assistance of a GSEP intern. The resulting survey (see the CYSHCN attachment) was implemented in the winter of 2016 and spring of 2017, and continues to collect feedback on partnership perceptions among direct-services enrollees (as well as non-affiliated CYSHCN families) in accordance with the language used in the revised NSCH. While the number of responses decreased with random sampling, CCSHCN feels that the survey methods are more robust. The surveys are administered in CCSHCN clinics and at non-clinic augmentative appointments using an iPad, and are distributed to non-affiliated families of CYSHCN through social media and other means. The NSCH data also provides a ready comparison group. This system yields important state data regarding the patient care experience and other information to supplement available data through the NSCH. From this database, CCSHCN can document direct outreach to over 1,100 CYSHCN to date. CCSHCN is learning how to best capture data on the non-enrolled population.

CCSHCN's continuing challenge is to obtain meaningful stakeholder involvement at a policy level. CCSHCN staffs a Parent Advisory Council (PAC) and a Youth Advisory Council (YAC), which are avenues for family representation and participation. During this reporting period members of the PAC and YAC participated in the CCSHCN strategic planning process. Ultimately, the goal is for families to be involved in the policies that affect them. CCSHCN encourages families to participate in any way they can, from working in the office, to being a Support Parent, to talking with families in the clinic, or being on an Advisory Council. The agency believes that allowing families to participate where they are comfortable will provide them information and support to grow to become involved in other areas.

The Title V investment in Kentucky includes coordination with an administration of the Family to Family Health Information Centers (F2F) program, a critical initiative addressing the needs to the CYSHCN population. CCSHCN social work staff and F2F staff/Support Parents also served as Certified Application Counselors for the state's Health Benefits Exchange – part of a network of individuals trained to provide information and assistance with enrollment.

The F2F has trained 110 Support Parents since the beginning of the grant to work with other families of CYSHCN. The Support Parents talk with families about services and resources available to help them understand what services they might qualify for and how to access these services. The F2F matches families with a Support Parent who has a child with a similar diagnosis or similar needs to the extent possible. Support Parents are present during the Autism Spectrum Disorder (ASD) clinics (both CCSHCN based and community based), and at other CCSHCN clinics supporting families. Many times during what starts out as a casual conversation between the families and the support parent, the families reveal needs that they never thought to discuss with the Care Coordinator, Social Worker, or the Physician. Issues like the need for a stroller, a ramp or a lift; how health issues can be included on an Individual Education Plan (IEP); or reasons to have a 504 plan established for their child's education. The F2F continues to work with PAC and YAC and participates on the EHDI Advisory Board and Learning Collaborative.

During the reporting period, F2F provided individualized assistance to nearly 2,500 (unduplicated) families and over 900 (unduplicated) professionals. Specifically, the F2F has worked one on one with 411 families in Partnering in Decision Making. F2F has several outreach projects including participating in Medicaid Waiver town halls, resource fairs, back to school events, Special Education Camps on IEP and 504 Plans, and made presentations at the Community Collaboration for Children Annual Conference.

F2F and CCSHCN staff often receive comments from families about the services they receive and staff help them to address their concerns to the appropriate department or agency. MCH has a toll-free number, and CCSHCN also offers a comment line available for families. F2F staff assists in monitoring the comment line and works with families needing assistance.

F2F offers small stipends to trained Support Parents to attend trainings or conferences to expand their knowledge so they are better equipped to assist other families. F2F offers a lending library that families can access with a wide array of materials.

CCSHCN staff work in partnership to support families in making decisions about health care and individualized treatment of CYSHCN. The nursing care coordination and multi-professional team approach continues onsite, and a support parent is present at offsite Muscular Dystrophy clinics in Louisville. Care coordinators also attend expanded Cerebral Palsy and Autism clinics, and care coordination and dietitians assist at the offsite Spina Bifida partnership clinic. The CCSHCN transitions administrator follows up personally with aged-out CYSHCN to assist with overcoming any barriers and assuring successful transition to adulthood.

MCHB Core Outcome #2: CSHCN who receive coordinated, ongoing, comprehensive care within a medical home

The percent of CYSHCN who have a medical home is 41.5% in Kentucky compared to 43.2% nationwide. CCSHCN supports the concept of a medical home that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate and culturally effective. While there are few true, certified medical homes available in Kentucky, CCSHCN provides many resources and supports to existing providers in the community. This includes not only employing a team approach, care coordination, and parent support, but also advancing the concept with patients and providers alike whenever possible, and partnering to assure that medical home efforts are linked with other efforts.

Case management services are offered to families who have children with a CCSHCN eligible diagnosis. The child does not have to be enrolled in CCSHCN's clinical program to receive case management. Through case management, a CCSHCN registered nurse works with a family to create the care plan that is right for the child and family. The plan includes the recommendations of physicians and other professionals and respects the needs of the child and family. This service meets the family's comprehensive health needs through communication and available resources to promote high quality, cost effective services for the child or youth. During this reporting period, an acuity measuring system was put in place.

Medical home training is a component of new support parent training. Among its services, F2F provided assistance to 228 families (duplicated) and 53 professionals toward the medical home outcome.

MCHB Core Outcome #3: CSHCN have consistent and adequate public or private insurance

Adequate insurance coverage is a priority issue for Kentucky and is associated with State Performance Measure #5. While CYSHCN represent a special risk, all children and MCH populations need adequate insurance. As such, discussion of this outcome is also found in the Cross Cutting domain narrative.

According to the 2016 National Survey of Children's Health (NSCH), 92.5% of Kentucky's children were covered by health insurance as compared to 94% nationwide. CCSHCN conducts a survey and found that 97% of KY CYSHCN report having health insurance coverage. The NSCH reports that, in Kentucky, 80.5% indicate their insurance is adequate; as compared to 75.2% nationally. CCSHCN 's survey asks how often insurance covers needed services; and 78% indicated always. Only 1.6% reported that they are not able to see the provider that their child needs as compared to 3.6% nationally and 2% of KY CYSHCN.

Regardless of public policy shifts at both the federal and state level, over which CCSHCN and MCH exerts no control, staff continue to assist as many families as possible to overcome barriers to adequate insurance and access to care.

Public policies that included the ACA, Kentucky's Medicaid expansion (January 2014), and development of a state-based Health Benefits Exchange (2013-2016) correlated with increasing numbers of those insured. During this reporting period, the Federal Exchange is being utilized. Clear improvements were seen in Kentuckians covered since the pre-ACA years. The rate of uninsured adults in Kentucky decreased by half between 2013 (25%) and 2014 (12%), and the percentage of uninsured adults has remained stable since then. (Kentucky Health Issues Poll, funded by the Foundation for a Healthy Kentucky and Interact for Health). Other estimates indicate that Kentucky's percentage of children ages 0-18 uninsured decreased from 6% in 2013 to 4% in 2015. (Commonwealth Fund Scorecard on State Health System Performance, 2017 Edition). The 2016 Kentucky Health Issues Poll further found that 2 in 10 Kentucky adults reported that a person in their household delayed or missed getting needed medical care due to the cost, about the same as in the past two years. This is an improvement over 2009, when about 3 in 10 Kentuckians found cost to be a barrier.

Since the change of gubernatorial administration in December of 2015, Kentucky submitted a Medicaid 1115 waiver application (which was approved) and transitioned to the federal health benefits exchange. Regardless of the system in place or that which may be planned, CCSHCN remains committed to ensuring that families of CYSHCN remain educated about coverage options that meet their needs and that agency partners with Medicaid and the managed care organizations (MCOs) to represent the needs of CYSHCN. CCSHCN and F2F staff who were previously navigators with the previous state-based exchange ("KYNECT") became certified application counselors with the federal exchange (HealthCare.gov). Although health insurance is a politicized issue, CCSHCN takes a nonpartisan and practical approach in working with families to ensure health care coverage that is appropriate, affordable, and

sufficient. Ultimately, what is sought is better health outcomes for children and youth; without insurance that includes accessible providers, CYSHCN are less likely to achieve better health. Within the past year, 9 agency-affiliated application counselors/navigators assisted over 749 people during the reporting period. Staff work on a daily basis to help families understand different options offered by insurance, Medicaid waivers, Hart Supported Living, and other options available to families to obtain adequate health financing to meet their needs. Staff and Support Parents talk with families about prescription assistance and different ways to assist in getting medications and are always looking for programs to assist families with medical needs. Staff refers families to programs that may be free in their area or refer them to providers that accept Medicaid as needed. CCSHCN's own family participation scale for direct clinical services is based on CHIP income levels (213-218% of FPL) to allow for a sliding fee scale based on household size and income. Clinic participation fees remain affordable for families and are commensurate with a family's calculated pay category.

The agency continues to collaborate with Patient Services Inc. for an insurance case management and premium assistance program, which currently covers 22 individuals with high cost conditions, such as Hemophilia and Cystic Fibrosis, and provides an estimated cost avoidance of up to $1.2 million per quarter.

As in previous reporting periods, the agency continues to partner with Medicaid on various initiatives. In a previous year, CCSHCN worked with DMS to negotiate enhanced rates for case management and to enable provision of CCSHCN care for behavioral health codes related to ASD, established a partnership with an MCO, and obtained a waiver for prior authorization for durable medical equipment including hearing aids and ear molds and for speech, physical, and occupational therapy for enrolled CYSHCN. Expansion of the CCSHCN Hearing Aid Program to all eleven district offices has resulted in enhanced hearing aid service delivery and improved affordability for families of children with permanent hearing loss. In this program, children are followed by community otolaryngologists and referred directly to CCSHCN audiology offices for audiology and hearing aid-related services. The program has been embraced by families and providers statewide and has resulted in an expansion of audiology services provided at all district offices.

CCSHCN convened a team including DMS and the Medicaid MCOs toward the goal of innovation in systems of care for children with complex medical conditions, who see disproportionate medical costs and expenditures. Kentucky is participating in the Children with Medical Complexities CoIIN. Kentucky's team includes the medical director of DMS. The Medicaid cost settlement agreement in place for care coordination services continues. In a prior reporting period, CCSHCN worked with the MCO dental administrator to negotiate special rates for Cleft Lip & Palate patients in need of complex and phased orthodontia treatment, which attracted more providers and resulted in increased access to care. Prior to negotiation, children were not covered for these services, and care was delayed.

MCHB Core Outcome #4: CSHCN who are screened early and continuously for special health care needs

CCSHCN specialty clinics serve CYSHCN from ages 0-21 and at different developmental stages, however, the Early Hearing Detection and Intervention (EHDI) surveillance program reaches the entire population of newborns to ensure early screening and follow up for hearing. In addition, CCSHCN has initiated a developmental screening program available to any child in Kentucky, birth to 5 years. Other programs discussed in this section include: CCSHCN's First Steps point of entry (POE), partnership with the Kentucky Birth Surveillance Registry, and the Healthy Weight initiative. As always, CCSHCN staff and F2F assists families in gaining access to Kentucky's early intervention system and other programs which can help them with their child's development (such as the Kentucky Health Access Nurturing Development Services home visitation program).

KY Hospitals have maintained a high rate of 97% of infants screened for hearing loss prior to hospital discharge. The KY EHDI program is focusing on an initiative to assist birthing hospitals in scheduling infants who do not pass the screening for warranted follow up prior to their discharge. This approach has been proven to improve parent compliance and results in more timely diagnosis of hearing loss or normal hearing. All CCSHCN district offices offer audiology services, including diagnostic Auditory Brainstem Response (ABR). In addition, in order to ensure speed to service, five district offices have been provided with access to screening ABR equipment. In these offices, infants are scheduled for screening evaluations when indicated, to reduce the impact of false positive referrals from hospitals that do not provide outpatient rescreens. To address concerns that infants and toddlers diagnosed with minimal or unilateral hearing loss do not qualify for First Steps services based on established risk criteria, EHDI is collaborating with Little Ears Hearing Center at The Home of the Innocents to provide intervention services for those children. The needed services will be provided through tele-health technology with an experienced Teacher of the Deaf and Hard of Hearing. The EHDI program expanded the Early Childhood Hearing Outreach (ECHO) in Kentucky that distributed Otoacoustic Emissions (OAE) equipment to Part C (First Steps) point of entry staff and provided

training in service delivery and EHDI reporting procedures. CCSHCN staff in district offices have been tasked with providing hearing screen services and staff training at Head Start and Early Head Start programs throughout the state. To ensure proper follow up occurs; the audiology program policy at CCSHCN was amended to allow any child "failing" a hearing screening provided at any facility (health department, physician office, school, pre-school, etc.) to be scheduled for diagnostic testing at a CCSHCN district office at no out of pocket cost to the family.

In the summer of 2016, the Kentucky EHDI program launched surveys in an effort to gather input from stakeholder groups across the state. For example, surveys asked specifically about their role as provider or their experience as families and requested input on areas of improvement. This needs assessment has highlighted several overarching needs in EHDI in Kentucky including the need for expanded representation on our advisory board by individuals serving families across the state and reducing challenges faced by families related to accessing information about hearing loss, identifying sources for follow up and accessing needed services. A Memorandum of Agreement was established with the Kentucky Commission on Deaf and Hard of Hearing (KCDHH) to recruit "Communication Role Models." These communication models are paired with a family of a newly identified infant in order to assist the families in exploring different communication options and to obtain information in order to select the best option for their family. A video was filmed in which each family described their journey through hearing loss and discussed their experiences with their chosen communication method(s). In addition to the video, KCDHH will be collaborating with the CCSHCN and First Steps to implement sign language classes across the state. In order to increase opportunities for children and families to engage in culturally sensitive recreational activities, the EHDI program is partnering with the University of Louisville School of Audiology Summer Camp Program. The camp serves deaf and hard of hearing children and their siblings.

CCSHCN implemented Autism Spectrum Disorder clinics in 2014. The clinics were opened in areas of the state where services were not readily available in order to fill gaps in services. In the previous reporting period, KY CCSHCN worked with state partners to prepare a proposal for the HRSA funding opportunity called "Innovation in Care Integration for Children and Youth with Autism Spectrum Disorders and Other Developmental Disabilities Program". Although this program was not ultimately funded, CCSHCN is following through on the initiative. Specifically proposed is for CCSHCN to provide education to physicians, ASD screenings, and referral of families to diagnostic services, and ultimately improving Kentucky outcomes for children on the autism spectrum. In 2017, nurses received training on administering the M-CHAT, ASQ-3, and ASQ-SE in preparation for implementation of the development screening program. Referrals for screening can be made by anyone – parents, teachers, therapists, physicians, or anyone who works with a child. Children do not have to be enrolled in the CCSHCN clinical program to be screened. The screening program, available in Bowling Green, Owensboro, Paducah, Somerset and Barbourville (close to 50% of Kentucky's counties), will eventually be expanded statewide.

Part of CCSHCN early screening (early intervention) is the Zika protocol. Kentucky Birth Surveillance Registry (KBSR) partnered with the Division of Epidemiology Reportable Disease Section and CCSHCN to develop a state plan to identify and enroll pregnant women who are Zika-positive in the USZPR and when the infant is born connect them to subspecialty and early intervention services. KBSR is notified at the time of birth, updates the USZPR and contacts the family to make referrals to CCSHCN for neurology clinic and other specialty services. The infant is evaluated by a neurologist and a pediatric audiologist and receives full hearing testing. The family also meets a Family to Family (F2F) representative. The infant returns to clinic at 2, 6, 12, and 24 months of age for a comprehensive physical exam with developmental surveillance and follow up on labs, imaging, hearing test results, early intervention, and ophthalmology referrals. If an abnormality is found on an exam or imaging screen, the infant has appropriate lab work and is referred to pediatric subspecialties. Zika has been added as an established risk for Early Intervention, categorically making exposed children eligible for First Steps. The state's DPH/CCSHCN partnership for Zika response was highlighted in a poster presentation at the annual AMCHP conference in March 2017.

During the reporting period, CCSHCN continued to serve as a Part C Early Intervention Point of Entry for the 7-county area including Louisville, the state's largest city. The point of entry is the largest in the state in terms of population served. The intended goal is to reach and serve more children with developmental disabilities, including CYSHCN who have previously been unaffiliated with the agency. The partnership ensures improved coordination of services, and children needing continued services as they transition out of Early Intervention Services may be directed to care. Over 250 referrals per month are being made to the point of entry, and over 2,300 children are being served.

The 2016 Kentucky Health Issues Poll asked Kentucky adults what they thought was the most important health issue for men, women, and children. Respondents could give any answer. One in four Kentucky adults (25 percent) said

obesity was the most important health issue facing children. As a follow-up in 2017, the poll asked, “First, some people say childhood obesity is a problem in KY, while others do not. What about you, would you say childhood obesity in KY is a serious problem, a problem but not serious, or not a problem?” Over half of the adults surveyed indicated childhood obesity is a serious problem (56%); 35% indicated it is a problem but not serious; and 6% said it was not a problem. Towards the goal of reducing obesity in the CYSHCN population, CCSHCN’s formal Healthy Weight Plan (developed and initiated during the prior needs assessment cycle, and incorporated into agency practice and operations) addresses prevention, identification/assessment, and intervention/treatment among the CYSHCN population – a group who often find it more difficult to control weight and remain healthy. Many barriers exist; lack of time during clinic appointments, family lack of readiness to make changes, or families not accepting that overweight/obesity is a legitimate concern; families who are more concerned with their children’s special health care need(s) than they are about the risks of overweight or obesity. CCSHCN makes gentle efforts to overcome these barriers, and works with others to advance solutions to community concerns beyond the scope of the agency. CCSHCN shares the 5-2-1-0 message with families, and promotes healthy eating and physical activity in the community. During the reporting period, CCSHCN staff continued participation in the 5-2-1-0 initiative for CCSHCN direct service enrollees and families. Staff dietitians provided training as needed on the accuracy of height and weight measurements and reviewed BMI status data with care coordination staff, and continued to participate in the Partnership for a Fit Kentucky – a collaboration among network partners, where best practices are shared and strategies are discussed. CCSHCN participates in the Early Care and Education Healthy Eating and Physical Activity Committee of the Partnership for a Fit Kentucky. The purpose of this committee is to improve access to healthy foods and beverage, screen time limits, physical activity and breastfeeding in early care and education settings.

CCSHCN’s leadership and early intervention system point of entry staff joined the Healthy Babies Louisville partnership, a collective of 25 organizations working to ensure that all babies born in Louisville Metro see their first birthday and beyond. Each organization is implementing practices and/or policies that impact women, men, children, and families across all stages of childbearing years. These evidence-based initiatives focus on making change at the individual, community, and policy levels with special attention on serving our neighbors with the greatest risk in underserved areas. This partnership continues to be developed.

As part of the data initiative (SPM #4), Kentucky CCSHCN continues its memorandum of understanding with the Kentucky Birth Surveillance Registry (KBSR) to study aggregate data for planning purposes and to connect families of newborns with diagnosed conditions to services provided by CCSHCN.

MCHB Core Outcome #5: CSHCN who can easily access community based services

MCHB Core Outcome 5 is associated with State Performance Measure #3, the percent of CCSHCN Access to Care Plan components completed. A range of activities continue under this performance measure, in accordance with the access to care and services priority. A wide variety of initiatives are planned or underway, especially with regard to reaching those CYSHCN not enrolled in clinical services. Kentucky’s plan is presented on the SPM Detail Sheet (Form 10-B), and the plan as scored is included for reference in the CYSHCN Supporting Documents. During the first year of implementation, Kentucky scored 61 out of a possible 75 points, or 81.3%. During this reporting period, Kentucky scored 68 out of 75, or 91%.

Elements which are fully implemented, many of which are continuous and ongoing in nature, include:

- Targeted outreach to educate providers and communities
- Funding of a University of Louisville pediatric neurology resident
- Provision of hearing screening training to early intervention points of entry
- Continuation of the provision of foster care support programs
- Funding of a social worker who assures transitions services to the contracted Hemophilia and Sickle Cell programs at the University of Louisville
- Replication of the successful non-English- speaking support group – now in Lexington
- Improvement in clinic flow resulting in a decreased wait time for families
- Use of social media to alert families of CYSHCN to services, events, resources, etc.

During the reporting period, a directory of CCSHCN services was made available on the agency’s website and promoted on social media. This document details partnerships in addition to gap-filling direct care services available, and details which services are available in which geographic areas. Care coordination continued in and outside of specialty medical clinics. Over 46,000 services were provided to over 8,300 unduplicated patients during the reporting period. Registered nurses partner with the family to develop a care plan incorporating an assessment

of patient and family needs, therapist evaluations, and physician recommendation. Nurses often work with the school system and help with special accommodations at home. CCSHCN continues to provide F2F and social work system navigation and resource-brokering assistance. Through the initiation of CCSHCN-sponsored ASD clinics, the waitlist for diagnostic and treatment has been shortened. As indicated on an individual basis, telemedicine follow-up may occur for these families (as with those enrolled in CCSHCN neurology clinics), an evidence-informed strategy improving access to care where there is a significant proximity to provider problem. CCSHCN utilizes a “huddle” process – the standard practice is to coordinate among multiple disciplines, agreeing on a plan of care for and with each family. Ensuring communication among multiple providers is considered a vital part of the patient care experience, cutting down on wait time and improving clinic efficiency and remaining respectful of a family’s time. CCSHCN staff presented a workshop at the Spring 2016 AMCHP conference, entitled “Enhancing ASD treatment through collaborative partnerships: co-locating medical care with behavioral health.” This experiential presentation described innovative evidence based practices such as visual storyboard scheduling, shared family experience, clinic flow outcomes, and provided a tool kit for other states. The presentation was repeated at the Kentucky System of Care Academy – sponsored by the Department of Behavioral Health and Developmental and Intellectual Disabilities – in June 2017. In June of 2018, CCSHCN was an exhibitor at the System of Care Academy. Other clinics have been redesigned as well; for example, the Louisville Cerebral Palsy clinic has become more comprehensive – children can be seen annually by the neurologist, physical medicine and rehabilitation specialist, orthopedic surgeon and pulmonologist addressing all the child’s needs in one visit. Children also see a nurse care coordinator, social worker, dietitian, F2F support parent and therapists as needed. Representatives for orthotics are present should new braces or wheelchair adjustments be needed. The patients leave clinic with a care plan developed by the entire team and a care coordinator available to help navigate the health care system. In addition to those specialty clinics mentioned above, CCSHCN continued to provide services for qualifying conditions such as cleft lip and palate, craniofacial anomalies, cystic fibrosis, ophthalmology, cardiology, hemophilia, neurology, neurosurgery, orthopedics, otology, and therapy and audiology services.

Better technology in the form of automatic opt-in text message reminders for clinic and non-clinic appointments is being utilized. This feature is one that will benefit families, decrease no-shows, and free up staff time.

Following intentional changes designed to improve clinic flow (and the implementation of teleneurology), wait time complaints have been cut more than half since the beginning of the comment card system in 2010. CCSHCN has been using contract help for audiology in busier offices to keep up with tests for patients without having them arrive so much earlier than the physicians. When pre-check indicates a heavier than usual clinic volume, contract Speech-Language Pathologists are used as well, especially for craniofacial anomalies clinic. In Louisville, the otologists are arriving earlier and their start times tend to be more predictable. CCSHCN looks at ways to continue to improve. A comprehensive rubric looked as ways to better design scheduling, handle no-shows, and other factors which improve physician utilization. Residual wait time is sometimes unavoidable due to physician schedules, but staff do their best to communicate delays to patients when delays happen.

While CCSHCN continues to provide traditional gap-filling direct services – where waitlists exist, where services are not otherwise available, or a need for multi-disciplinary clinics exists, the agency uses its infrastructure to advance access to care in partnership with existing providers when possible. CCSHCN partnerships are our strongest resource regarding access to care. For example, the urology clinics are provided through the University of Kentucky (UK) in two regions (Morehead and Elizabethtown), NICU graduate clinics through UK are planned in three (Hazard, Morehead, Somerset), dermatology has utilized telemedicine equipment as needed (Owensboro), and a University of Louisville (U of L) sponsored assessment for developmental disabilities clinic is within 4 regions in the state (Bowling Green, Lexington, Owensboro, and Paducah, with the potential to serve 90-100 patients per year). A genetics clinic through U of L operates in Paducah, Bowling Green, and Owensboro, and a similar genetics initiative has been the subject of discussion with the University of Kentucky as well. In some clinics, only CCSHCN facilities are used; in others, CCSHCN may enhance care through staffing care coordinators, social workers, or support parents. The “hybrid clinic” model of collaborating with community and state partners not only augments care, but also limits duplication and fragmentation of services.

As children in or at risk of foster care represent a medically underserved population, CCSHCN’s foster care support program has continued during the reporting period. Nurses outstationed in child welfare offices (and those in regional CCSHCN offices) now convene individual health planning meetings and reviews, as well as conducting monthly home visits to approximately 140 medically complex children placed in out of home care throughout the state. Annually, over 1,500 visits are conducted by CCSHCN. Medical consultation is also available on behalf of any child in or at risk of placement in the child welfare system (over 8,000) on an as-needed basis.

CCSHCN also partially funds a social worker working with the University of Louisville Sickle Cell program in the area of transitions. Data from the program was presented as a poster at the 2018 AMCHP conference. CCSHCN funds the state's Hemophilia pediatric programs that occur at the University of Louisville and the University of Kentucky (UK). Both programs incorporate the Medical and Scientific Advisory Council (MASAC) transition guidelines into clinic visits and documentation at the patient's yearly check-up. All providers and team members cover appropriate transition issues per the life stages. The exact MASAC guidelines were inserted into UK's electronic medical record and it is used as a checklist for the comprehensive clinic visits.

CCSHCN funds an ABA therapist and a nurse for two therapeutic riding programs – one in Paducah (Western KY) and the other in Lexington (Central KY). Both programs are for medically complex children and youth.

Another underserved population, those with Limited English Proficiency, was served through the Una Mano Amiga (UMA) Spanish-speaking support groups (473 individuals attended during FY 2017, including 250 mothers in the Madres group and 223 parents in the Families group. UMA's connection to the Latino community in Louisville is extensive, and meeting topics are geared toward expressed need. Identified needs include topics in the areas of advocacy (e.g. initiating meaningful summer programs), emotional support (e.g. crisis intervention, dealing with stress and exhaustion), outreach (e.g. educating teachers and interpreters, as well as reaching other Latino families), and education (e.g. documentation such as what educational records to keep). Hospitality services beyond support groups are offered to CYSHCN families by La Casita. A newer program, Un Abrazo Amigo (UAA) began serving CYSHCN families for Spanish speakers in the Lexington area in August 2016. Twelve adults attended the first meeting, at which topics included preparedness and availability of medical insurance and waiver programs. Participant evaluations were uniformly satisfied. The group has met 11 times through June 2017. Sample meeting summaries from both groups are attached for reference in the supporting documents.

Louisville Urban League deploys community health navigators who conduct in-home assessments and identify residents' top areas of need and connect them with resources (such as CCSHCN). Assistance and follow up occurs as part of the "It Starts with Me!" program. Initiated in 2016, the program goes door-to-door and is completely free. The concept of "It Starts with Me!" is that there are many services, initiatives, and organizations doing good work, but they may not be reaching many of the residents who need them. The program aims to be the missing connector, and volunteers are equipped with information regarding CCSHCN services. CCSHCN worked with the Urban League and suggested a set of questions to add to their assessment regarding CYSHCN with the hope to identify issues that would benefit from a referral to a CYSHCN service provider.

In order to ensure access, provider and public education regarding CCSHCN and the needs of Kentucky CYSHCN is employed as a strategy. Building on prior outreach and publicity efforts, (pediatric grand rounds presentations, social media efforts, health fairs, "birthday bags" in state NICUs as needed), ongoing education has been provided to upper-level pediatric residents in Louisville. During this reporting period, informational ads for the agency have been placed in community periodicals focused on children's services and activities.

CCSHCN's Facebook reach continues to grow; over 1,500 "like" the agency's page and 1,400 follow it; the page had 48,186 hits during this reporting period and 7,066 page engagements. The agency posts 5 days each week. F2F reaches many additional families through handouts, listserv postings, trainings, and other methods including a new Facebook page for that organization.

MCHB Core Outcome #6: CSHCN youth receive services needed for transition to adulthood

The transitions core outcome is associated with National Performance Measure #12. Kentucky's 2009/10 NS-CSHCN score of 37.1% of YSHCN12-17 successfully achieving the transitions outcome trailed the national average of 40%. The updated 2016 survey includes youth 12-17 with and without special health care needs who received services necessary to make transitions to adult health care. The combined population resulted in the 2016 NSCH score of 13.6% for Kentucky as compared to the nation at 16.5%.

Kentucky's national survey results differ significantly from internal survey results. This difference is primarily because CCSHCN survey's individuals and families who are enrolled in CCSHCN clinical services. As discussed in the following paragraphs, the CYSHCN agency has a strong transition program and thus high outcomes on survey responses. In order to improve results of the national survey, CCSHCN will outreach to, and educate, Kentucky's providers regarding development and implementation of successful transition programs.

CCSHCN chose improving agency capacity as a priority during the previous 5-year cycle and embarked on an

ambitious 13-point improvement plan designed with the assistance of national transitions resource center staff. The transitions program for CCSHCN was originally established in 1998, and has expanded from a small program to the point where transitions preparation is the rule and an established part of the array of services offered for direct services enrollees. Kentucky's CYSHCN agency believes that the Got Transition Health Care Transition "Process Measurement Tool for Transitioning Youth to Adult Health Care Providers" offers an appropriate scoring method to assess progress in implementing the Six Core Elements. In the first year of scoring, Kentucky's CYSHCN agency (CCSHCN) achieved a total score of 87.5% utilizing the Got Transition tool. The current reporting year's activities resulted in a score of 94%. (See CYSHCN Supporting Document #3.) This increase occurred as a result of the development of the plan of care template that includes transition elements as well as the inclusion of an emergency care plan within the portable medical summary.

CCSHCN staff continue those activities which are established, including one on one planning discussions with families enrolled in CCSHCN programs – based on a transition readiness assessment checklist which documents what developmentally appropriate skills have been accomplished, are in progress or are a part of future expectations. During this reporting period, two additional questions were added to the transition checklist based on Got Transitions information – "Understands the importance of organizing and keeping my medical records and receipts" and "Can explain to others how our family's customs and beliefs might affect health care decisions and medical treatments." Kentucky's program has continued quality assurance activities in the form of random chart audits within the 11 statewide CCSHCN offices to ensure transition preparation services.

The transition work at the agency level continues successfully as reflected in an internal survey provided to patients/families enrolled in clinical and augmentative services. The following scores have been observed on CCSHCN internal survey:

Survey Question	Percent responding yes
Has your child's doctor or other health care provider (e.g. nurses or social workers) actively worked with your child to: Think about a plan for the future? (for example, discussing future plans about education, work, relationships, and development of independent living skills):	83%
Has your child's doctor or other health care provider (e.g. nurses or social workers) actively worked with your child to: Make positive choices about your child's health? (for example, by eating healthy, getting regular exercise, not using tobacco, alcohol, or other drugs or delaying sexual activity)	91%
Has your child's doctor or other health care provider (e.g. nurses or social workers) actively worked with your child to: Gain skills to manage your child's health and health care? (for example, by understanding current health needs, knowing what to do in a medical emergency, or taking medications you might need	90%
Has your child's doctor or other health care provider (e.g. nurses or social workers) actively worked with you or your child to: Understand the changes in health care that happen at 18? (for example, by understanding changes in privacy, consent, access to information, or decision-making):	75%

Transfer of care planning activities, begun as a pilot project through the D-70 State Implementation Grant, are now a part of process statewide – outreach occurs to assist youths with the handoff to adult care. In all CCSHCN regions, adult health care providers have been identified who are willing to take YSHCN into their adult practices. CCSHCN prepares preparation assurance and a portable medical summary, and assists with the transfer completion. The Transition Administrator conducts regular follow-up calls to aged-out youth – of 82 who have been contacted, 99% have successfully transitioned to adult health care providers.

Beyond the individual and clinical level, CCSHCN remains actively involved in the Kentucky Interagency Transition Council for Persons with Disabilities and the nine Regional Interagency Transition Teams ("RITTs") across the state, designed to help agencies collaborate better at the regional level to support youth. CCSHCN and F2F staff activities

beyond CCSHCN walls include participation in regional school transition fairs (targeting both middle- and high-school students), providing education at conferences and school events, and sharing information with families and professionals. F2F staff outreach efforts included exhibiting at the nine Special Education Transition fairs throughout the state and presenting at the Vocational Rehabilitation Conference on “Dude Where’s My Transition Plan”. F2F staff received training on the DB101 System allowing them to assist families of children/adults with special needs to understand if they go to work how much money they can make as they transition.

KentuckyWorks is an employment partnership at the University of Kentucky Human Development Institute that has set a goal of raising the employment rate of Kentucky students with disabilities by 20% by 2022. In February 2017, KentuckyWorks held a Statewide Transition Summit and Community Conversation. Representatives from agencies across the state that KentuckyWorks identified as crucial players in the transition of high school students from school to employment were invited to attend the one-day kick off event. A portion of the day was devoted to a Statewide Community Conversation, led by national transition expert Dr. Erik Carter of Vanderbilt, for the attendees as a state to discuss and identify what is working well, what we need to improve upon, and critical next steps to improve transition outcomes. Two CCSHCN staff members (Transition Administrator and the F2F HICs Co-Director for the Western half of the state) attended the Summit. At the end of the one-day Summit, KentuckyWorks staff thanked everyone for their input, and stated they would take the information provided by the attendees and would use that to help them in making plans to address needs of students with disabilities to improve the employment rate of students with disabilities. Recently, KentuckyWorks created Transition Training modules which were shared with CCSHCN managers as well as the Youth Advisory Council. As opportunities are made available, CCSHCN will continue to collaborate with the KentuckyWorks initiative.

III.E.2.c. (5) CSHCN Application Year

As the 90-plus year-old agency's evolution continues, CCSHCN looks forward to continuing to partner with peer agencies in a way that will transform Kentucky's pediatric care landscape, particularly in the area of enhanced access. The agency will continue to focus on four priorities – access to care, adequate insurance, transitions, and data driven decision making – while maintaining focus on established MCHB outcomes.

CCSHCN is continuing to bring state administrative regulations into compliance. Kentucky statute requires administrative agencies to promulgate regulations to set forth policies, and the agency, in conjunction with the Governor's Red Tape Reduction initiative, is anticipating filing several regulations. A regulation that will go into effect just after submission of this application will bring about a change to the agency's name. Through Red Tape reduction the CCSHCN Board of Commissioners was dissolved (HB 276). As a result, the agency will be renamed the Office for Children with Special Health Care Needs (OCSHCN) since commissioners are no longer part of the leadership. As CCSHCN is now a structure organizationally under the Cabinet for Health and Family Services, the concept of a governing board became a redundant structure. Several advisory committees exist already, which have specific areas of interest in CCSHCN operations (e.g. Data, EHDI, YAC, PAC).

An area of need which has been explored in some depth during past reports is to accurately measure data beyond the provision of direct services. While the revised NSCH provides a backbone for annual block grant reporting, CCSHCN revisited data collection efforts for the purposes of developing more accurate local and regional management information and to guide program evaluation and program planning and development. During the previous 5-year cycle, CCSHCN substituted consumer- and agency-generated data in place of national survey data, in order to measure year-to-year changes in progress or lack of progress toward indicators, and to connect results to programs. However, this approach suggests a clinical focus, and pertains to a subpopulation of the larger population of CYSHCN in Kentucky. A successful GSEP proposal assisted the agency with reengineering the "comment card" data collection system in 2016, to collect needed feedback and correspond to questions on the NSCH. That system was successfully launched. The next step is to ensure the inclusion of not only CCSHCN enrollees, but also non-enrolled CYSHCN, to capture additional dimensions of outcomes and process, and to conform to and supplement national data sources.

In conjunction with the strategies listed on the preliminary action plan table, CCSHCN submits the following updates as to plans:

MCHB Core Outcome #1: Families are partners in shared decision-making for child's optimal health

CCSHCN will continue to serve and train parents/youth on the importance of shared decision making at all levels of planning/care. F2F has plans on doing a training on how to serve on committees and boards to help families better understand why serving on boards or committees is so important.

CCSHCN is collaborating with several agencies to work heavily with the Hispanic population and will be training those families to support/mentor other Hispanic families by becoming Support Parents. This will extend our reach to assist more families.

CCSHCN parent consultants, social workers, and other staff have completed training in preparation for the new KY Health program that will begin in July 2018. This program has many new requirements of families such as paying a premium for Medicaid, possible co-payments, and Partnering to Advance Training and Health (PATH) Community Engagement, which will require low-income adults to work 80 hours a month and report. CCSHCN is prepared to assist families in understanding the requirements and helping them complete their reporting.

CCSHCN will continue asking for input from the Parent Advisory Council (PAC) and the Youth Advisory Council (YAC), which each meet quarterly. One of the main barriers in the area of participation in family advisory committees (both parent and youth) is the obstacle of geography. CCSHCN is in the process of subscribing to Zoom Video Communications that will be used for the PAC and YAC meetings. This will allow members to participate in meetings from their home computer or mobile device. It is hoped that this type of improvement will lead to increasing numbers of participants in diverse geographic areas, and hearing new voices provide input.

The CCSHCN transitions administrator will continue to follow up with families of aged-out CYSHCN to assist with overcoming barriers, conducting quality assurance regarding transitions efforts, and gauging how much families

understand.

MCHB Core Outcome #2: CSHCN who receive coordinated, ongoing, comprehensive care within a medical home

CCSHCN staff will continue to advocate for the concept of a medical home, and provide support to existing providers in communities. CCSHCN is participating in the CoIIN on Children with Medical Complexity in which one of the goals is to increase the number of families reporting having a medical home. In its own direct services, the use of nursing care plans supports the measurement of individual outcomes and interventions through care coordination.

MCHB Core Outcome #3: CSHCN have consistent and adequate public or private insurance

CCSHCN remains committed to enrolling families and one on one education or application assistance in the upcoming year. Especially in light of uncertainty with regard to possible public policy shifts at the federal and state levels, CCSHCN front-line staff and support parents will continue participation with Kentucky's Health Benefits Exchange, Healthcare.gov, and remain trusted resources with regard to the 1115 Medicaid waiver and Kentucky HEALTH. Please refer to SPM #5, in the cross-cutting domain.

MCHB Core Outcome #4: CSHCN who are screened early and continuously for special health care needs

CCSHCN plans to grow and expand the newly implemented developmental screening, part of the Autism Spectrum Disorder Program, which is available to all children in Kentucky through age 5.

CCSHCN's dietitians and other clinical staff will continue to administer the agency's Healthy Weight Plan, focusing this year on how to collect healthy weight data with an ever-changing population, possibly initiating chart reviews of individual longer-term patients to determine whether the agency's processes positively, negatively (or neither) affect outcomes in any way, and will continue to collaborate with the Partnership for a Fit Kentucky and coalitions locally and statewide.

CCSHCN will continue screening all new borns for hearing loss. CCSHCN audiology is committed to supporting and promoting periodic hearing screenings throughout childhood. The KY EHDI program is in the process of preparing a "Risk Factor Fact Sheet" which will be disseminated to physicians when an infant on their caseload is identified as having a risk factor for late onset or progressive hearing loss. The fact sheet will include pertinent information regarding appropriate follow up protocols that should be initiated. Loaner audiometers are made available to school systems for use in their hearing conservation programs. Our outreach to Head Start and Early Head Start Programs, previously limited to service delivery and staff training has been supplemented by making loaner Otoacoustic Emissions (OAE) test equipment available to agencies whose own equipment is malfunctioning. As mentioned previously, changes to the CCSHCN policy have made diagnostic audiologic follow up (in the event of a "failed" hearing screening) available at no cost to the family through any one of eleven CCSHCN offices. This policy change has encouraged referrals from our community partners, specifically family practice physicians, pediatricians, and otolaryngologists.

CCSHCN plans to partner with the Department for Community Based Services to provide care coordination to babies born with Neonatal Abstinence Syndrome. A CCSHCN Social Service Worker will participate in the hospital discharge planning and ensure the baby receives appropriate services following discharge.

MCHB Core Outcome #5: CSHCN who can easily access community based services

As described in the Detail Sheet (Form 10-B) for SPM #3, CCSHCN will continue to build infrastructure as per the Access to Care Plan (see attached documents). Supplementing efforts will also include supporting partner providers to take over direct services where possible (or the inverse, assuming duties of departing providers who leave a community gap – such as pediatric ophthalmology in Morehead, where CCSHCN services filled a void), working with Medicaid toward integrated and coordinated care, and increased access, considering well-planned telemedicine expansion possibilities into other disciplines beyond neurology and autism, continued assurance of services for medically complex youth in foster care as well as population in or at risk of placement outside the home, replication of the Spanish-speaking support group programs outside of the Louisville and Lexington area, and administration of the F2F, care coordination, and social work programs to assist with navigation of services. A hybrid clinic model is planned in Hazard (Urology) and a Neonatal Abstinence project is in the developmental stages in partnership with the Department of Behavioral Health), through which CCSHCN staff are able to support additional conditions not on

the formal eligibility list. As is mentioned in the annual report, CCSHCN is investigating advanced telehealth technology.

Continuous education of medical providers occurs through the Medical Director to support the quality of care, and also includes the pediatric neurology resident program partially funded by CCSHCN funding. The Medical Director hosts a rotation of 2 U of L medical residents per month, educates through the University of Kentucky as well through a lecture to NICU fellows. A provider summit has been proposed by the Children with Medical Complexities (CMC) team, as follow up to the well received 2015 Access to Care for CYSHCN Summit. The CMC team was organized to brainstorm and implement ideas to improve the system of care for the CMC population in Kentucky. CCSHCN will be participating in the Children with Medical Complexities CoIIN with a focus on home ventilation and aero-digestive service incorporating teleconferencing technology for care planning services. The concept of a virtual care team will be utilized.

CCSHCN will continue to partially fund a social worker working with the University of Louisville Sickle Cell and Hemophilia pediatric programs.

CCSHCN plans to continue program funding for a therapeutic riding program in the Paducah area, and funding of medical personnel for a Lexington-based Easter Seals summer camp for medically complex youth. A partnership with Kids Center is under development that will provide nutrition services and a feeding clinic to CYSHCN in the Louisville area – a service that is greatly needed in the community.

CCSHCN will continue to request and use data from our partners and stakeholders. Specifically, furthering the analysis of both Medicaid and hospital discharge data and determining next steps.

MCHB Core Outcome #6: CSHCN youth receive services needed for transition to adulthood

Transitions continues to be a priority need. CCSHCN intends to ensure conformity with Got Transition and AAP guidelines/best practices as described in the State Action Plan Table.

F2F is planning a Community Resources Fair in collaboration with the Wendell Foster Campus on Developmental Disabilities this coming year. The F2F continues to work with the Midwest Genetics Collaborative on developing video's and material on understanding Genetic Telehealth Medicine. CCSHCN will continue working with families and professionals to understand the importance of transition for children with special needs.

F2F and CCSHCN staff participate on Regional Interagency Transition Teams to collaborate with schools with planning for transition activities, such as local transition fairs.

CCSHCN staff will continue to utilize the transition checklist to work with patients and their families on transition issues to assist patients to plan for transitioning to adulthood. As appropriate staff communicate/collaborate with community service providers (Vocational Rehabilitation, the Department of Community Based Services, Behavioral Health, and others) in order to connect patients/families with services/resources to assist them with transitioning to adulthood to the optimum ability of the of the patient. As appropriate CCSHCN staff attend community resource fairs to give information to families.

The Transition Administrator will continue to complete transition checklist audits twice a year (3 transition checklist audits per each CCSHCN office twice a year).

Cross-Cutting/Systems Building

Cross-Cutting/Systems Builiding - Annual Report

Substance Abuse

The areas that are highlighted for the annual report include plan of safe care, NAS surveillance, and collaborative activities with other state agencies.

Perinatal Advisory Committee

As part of Governor Bevin's Red Tape Reduction Act, the Perinatal Advisory Committee was legislatively dissolved. While this committee no longer meets, their recommendations regarding substance abuse during pregnancy and NAS remained a core concern for MCH. During discussions in the past year, multiple agencies, locally and at the state level, have met to work on development of addressing a plan of safe care that will provide ongoing wrap-around services to address a multi-pronged approach.

- KY needs to develop more comprehensive services for pregnant and parenting women with substance use disorder.
    - In the past year, the Find Help Now KY (findhelpnowky.org) website was launched. The development of this website included a multi-agency collaboration of KIPRC, UK College of Public Health, CDC, KY Cabinet for Justice and Public Safety, and multiple departments from the Cabinet for Health and Family Services. The website is innovative and helps providers or an individual across the state find up-to-date information on the current availability of accessible additional treatment services, both online and in real time.
- Birthing hospitals are required to report NAS once diagnosed regardless of treatment required. Birthing hospitals continue to need a standardized model for identification and treatment of NAS as this has shown to have better outcomes than hospitals with no protocol and where each doctor addresses NAS differently.
    - MCH is reviewing information related to developing a standardized model.
- Birthing hospitals report they model safe sleep and educate on AHT to the parents/caregiver for all newborns including those with NAS.
    - Birthing hospitals utilized various trainings for both topics and are partnering with MCH, KY Hospital Association, and Prevent Child Abuse of KY to improve engagement with current educational videos, and possibly establishment of a web application to provide push messages on various well child topics after discharge.
- Rooming in for the mother with an infant with NAS should be encouraged and promotes better outcomes.
    - Birthing hospitals present at the KHA meeting noted they encourage rooming in and use the opportunity to model safe sleep and promote breastfeeding with mothers.

Kentucky Center for the Prevention of Neonatal Abstinence Syndrome

This Center was established through a contractual agreement with the University of Kentucky. A Committee of Experts was developed to review and approve guidelines and best practices. Evidence-based guidelines were developed to include chapters on: Pre-pregnancy, Screening for substance use during pregnancy, Management of opioid-dependent women during pregnancy, Intrapartum and postpartum management, Infant care, Discharge planning and transition to community services, and Primary care for infants affected by perinatal opioid use. The guideline for infant care has been drafted and is currently under review. This guideline includes information on assessment and treatment (pharmacologic and non-pharmacologic) for infants with NAS. Secondary to the university request that they do not have resources to continue this initiative, this contract will not be renewed.

Neonatal Abstinence Syndrome (NAS)

In KY, data from hospital discharge records indicate the number of cases of NAS has increased more than 20-fold in the last decade (46 in 2001 compared to 1,115 in 2016). Mandatory reporting of NAS to MCH was instituted in July 2014. An annual report was completed that covered cases reported from August 1, 2014 to July 31, 2015. Since then, two additional calendar year reports has been completed for 2015 and 2016. A third calendar year report is currently being developed and will cover cases for 2017. Preliminary analysis of the 2017 data indicates that the rate of NAS among KY resident live births was 22.6/1,000. This data is still preliminary as edit checks are still being performed to ensure accuracy and complete reporting; therefore this rate may change. Additional information about this report is included in the Accomplishments section below.

Kentucky is at the center of an injection drug epidemic that has brought with it the highest HCV infection rate in the country. Although spread of the virus nationally declined until 2006, rates have more than tripled in Kentucky and several surrounding states over the last 10 years. Nationally, most people living with HCV are baby boomers who acquired the virus before testing was available, but in Kentucky, most new cases are among injection drug users in Appalachia, especially among people in their 20's.

In 2013, the Kentucky Adult Viral Hepatitis Prevention Program partnered with selected local health departments for a HCV laboratory testing pilot for individuals identified with HCV risk factors. The results of this pilot project revealed a large number of confirmed HCV positive tests in persons aged 10 to 35. This raised concerns about the limited data available and the potential for mother to child HCV perinatal transmission. Thus, in January 2014, the Kentucky's Viral Hepatitis Prevention Program initiated a voluntary reporting pilot project for Hepatitis C Virus (HCV) for pregnant women, children aged five years and younger, and infants born to HCV positive women. In 2014, there were 848 reports to the Kentucky Vital Statistics Branch of women reported to have HCV and who gave birth in Kentucky. The voluntary reporting demonstrated the high number of infections and need for mandatory reporting. In April of 2018, SB250 was updated requiring all pregnant women in Kentucky be tested for HCV.

Plan of Safe Care:

The DBHDID, in collaboration with MCH and multiple other community partners, has been working on an initiative focused on developing a comprehensive system of care for women of child bearing age and their families, who are at risk of using drugs or alcohol. One aspect of this initiative addresses services available for infants born with effects from substances of abuse, especially NAS; specifically, the Federal Child Abuse Prevention and Treatment Act requirements that states "have policies and procedures ensuring that infants born with and identified as being affected by illegal substance abuse or withdrawal symptoms resulting from prenatal drug exposure" have a Plan of Safe Care upon discharge.

In the past year, 6 regional meetings have been held in conjunction with the Kentucky Perinatal Association (KPA) to discuss the plan of safe care for infants with NAS. The topics that were covered included:

- Overview of NAS and Goals of the Workshop
- The addicted mother – "PATHWAYS"
- Non-Pharmacological and Pharmacological Treatment of NAS
- Safe Sleep and Plan for Safe Care
- Resources for Mothers and Children
- two question and answer sessions

These meetings had an average attendance of 50-100. In attendance were representatives from multiple local agencies with a desire to learn more on this subject and begin work to address helping the mothers and newborns. As a result of these meetings, Floyd County and Madison County began active planning to develop a program for services to address the plan of safe care.

With 70 of every 1000 births diagnosed with NAS, Floyd County was chosen as an initial pilot. Floyd County, in collaboration with the Big Sandy NAS Coalition and KDPH, has drafted the HEART plan. As previously mentioned, this program will meet the needs of pregnant and parenting women who have Opioid Use Disorder (OUD) and their young children through a support group experience. It will include supports for mother and child akin to "one-stop-shopping." Through this experience, participants will build protective factors to minimize the opportunities for stress and feelings of being overwhelmed. This parent-driven and strength-based program will include resources for physical and mental healing, education and skill building for nurturing parenting, and the necessary supports for success in long-term recovery. For the initial pilot group, all moms who deliver a baby with a NAS diagnosis at Highlands Regional Hospital in Floyd County will be referred to the Floyd County LHD-HANDS program. A HANDS home visitor will visit the mother in the hospital or make contact if she has already been released to offer HANDS home visitation services and/or enrollment in the HEART program. The initial HEART group will consist of six to ten moms who, along with their children, will meet every Tuesday from 10 a.m. to 1:00 p.m. at the Floyd County Health Department. The group experience will be co-led by HANDS home visitors, an Early Childhood Mental Health Specialist, OUD Peer Support Specialist, and a Regional Program Coordinator. During the three-hour meeting, parents will learn parenting best practices from *Growing Great Kids Curriculum* and *Nurturing Parenting Curriculum*. There will be time allotted for parents to practice these new skills with their infants under the guidance and support of HANDS providers. In addition, parents will learn positive coping strategies through the use of Kentucky Strengthening Families Protective Factors Framework. Finally, area providers will attend sessions on a

rotating schedule to provide critical mental and physical health services such as well-child check-ups, immunizations, nutrition education, easy access to community resources, tax preparation and other services as identified by participants. There are five overarching goals of the HEART program:

1. Infrastructure: Increase coordination of care for parenting and pregnant women with OUD by integrating HANDS with OUD services and supports
2. Prevention: Utilize an early detection screener to help prevent opioid misuse and abuse in Floyd County
3. Treatment: Increase connectivity to OUD Treatment Service
4. Recovery: Provide psycho-education on relapse and prevention and increase retention for long-term recovery
5. Harm Reduction: Every child and family that participates in this program builds strong protective factors to buffer toxic stress and ACES

The first group has a planned launch date of Tuesday, September 11th. Once this group is running successfully, the HEART state planning team will identify a second site for group two. The HEART state team consists of local Floyd County leadership, Big Sandy NAS Coalition representatives, Department for Behavioral Health, and Department for Public Health employees. The trainings for pilot group one are set for the 1st and 2nd week in August to include *Nurturing Parenting Curriculum*, Kentucky Strengthening Families, Parent Cafés, and information about OUD and NAS populations as well as Motivational Interviewing.

Madison County created a group of community stakeholders that includes the local birthing hospital, health department, parent/grandparent representatives, law enforcement, DCBS, Bluegrass Treatment program staff, social workers, head start, and school representatives to work on improving outcomes after discharge for infants with NAS. This group meets monthly and has begun drafting a discharge planning guide for the infant with NAS and has identified touch points of care for the caregiver/infant, as possible points of time in which reinforcement for safety, well child exams, developmental screening, or linkage to community resources could occur.

Collaborative Activities with Other State Agencies:

CHFS has developed a workgroup to address opioid misuse and abuse. The charge of this group is to explore opportunities to improve collaboration and expand joint efforts among departments within CHFS that are working to address KY's epidemic of opioid misuse and abuse. In addition to KDPH, there are representatives from the Department for Behavioral Health, Developmental and Intellectual Disabilities (DBHDID), Department for Medicaid Services (DMS), KIPRC, Department of Aging and Independent Living, Office of the Inspector General, Office of Health Policy, and Family Resource and Youth Services Centers.

MCH also collaborates with the Office of Drug Control Policy on issues related to substance abuse. In 2015, a comprehensive bill was passed in the KY Legislature to address the heroin epidemic. The bill includes stronger penalties for dealers and traffickers and better treatment options for those seeking help. The addiction treatment system will receive an immediate $10 million boost followed by $24 million annually. The bill also increases the availability of naloxone, and allows for clean needle exchange programs, if the local jurisdiction approves. In 2016, Kentucky Governor Matt Bevin signed a two-year budget with a total of $15.7M in FY 2017 and $16.3M in FY 2018 allocated to the Kentucky Justice and Public Safety Cabinet to combat heroin and substance abuse in the Commonwealth. With the FY 2017 funding allocation, $2.5M was set aside for established programs to address neonatal abstinence syndrome by developing or expanding comprehensive evidence-based residential treatment services, transitional housing, and other recovery supports to pregnant and parenting women with opioid use disorders. Seven awards were made with these funds; six of these programs have residential service options and the remaining program offers an intensive outpatient service along with MAT. MCH reviews proposals for these funds and provides input on the distribution of funds.

The 2017 KY legislature passed a bill that limits the number of opioid painkillers a patient can be prescribed to a three-day supply. The Kentucky Board of Licensure will develop methods of implementing the provision for doctors, and a public hearing will be held before physicians are required to abide by the new guidelines.

NAS Accomplishments/Progress:

Recognizing the serious issue of NAS, legislation was passed that required facilities making the diagnosis of NAS to report those cases to KDPH. The legislation also requires that KDPH publish on, at least an annual basis. de-identified statistical data on the reports of NAS. In July 2014, a guidance document and form were distributed to all birthing hospitals in the state, with a revision distributed in January 2016. A database system was developed to track the reports received. Published in 2017, the Annual Report on 2016 Births from the Public Health Neonatal Abstinence Syndrome Reporting Registry can be viewed at the following web address:

https://chfs.ky.gov/agencies/dph/dmch/Documents/DPHNASReport2016.pdf. The report documents, in calendar year 2016, there were 1,697 reports representing 1,257 unduplicated cases reported to MCH. This represents over 100 new cases of NAS each month in KY.

KY also has received $3 million in funding over three years from SAMHSA for Medication Assisted Treatment (MAT) – Prescription Drug and Opioid Abuse. The purpose of this project, Supporting Mothers to Achieve Recovery through Treatment and Services (SMARTS), is to expand treatment services and to increase capacity for evidence-based MAT and other recovery support services to pregnant and postpartum women with opioid use disorders.

KY has the KY Moms: Maternal Assistance Towards Recovery Program (MATR). The program goal is to reduce harm to KY mothers and children from maternal substance use during and after pregnancy. This program is organizationally located within the BHDID. This program is currently offered in 13 regions across the state.

MCH worked with the KPA on a Kentucky Perinatal Quality Collaborative (KPQC) focused on NAS. The aim was to improve the care of infants with NAS by standardizing NAS scoring and medical guidelines for treatment of infants with NAS. Birthing hospitals submitted data through a RedCap database and quarterly reports were provided to the participating hospitals. KPQC completed a onetime project from December 2014 to February 2017, a total of 2,466 cases were entered into the RedCap system. In this project, 24 hospitals (52.2% of 46 total birthing hospitals [as of 2017]) participated in the project; however, five hospitals reported on fewer than 10 cases. The hospitals participating in this project reflect 77.8% of the Kentucky hospital-based birth population. The average length of stay declined from 18.9 days in Dec 2014 (1st Quarter 2015) to 13.1 days in Feb 2017 (4th Quarter 2016). MCH wished to continue this surveillance and submitted a grant application to the CDC to fund the Kentucky Perinatal Quality Collaborative in the future. Funding was not available for the grant at this point. However, initiation of the KY Perinatal Quality Collaborative will begin, as funding is available.

NAS Challenges:

The widespread nature of the substance abuse epidemic in Kentucky is a challenge. When focusing efforts on treatment options for pregnant and parenting women, the need far outweighs capacity. From a data standpoint, there also are challenges to obtain accurate numbers using administrative data sources. Another significant concern is that some babies with NAS may be discharged from the hospital before onset of symptoms, resulting in a potentially high-risk situation for the infant. NAS has been identified as a risk factor for infant deaths, especially for sudden unexpected infant deaths with unsafe sleep practices, as well as pediatric abusive head trauma. These findings highlight the critical need for a comprehensive plan of safe care that assures a safe environment after discharge from the birthing hospital.

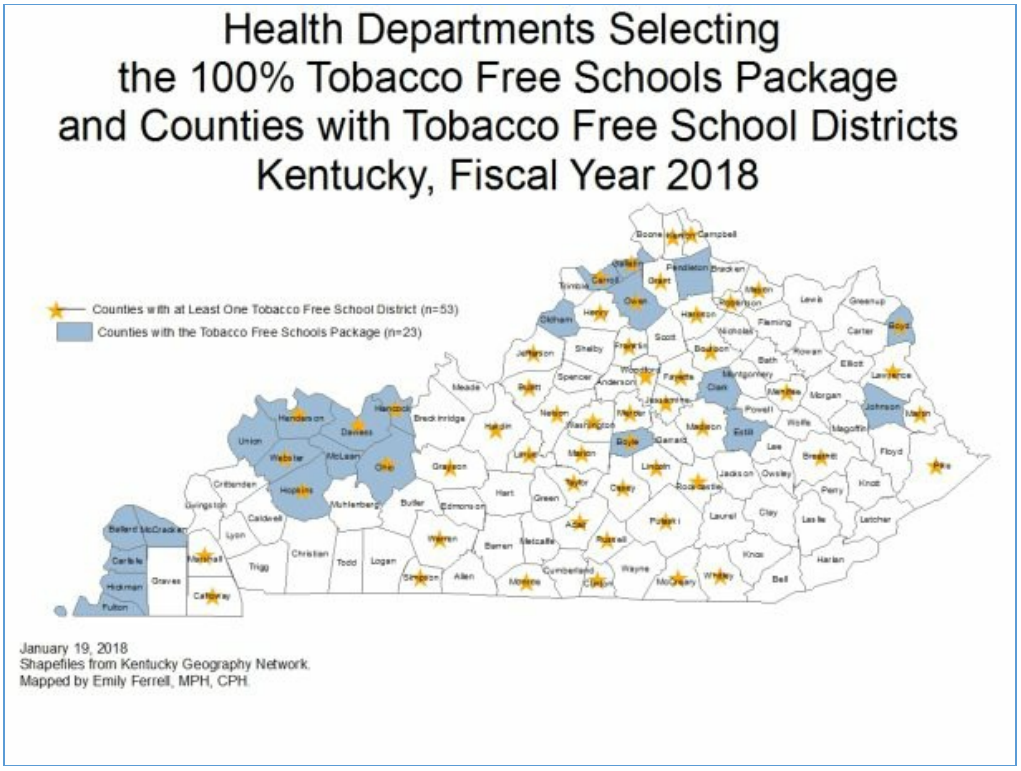
Tobacco Use

Broad goals for tobacco cessation and prevention are to prevent initiation of tobacco use among youth and young adults, promote tobacco use cessation among youth and adults, eliminate exposure to secondhand smoke, and identify and eliminate tobacco-related disparities. To address this concern, KY selected *NPM #14: Percent of children who live in households where someone smokes*. Specific strategies to achieve these goals include:

- Increasing the use of smoking cessation therapy
- Supporting tobacco-free schools, campuses, and communities

Collaborative Efforts with Tobacco Prevention and Cessation Program:

The Tobacco Prevention and Cessation Program is organizationally located within the DMCH which leads to increased collaborative efforts regarding the MCH target population and tobacco issues. A statewide 100% Tobacco Free School (TFS) bill was proposed during the 2017, and again in the 2018, legislative session. The bill passed the Senate but was not called for a vote in the House. A poll released in January 2017, by the Foundation for a Healthy Kentucky, found that over 70% of Kentuckians now support a comprehensive statewide smoke-free law. Several cities have strengthened their already existent partial smoke-free laws in 2018. For the past few years 32.7% of Kentuckians were protected by smoke-free law. With local changes, this has improved to 34.7% of Kentuckians protected.



Tobacco efforts have also focused on adolescents. By March 2018, the number of school districts with 100% TFS policies has grown to 40% of school districts, or 70 in the state, covering 721 individual schools and protecting 56% of students in the state.

In the current state fiscal year, 22 LHDs chose the MCH Evidence Informed Strategy: 100% TFS for their community. Local health departments provide assistance to local Boards of Education in passing and implementing 100% TFS. Activities for this package include the establishment of baseline data, meeting with key gatekeepers, stakeholders, and potential partners within the school district, and surveying school personnel, students, and the community for measures of their support. The package also supports collaboration with appropriate student groups and distribution of survey results and information about policies to key stakeholders. When policies are adopted, this package can also be used to assist with implementation of the policy. To date LHDs have provided education to 448 community stakeholders.

Smoke-free Child Care Centers:

One LHD has piloted a program for tobacco-free child care centers, which encourages child care centers to pass policies prohibiting tobacco use on center property and requires caregivers to remove smoke-residue when returning to work after a break by removing a smoking jacket/shirt, washing hands, and rinsing mouths. In the 2017-2018 fiscal year, two additional LHDs have decided to encourage smoke-free child care centers in their community as well. LHDs create signage for the centers, provide technical assistance on policy change, and create mass media to increase community demand for smoke-free facilities. As of this time, 30 child care centers are known to have smoke-free policies.

The tobacco retailer education program, Tobacco Retailer Underage Sales Training, reached 1,466 retailers during the 2017 calendar year and 596 retailers between January and March, 2018. Ads continue to run in the Midwest Beverage Journal and the Kentucky Grocer's Association magazine promoting the free online training.

Quit Now KY has a pregnancy/postpartum protocol that is available to all KY residents 15 years of age or older who are currently pregnant. This protocol includes a designated female coach assigned to each pregnant woman. During pregnancy each woman receives $5 per completed call for up to $25 and during postpartum each woman receives $10 per completed call up to $40.

The Tobacco Prevention and Cessation Program has also been working with Medicaid MCOs and the Quality Improvement Branch on a Prenatal Smoking Performance Improvement Plan (PIP) through an enhanced Obstetric

Care Management model. The suggested PIP template suggests the following areas:

- 1a) Develop a care management program to enhance reach to target the smoking subpopulation for smoking cessation outreach and follow-up
- 1b) Tailor care coordination with care management to susceptible subpopulations as indicated by risk factors identified in focused study
- 3a) Use Health Risk Assessments (HRAs) and develop new methods to identify smokers
- 3b) Improve HRA response rates by collaborating with providers to complete HRAs for new members
- 3c) Develop a MCO smoker registry to identify smokers for outreach, engagement in cessation counseling, and referral to the Kentucky quitline
- 4a) Work to track members who contact the quitline, receive services, and monitor quit status

To date, the collaborative has worked with Audrey Darville, APRN, CTTS (Certified Tobacco Treatment Specialist) to provide tobacco cessation training for MCO care managers. The MCOs are working on developing a smoking registry. Those women who are identified as pregnant and smokers are referred to OB care management, where they are educated about smoking risks and encouraged to utilize quitline services and Safelink/Vioxiva text messaging. Upon delivery, postpartum nicotine replacement therapy (NRT) is initiated for smokers, who had not quit or relapsed, to reduce exposure of secondhand smoke to the newborns.

A plan, provider, and member barrier analysis was conducted with the following results.
Plans:

- Do not systematically know if a member is pregnant and/or a smoker
- Do not know how many pregnant smokers are enrolled in care management
- Have inadequate staffing to support care management/care coordination for pregnant members for smoking cessation
- Care management team does not advise/assess member after enrollment if member declines help for cessation
- Unable to reach members to initiate postpartum NRT and/or determine quit status
- Erroneous member contact information

Providers:

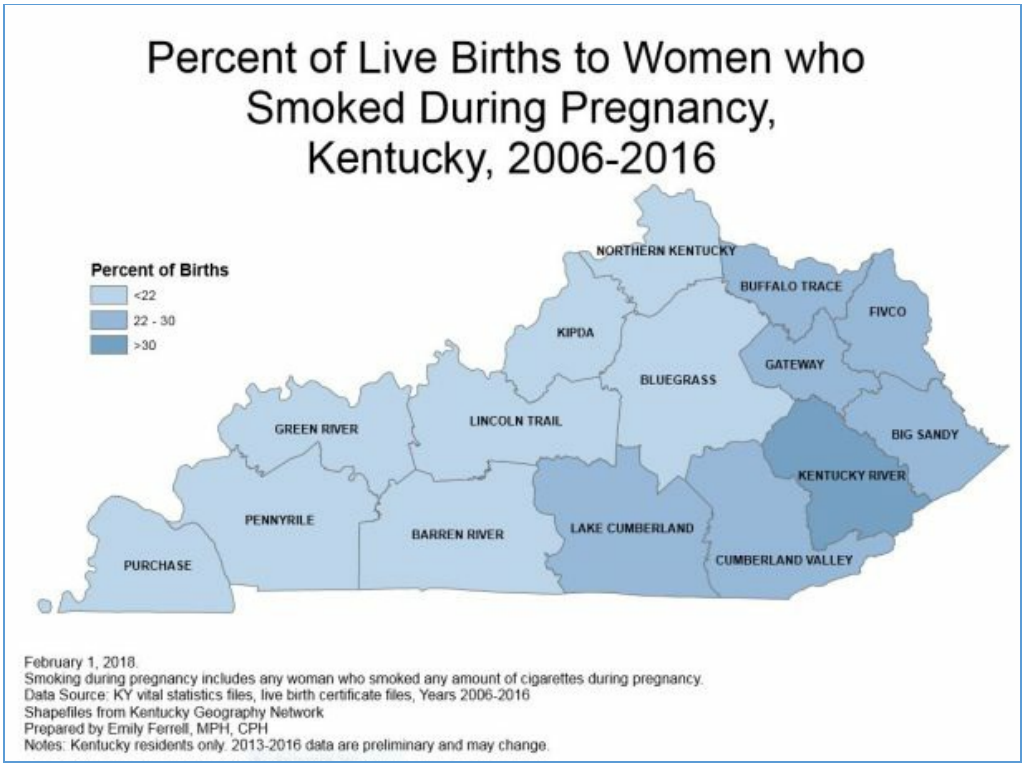
- Lack of provider involvement in 5A's (Ask, Advise, Assess, Assist, and Arrange)
- Lack of provider knowledge about MCO smoking cessation benefits and quitline resources

Members:

- Lack of knowledge about MCO smoking cessation benefits and quitline resources
- Lack of knowledge about tobacco risks to unborn child, need for prenatal care and screening
- Lack of willingness/readiness to quit
- Lack of family support
- Privacy concerns to quitline referral

Tobacco Use Accomplishments/Progress:

In the 2017 KY legislature, a bill entitled Insurance Coverage for Tobacco Screening and Cessation passed and took effect on June 29, 2017. This bill made a uniform mandate of resources suggested by the U.S. Preventive Services Task Force. Smoking and tobacco cessation counseling group education programs and all seven FDA-approved cessation medications will be covered by most insurance policies. MCH will continue support of this new law and increasing smoking cessation among pregnant women.



Based on federally available data, KY is making slow, but steady progress in reducing the percentage of women who smoke during pregnancy. In 2016, 18.6% of pregnant women smoked during pregnancy compared to 26.1% in 2006. The KFAP Smoking Use During Pregnancy work group has developed materials including talking points, frequently asked questions (FAQ's), and a resource list to promote consistency in messages among the partners. In addition, all pregnant women enrolled in the Public Health Prenatal Program are to be assessed at each prenatal visit about the use of alcohol, tobacco, secondhand smoke exposure, and other drug use. Staff is to provide appropriate education and referrals such as to Quit Now KY.

The MCH Evidence Informed Strategy for smoking cessation among pregnant women, GIFTS, is discussed in the Women/Maternal Health Annual Report.

Tobacco Use Challenges:

While KY has made some progress in decreasing the number of women who smoke during pregnancy, the rates of smoking during pregnancy in KY remain almost double that of the nation. KY is consistently one of the worst states on this indicator. Initial efforts to encourage participation of pregnant smokers in Quit Now KY have not been successful. In 2017, there were a total of 7 women enrolled in the pregnancy protocol and no women enrolled in the post-partum protocol. Quit Now KY services are underutilized by pregnant women in KY. New strategies to engage this population will be identified and tested in the upcoming year. While the NPM addressing this population for 2018 will not be carried forward, the efforts to improve this outcome will continue as part of previously stated strategies to improve pregnancy outcomes.

Oral Health

Fluoride varnish and the application of dental sealants are preventive health strategies used to meet the needs of our youngest Kentuckians who live in pockets of the state without pediatric dentists or where providers do not accept Medicaid or treat uninsured populations. MCH continues to use state general fund allocations to fund sealants that are placed by dentists in the state through contracts with their LHDs or through LHD-established hygiene programs. The target audience for this outreach is children that do not have a payment source for sealants and are under 300% FPL.

Fluoride Varnish Program:

KOHP supports LHDs for the provision of fluoride varnishes to their clinic- and school-based patients through trained

public health nurses. Fluoride varnishes are provided by public health nurses for children from birth through the fifth grade. Varnishes were initially provided only to children through the age of five years. The age group for receipt of this service was extended to fifth grade based on the “Smiling Schools” project outcomes (see accomplishments). Up-to-date training in dental development and disease prevention is provided to public health nurses throughout the state. As a leading oral health preventive service, the varnish training program continues to encourage interested physicians, including pediatricians, to provide fluoride varnish treatments for very young children in their clinical settings, which are reimbursable through Medicaid. An MCH Evidence Informed Strategy, Fluoride Varnish, was available in state fiscal year 2018. A total of 22 LHDs chose this package which provides Title V funding for sites to perform outreach activities and set up sites, provide training, and complete quality assurance activities with a focus on the varnish service. To date this package has reached 18,541 community members.

Oral Health Screenings for School Entry:

The KY Legislature has acknowledged the importance of oral health in children by passing a requirement for all children to have an oral health screening at school entry (kindergarten or first grade). The MCH State Dental Director collaborated with KDE to develop the form, and has trained LHD and school nurses on completion of the screening. The KDE recently adopted the *Smiles for Life Curriculum* as an appropriate training for school-employed nurses to perform oral screenings toward this school-ready requirement.

Public Health Dental Hygiene Program:

In order to provide more access to preventive dental services, especially in rural and dentally underserved areas, the legislature established a new licensure category for public health dental hygienists in 2010. These hygienists can provide preventive dental services to children who are apparently healthy but may be at high risk for dental disease, operating under narrow protocols rather than the direct oversight of a dentist. Currently, public health hygiene teams exist in 10 LHDs to provide primary preventive services to the underserved. Although they provide a comprehensive range of primary preventive services, our clinical focus is on the placement of sealants on erupting molars (previous MCH NPM). However, the most important service provided to this at-risk population is the referral of these patients to a permanent dental home in their own communities. Since program inception, these programs have a 92% success rate of getting comprehensive dental treatment to these high-risk patients.

One of the impacts of the establishment of public health dental hygiene teams can be seen through the annual report of the Centers for Medicare and Medicaid outlining clinical experience of Medicaid children relative to dental services (CMS 416 Report). Based on the FY2016 data, our programs are providing preventive care for 4% of all of the preventive dental care in the state (we serve 34 of 120 counties with this program.) While the percentage of enrolled children receiving a preventive dental service was 44.2% in FY2015, it slightly increased to 44.7% for FY2016. While this appears to be ‘flat’ growth, this data set indicates that the public health dental hygiene programs doubled their ‘footprint’ and were responsible for over 4.2% of services between these two federal years. Moreover, the number of children receiving any dental or oral health service increased by 18,453 between FY2015 and FY2016. These data indicate that our programs provided over 58% of this care. Secondary to a loss of an electronic medical record mid-year, data from the past year is unavailable.

Oral Health Outreach:

Through a contract, KOHP supports and partially funds preventive and restorative outreach services of the UK College of Dentistry to underserved children through their mobile dental vans and remote clinics/teaching sites. The application of dental varnish, the dental sealants, and the placement of fillings impact the Performance Measure related to the number of preventive dental visits and the outcome measure related to the percentage of children ages 1-6 with untreated dental decay.

Oral Health Accomplishments/Progress:

KOHP worked diligently to retain community water fluoridation and updated the applicable regulations that reflect the new HHS/CDC Recommendations released in April, 2015. The new state regulations reduce the optimal concentration of fluoride in drinking water by 30%. Compliance to this new level by water operators was quickly achieved.

In the recent past, the KOHP developed a school-based fluoride varnish program, “Smiling Schools,” for elementary children in 42 of KYs highest need counties. This three-year project had significant results as LHD nurses provided two varnishes for over 22,000 students for each of the years of the project. The most impactful of the evaluation

results was the finding that active decay had consistently reduced by 20% in this population over the course of the project. Because of this finding, our MCH Title V plan expanded to support the provision of fluoride varnish to elementary students through the fifth grade. For the state fiscal year ending June 2018, health department based programs provided over 28,000 fluoride varnishes to at-risk patients in their clinics, school based programs, and other outreach activities.

The 2014-16 biennial budget provided new funding for the state oral health program. The continuation of this funding in the subsequent biennium has enabled the KOHP to establish and retain four new positions dedicated to the improvement of the state's oral health status, rather than relying on grant funding.

Changes in KY law allow Public Health Dental Hygienists in LHDs to provide preventive dental services. These professionals' target audience are those children that do not have a dental home. Through their outreach and referral services, over 90% of the children in need have begun receiving care by a dentist.

Established community oral health coalitions continue to provide solutions to barriers related to the lack of access to dental services for the MCH targeted populations. As expected, sustainability of the coalition relies on training and implementing strategies to increase oral health knowledge and advocacy skills to create social change about oral health. These coalitions were funded through grants from the federal HRSA and the quasi-federal Appalachian Regional Commission (ARC). Although the funding has ended for these coalitions, many of them (about 15) still carry on with goals to improve the dental health status of their community, and most of the coalitions target children's access to care. Many of the original coalitions have been incorporated into local "healthy community" coalition initiatives and remain one of the foci of their respective groups. The statewide Kentucky Oral Health Coalition (KOHC) continues its mission of improving dental health status and has recently partnered with Delta Dental for an oral health survey of third and fifth graders. This partnership continues with funding of regional efforts targeted toward oral health (Summer 2017). While these are not formally coalitions, they are groups focused on change in their home counties.

Oral Health Challenges:

One challenge faced by KOHP is that KY families may not see the value of good oral health for their children. A recent meeting of stakeholders made strong statements that oral health literacy must improve in order for good decisions on care (and policy) to take place. Many barriers remain including accessing a dentist in a patient's geographic area. The burden for families to travel distances because of lack of transportation or cost is another issue, as well as long wait times for scheduling and office visits.

Participation statistics from the screening requirement points out another challenge to Kentucky. A relatively new Kentucky law requires that a child entering into a public school system (either kindergarten or first grade) have a dental screening to identify those with dental needs. Although most school systems participate in collecting and reporting screening activities, still only a little more than half of Kentucky's children have this screening reported in the database of the Kentucky Department of Education (KDE). The improvement of participation of this requirement is one of the goals of the 2017 Kentucky Strategic Plan for Oral Health. The KDE, KOHP, and KOHC will collaborate on this initiative.

Another outcome of the stakeholders meeting was the recognition that a strong data collection system is necessary to provide the foundation for effective policy development. The work to update the oral health plan quantifies other challenges to oral health. Among the topics the new plan will address is the expansion of the public health dental hygienists (in geography and scope of practice), improvement in oral health literacy, and dentist distribution to meet population needs.

Last year, Kentucky's annual objective for *NPM #13A (Percent of women who had a dental visit during pregnancy)* was set at 33%, but based on Medicaid data was 11%. In general, Kentucky dentists do not see or treat pregnant women, and obstetricians do not encourage dental care during pregnancy. In strategic plan development meetings, the inclusion of dental care and treatment was recognized as an important service to pregnant women. In the coming year, Kentucky will be addressing the decline in the percentage of prenatal patients having a dental visit. Kentucky will further analyze these data to identify reasons for this disparity. KOHP will be engaging other public health programs that target pregnant women to improve on this indicator. A pilot project to have the public health dental hygienist provide appropriate preventive care to Medicaid patients, as part of their comprehensive prenatal care, will demonstrate the impact of this care on birth outcomes. As this program becomes more impactful, it will be expanded to other parts of the state to further improve on this measure, but more importantly, to improve the health of the mother thus increasing their chances for a healthy, full term infant.

Insurance Coverage

Adequate insurance coverage is a priority issue for Kentucky and is associated with a State Performance Measure (#5). According to the 2016 National Survey of Children's Health (NSCH), 92.5% of Kentucky's children were covered by health insurance as compared to 94% nationwide. CCSHCN conducts a survey and found that 97% of KY CYSHCN report having health insurance coverage. The NSCH reports that, in Kentucky, 80.5% indicate their insurance is adequate; as compared to 75.2% nationally. CCSHCN 's survey asks how often insurance covers needed services; and 78% indicated always. Only 1.6% reported that they are not able to see the provider that their child needs as compared to 3.6% nationally and 2% of KY CYSHCN.

Regardless of public policy shifts at both the federal and state level, over which CCSHCN and MCH exerts no control, staff will continue to assist as many families as possible to overcome barriers to adequate insurance and access to care.

Public policies that included the ACA, Kentucky's Medicaid expansion (January 2014), and development of a state-based Health Benefits Exchange (2013-2016) correlated with increasing numbers of those insured. During this reporting period the Federal Exchange is being utilized. Clear improvements were seen in Kentuckians covered since the pre-ACA years. The rate of uninsured adults in Kentucky decreased by half between 2013 (25%) and 2014 (12%), and the percentage of uninsured adults has remained stable since then. (Kentucky Health Issues Poll, funded by the Foundation for a Healthy Kentucky and Interact for Health). Other estimates indicate that Kentucky's percentage of children ages 0-18 uninsured decreased from 6% in 2013 to 4% in 2015. (Commonwealth Fund Scorecard on State Health System Performance, 2017 Edition). The 2016 Kentucky Health Issues Poll further found that 2 in 10 Kentucky adults reported that a person in their household delayed or missed getting needed medical care due to the cost, about the same as in the past two years. This is an improvement over 2009, when about 3 in 10 Kentuckians found cost to be a barrier.

Since the change of gubernatorial administration in December of 2015, Kentucky submitted a Medicaid 1115 waiver application (which was approved) and transitioned to the federal health benefits exchange. Regardless of the system in place or that which may be planned, CCSHCN remains committed to ensuring that families of CYSHCN remain educated about coverage options that meet their needs and that agency partners with Medicaid and the managed care organizations (MCOs) to represent the needs of CYSHCN. CCSHCN and F2F staff who were previously navigators with the previous state-based exchange ("KYNECT") became certified application counselors with the federal exchange (HealthCare.gov). Although health insurance is a politicized issue, CCSHCN takes a nonpartisan and practical approach in working with families to ensure health care coverage that is appropriate, affordable, and sufficient. Ultimately, what is sought is better health outcomes for children and youth; without insurance that includes accessible providers, CYSHCN are less likely to achieve better health. Within the past year, 9 agency-affiliated application counselors/navigators assisted over 749 people during the reporting period. Staff work on a daily basis to help families understand different options offered by insurance, Medicaid waivers, Hart Supported Living, and other options available to families to obtain adequate health financing to meet their needs. Staff and Support Parents talk with families about prescription assistance and different ways to assist in getting medications and are always looking for programs to assist families with medical needs. Staff refers families to programs that may be free in their area or refer them to providers that accept Medicaid as needed. CCSHCN's own family participation scale for direct clinical services is based on CHIP income levels (213-218% of FPL) to allow for a sliding fee scale based on household size and income. Clinic participation fees remain affordable for families and are commensurate with a family's calculated pay category.

The agency continues to collaborate with Patient Services Inc. for an insurance case management and premium assistance program which currently covers 22 individuals with high cost conditions, such as Hemophilia and Cystic Fibrosis, and provides an estimated cost avoidance of up to $1.2 million per quarter.

As in previous reporting periods, the agency continues to partner with Medicaid on various initiatives. In a previous year, CCSHCN worked with DMS to negotiate enhanced rates for case management and to enable provision of CCSHCN care for behavioral health codes related to ASD, established a partnership with an MCO, and obtained a waiver for prior authorization for durable medical equipment including hearing aids and ear molds and for speech, physical, and occupational therapy for enrolled CYSHCN. Expansion of the CCSHCN Hearing Aid Program to all eleven district offices has resulted in enhanced hearing aid service delivery and improved affordability for families of children with permanent hearing loss. In this program, children are followed by community otolaryngologists and referred directly to CCSHCN audiology offices for audiology and hearing aid-related services. The program has been embraced by families and providers statewide and has resulted in an expansion of audiology services

provided at all district offices.

CCSHCN convened a team including DMS and the Medicaid MCOs toward the goal of innovation in systems of care for children with complex medical conditions, who see disproportionate medical costs and expenditures. Kentucky is participating in the Children with Medical Complexities CoIIN. Kentucky's team includes the medical director of DMS. The Medicaid cost settlement agreement in place for care coordination services continues. In a prior reporting period, CCSHCN worked with the MCO dental administrator to negotiate special rates for Cleft Lip & Palate patients in need of complex and phased orthodontia treatment, which attracted more providers and resulted in increased access to care. Prior to negotiation, children were not covered for these services, and care was delayed.

Cross-Cutting/Systems Building - Application Year

The cross-cutting domain allowed KY to focus on critical issues that affect individuals across the entire course of their life. Further, the concept of life course recognizes that there are critical periods from before the time a child is born and throughout the entire life span that influences the health of individuals. The clinical and preventive services described in this update will be moved to corresponding domains for the upcoming year. The topics that are of vital importance in KY for the cross-cutting domain are substance abuse, including tobacco use, oral health, and health insurance coverage. The plans for these are included below.

Substance Abuse

Substance abuse is having a devastating effect across all MCH populations in KY as evidenced in the 2015 needs assessment process and quantitative data analysis. It is an issue in every community in KY, and the consequences of this epidemic have been particularly devastating to pregnant women and their infants. These consequences include pregnancy complications, increased risks of relapse, and overdose deaths in women. The effects on children include neonatal abstinence syndrome (NAS), infant death from co-sleeping with an impaired caregiver, and deaths from pediatric abusive head trauma (PAHT).

Substance Abuse Plan for the Coming Year:

In the upcoming year, KY will focus efforts on *SPM #1: Reduce by 5% the rate of NAS among KY resident live births*. This measure will be moved to the Perinatal/Infant Health Domain. Planned strategies include ongoing surveillance activities, regional trainings for a plan of safe care, pilot programming as previously described, and continued collaborative efforts with state agencies, health care providers, and stakeholders.

KY will continue NAS surveillance efforts within MCH. Quality assurance efforts will be ongoing to improve data quality. A third report is planned for fall 2018 that will cover NAS reporting for the calendar year 2017. This report will cover the demographic characteristics of infants with NAS including geographical distribution, substances to which these infants are commonly exposed, and information about the timing of symptom onset and need for medication.

MCH will continue to host regional trainings on the plan of safe care for infants with NAS. These trainings provide an opportunity for birthing hospitals, LHDs, Department for Community-Based Services (DCBS), and Community Mental Health Center staff to learn about the plan of safe care. Dialogue during the training builds relationships between these entities which is critical to assure the safety of these infants.

KY will continue the numerous collaborations on substance abuse including the Cabinet Opioid Workgroup, Medication Assisted Treatment grant for pregnant and postpartum women, and the Plan of Safe Care Workgroup.

Tobacco Use

Tobacco use remains a significant public health problem in KY with 26.0% of adults reporting tobacco use according to the 2015 KY BRFSS compared to 17.5% nationally. Due to the widespread health implications from tobacco use, this is a priority goal for the KDPH.

Tobacco Use Plan for the Coming Year:

In the upcoming year, MCH plans to focus activities on *NPM #14: A) Percent of women who smoked during pregnancy* and *B) Percent of children who live in households where someone smokes*. In order to address this performance measure, KY will focus on three primary strategies: smoke-free communities, 100% Tobacco Free Schools (TFS), and increasing the availability of smoking cessation services at the local level.

There are currently 26 KY communities with comprehensive smoke-free ordinances and 19 partial smoke-free local ordinances (University of Kentucky Kentucky Center for Smoke-free Policy, 2017a). As of April 1, 2017, 32.7% of Kentuckians are protected by comprehensive smoke-free workplace laws (University of Kentucky Kentucky Center for Smoke-free Policy, 2017b). MCH will continue to collaborate with partners to promote comprehensive ordinances in more KY counties.

The 100% TFS policies prohibit tobacco use, including vapor products and alternative nicotine products, by staff, students, and visitors twenty-four hours a day, seven days a week, inside Board-owned buildings or vehicles, on school owned property, and during school-sponsored trips and activities. Tobacco-free school policies reduce exposure to secondhand smoke and provide opportunities for adults to role model smoke-free lifestyles for youth. Schools with strongly enforced TFS policies show reduced youth smoking. In the upcoming year, MCH will support

continued implementation of TFS, and will continue to promote the MCH Evidence Informed Strategy to support this work.

KY will continue to promote incorporation of smoking cessation counseling for pregnant women. The MCH Evidence Informed Strategy, Giving Infants and Families Tobacco-free Starts (GIFTS), will continue in the upcoming year. KY will also continue partnerships with other organizations, such as the MOD, that are promoting smoking cessation at the local community level and providing training to health care providers to increase their efficacy in providing smoking cessation counseling. MCH will also partner with HANDS and WIC to promote quitline referrals for pregnant women. These programs are organizationally located within MCH and have committed to strengthening their referral process for women who smoke during pregnancy.

Oral Health

Oral health in KY ranks very poorly and is a subject of concern for all ages in the cross-cutting health population domain. According to the KY Department for Medicaid Services, the proportion of KY children with Medicaid who accessed at least one dental service in 2016 was 41% under the age of 6, 52% under the age of 15, and 51% under the age of 18 (KY Medicaid Data Warehouse; CMS 416 Report: Federal Year 2016). The Kentucky Oral Health Program (KOHP) is concerned with the oral status of all Kentuckians and houses programs that target that goal. The Community Fluoridation Program works with municipal and private water systems to assure compliance with KY's statewide law that requires fluoridation at optimal levels to reduce decay rates in the state. KY has the highest rate of municipal system customers having optimally fluoridated water than any other state in the country.

Oral Health Plan for the Coming Year:

In the upcoming year, the KOHP will focus on *NPM #13: A) Percent of women who had a dental visit during pregnancy* and *B) Percent of children aged 1-17 who had a preventive dental visit in the past year*. The KOHP will implement strategies to increase LHD providers that complete successful varnish applications, promote public health dental hygiene programs, and establish a surveillance system to monitor the oral health needs of children in KY.

The KOHP will continue to provide training in the upcoming year to LHD nurses on successful varnish application. Efforts will continue to support our existing public health dental hygiene programs and their establishment, in areas interested, in this focus of public health. This program serves the MCH targeted populations, and recent figures show that these programs are fiscally sustainable solely through Medicaid reimbursement.

To adequately address the oral health needs of children in KY, it is critical that an ongoing surveillance system be developed. KY had not completed a comprehensive survey since 2001. Late in 2016, the Delta Dental Foundation released their surveillance finding of caries and dental needs among KY's third and sixth graders. Although this study is important, the KOHP continues to work on establishing ongoing surveillance of children's oral health status with adequate funding as an internal program while still engaging the two state dental schools and established public health dental hygienists. Current data is critical for the development of effective policies and programs to meet the oral health needs of KY children.

The KOHP is designing and implementing an evaluation tool for varnish services in KY's LHDs. This tool will be valuable in improving our services through identification of gaps that will result in more children being served. Kentucky will continue to support varnishes for the target age groups with a small portion of the Title V funding.

Through non-Title V funding, a few health departments are implementing community-based varnish services in settings that traditionally do not offer oral health services such as daycare centers and schools. The children and parents receive appropriate educational materials with each varnish.

Although KY's focus has been on the NPM aspect of increasing dental visits to children between 1 and 17, KY plans to become more active in addressing the need of dental visits for prenatal women in KY. Using a geographic area that houses a public health dental hygiene team, we plan to pilot a program that offers preventive care to prenatal women with a focus on moving them on to a local dentist's office for needed treatment (such as restorative care and extractions). KY plans to use the MCHB document, "Oral Health Care During Pregnancy: A National Consensus Statement," as guidance for appropriate and effective dental intervention during the perinatal period.

The KOHP is revised KY's strategic plan for oral health. Many of the goals in this plan will address and improve the oral health of the Title V grant's targeted population, including the expansion of the role of public health dental hygienists for preventive dental services. The strategic plan is currently being distributed to community partners and

agencies. A follow-up review and update is planned for September 2018.

Insurance

Insurance Plan for the Coming Year:

MCH and CCSHCN remain committed to enrolling families and providing one on one education or application assistance in the upcoming year. Especially in light of uncertainty with regard to KHW, front-line staff and support parents will remain trusted resources with regard to the Medicaid waiver. CCSHCN Parent Consultants will use their knowledge to assist families and educate stakeholders. Please refer to the Health Reform section for a more in-depth discussion of KY's insurance landscape and Title V efforts. With the federal ruling on June 30, 2018, it is understood KY MCH population may need additional supports from CCSHCN and MCH with navigation of available resources in all areas of medical, dental and vision coverage.

III.F. Public Input

Completion of the 2015 Needs Assessment in KY provided opportunity for MCH to solicit information from the public. Since the formal needs assessment, KY has continued to solicit information from the public and stakeholders at a programmatic level. Consumers continue to have the greatest insight regarding the needs of the MCH population. In 2017, the KY Oral Health Program (KOHP) conducted two meetings of stakeholders resulting in a new strategic oral health plan. Needs identified from this included dental care for children and women of child bearing age, access to dental care, and health literacy as it relates to oral health. In March 2017, a meeting was convened to review an update to the State Health Assessment (SHA) and begin work on creating a State Health Improvement Plan for KY. The SHA data is undergoing an annual review. Data contained in the SHA includes multiple MCH topics related to infant mortality, NAS, ACES, breastfeeding, obesity, activity, and oral health.

Stakeholder feedback was used for refinement of KY priorities. Following up on the 2014 Stakeholder meeting, a diverse group of 164 stakeholders completed a survey to rank the importance of potential priorities by population domain. Over 80 individuals provided input on strengths, gaps, and strategies for selected topics. MCH and CCSHCN convened a meeting, with over 80 participants from diverse backgrounds, and 77 indicated interest in continued participation. This meeting was instrumental for refinement of strategies included in the 5-Year Action Plan.

In the previous year, CCSHCN received a comment from a staff member that the CYSHCN portion of the needs assessment document (excerpted) was too complicated in its language, so an “at-a-glance” summary with more images and simplified language was prepared to “get to the point” quicker. A document was created that featured 10 Facts about MCH (attached) as a springboard for further conversation. This document has been adopted and continues to be updated and utilized. CCSHCN attempted to strike a balance between readability for families with busy lives while still containing enough substance to summarize the block grant partnership activities, system of care, and state priorities accurately. During the previous reporting period, an effort was made to use focused 1-page strategy sheets for the CYSHCN priorities in order to educate stakeholders. During presentations, more emphasis was placed on the priorities and plans than the process itself.

No activities were completed via public hearings, as historically, these have not been successful for gaining public input. Activities to solicit public input were conducted via web posting, advisory council review, social media, electronic distribution lists, and outreach to specific stakeholders. These activities are summarized below along with plans for continued input following submission of the application and annual report.

Web Posting

A comment period followed after the CYSHCN MCH Fact Sheet appeared on the CCSHCN staff intranet and the CCSHCN website and Facebook page. Comments were invited via phone, email, and Facebook. MCH posts the entire annual report and application on its website annually. In addition, MCH uses the website to solicit public input on priority topics and activities throughout the year.

Advisory Council Review

As advisory councils meet, the goals for MCH are reviewed specific to that program. Annually, the Child Fatality and Injury Prevention advisory team reviews the annual data of child fatality, active review, teams, and trends for KY. This team then drafts a survey that is sent to community stakeholders, LHDs, and others for input on preventive goals for the upcoming year. These goals are published in the annual CFR report, and programming for MCH packages are aligned to address the goals. The KOHP held two stakeholder meetings, with over 120 in attendance, to review the previous strategic plan, and it updated the plan to address the oral health needs for KY to include need to educate, refer, and increase providers in areas of maldistribution; increase surveillance; and add silver diamine fluoride as a treatment option and continuation of the fluoridation programs’ success. KPA partnered with MCH to provide regional trainings and discussions on how to develop a plan of safe care to address ongoing need to for babies with NAS to be followed through 2 years of life. From these trainings, LHDs, hospital staff, social workers, and more are collaborating to design programming for wrap-around services and resources for the infant and mother.

CCSHCN staff presented overviews of the MCH priorities and a preview of the application/report to the regional CCSHCN clinical managers and administrative branch managers. Information was shared with the Youth Advisory Council at the beginning of the process. Input, questions, and active participation was invited. It is the agency’s goal to increase families’ comfort level with this process so they may ask questions and provide feedback.

Social Media

The safe sleep website and Facebook is monitored by the child fatality review/prevention nurse. Emails to the website have included comments of need for updated information and requests for material. The Facebook page has had comments/suggestions for safe sleep, comments from parent advocates, and solicitation of more information. One strong advocate has reached out to the CFR program requesting information on ways she can personally assist with messaging in her community. More information on social media will be detailed later in the report.

Other Use of Media

MCH uses electronic distribution lists as a mechanism to distribute information and obtain information from stakeholders for specific issues, such as the stakeholder survey for the needs assessment. MCH continues to use distribution lists and stakeholder distributions to promote evidence informed strategies and best practices that may improve the services and resources that are available to all MCH consumers.

Outreach to Specific Stakeholders

In late May 2016, several agencies convened the Kentucky Summit on Access to Care for Children and Youth with Special Health Care Needs, at which the overall goal was to develop a shared vision with a broad group of stakeholders regarding access to care for children and youth with special health care needs in KY. Nearly 90 individuals attended, representing providers (universities, health departments and medical schools), insurers, family members, state agency representatives, and other service organizations and advocates. The meeting included several speakers on CYSHCN issues, including F2F, HRSA, Title V, Medicaid, Behavioral Health, and Kentucky Telecare. KY's Governor addressed the gathering (formally proclaiming the day CYSHCN Awareness Day in Kentucky), and a moderated legislative panel was held in the afternoon with Representatives and Senators sitting on the Health and Welfare Committees. The meeting helped to build awareness of the programs available for children and youth with special health care needs, allowed the state to coordinate work and prevent duplication of effort, shared knowledge about the challenges CYSHCN face, and attempted to drive progress in addressing barriers. Since the summit, CCSHCN invites community stakeholders to be a part of teams that affect the care of CYSHCN in KY. The Data Advisory Team and the Complex Medical Care Team are two examples.

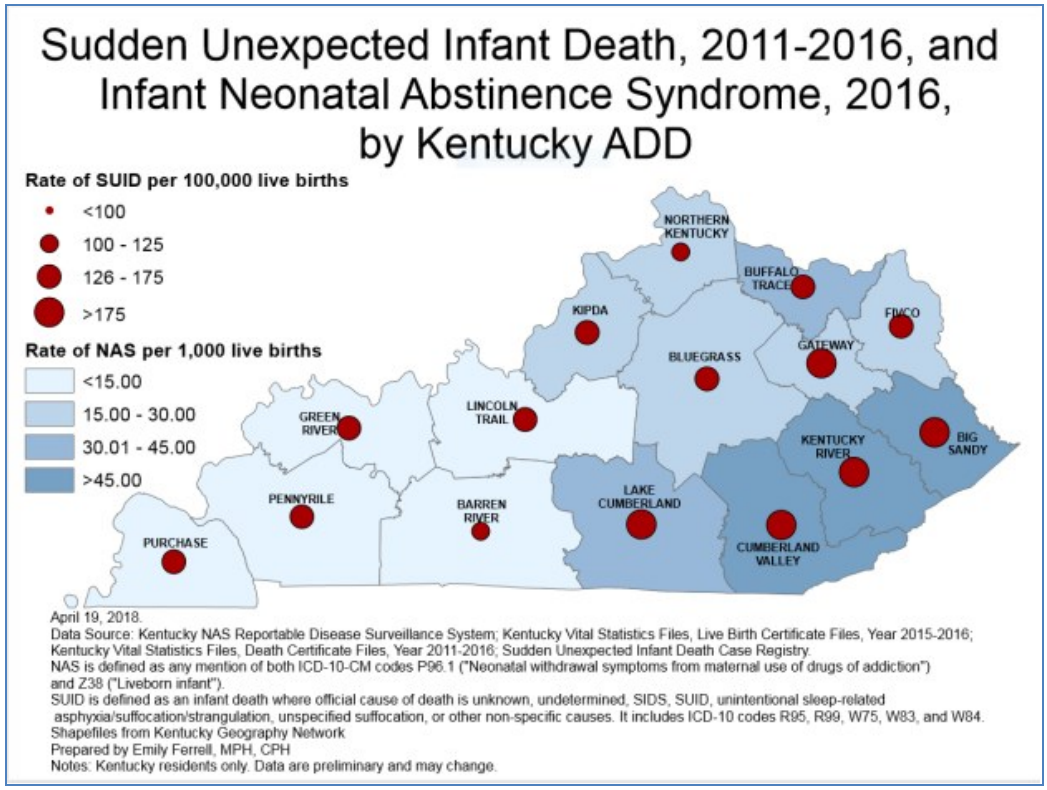
CCSHCN is a user of surveys. Randomly-chosen visitors to clinics are requested to voluntarily and anonymously complete a survey. Over 359 surveys were received during the reporting period with regard to the direct services experience as well as with regard to aspects of the system of care available in communities. Over 1,100 surveys have been completed since December 2016. As is mentioned elsewhere in this report, CCSHCN is working to expand data gathering to non-enrolled CYSHCN. All families may reach CCSHCN at any time via the website, through social media, or on the "800" hotline phone number. CCSHCN also maintains a listing of individuals who have expressed interest in hearing more about the agency's regulatory filings through state government's "Reg Watch" email list. The CCSHCN alerts the members of this distribution list when administrative regulations are in the process of promulgation and solicits comments during the public input period.

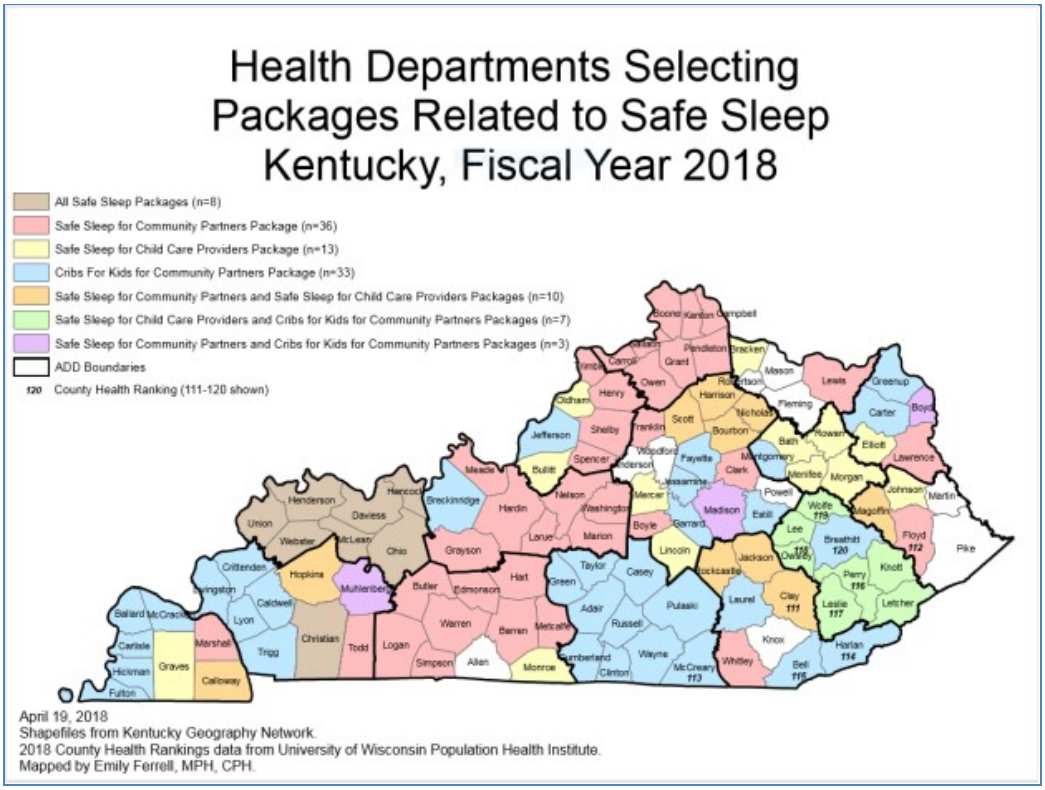
MCH continues outreach to LHDs and stakeholders through use of distribution lists and various collaborative meetings, and plans to host a statewide MCH meeting in November 2018. Collaborative regional meetings have been held concerning plan of safe care, CFR, suicide prevention, and oral health. The resulting feedback demonstrated local staff are eager for more interaction with state staff and other MCH providers in their areas to find solutions for improving outcomes. In addition, they desire to have more data regarding MCH outcomes regarding infant mortality, child fatality, NAS, and obesity to help with discussions with community stakeholders, boards of health and community leaders.

III.G. Technical Assistance

In order to better understand geographic disparities in infant mortality, a spatial analysis including detailed maps of KY's infant deaths would be beneficial. Assistance in conducting the spatial analysis and various mapping techniques would be necessary. This would be useful for better understanding of a number of MCH indicators. In the past year, we have obtained the software needed to complete this work. Staff epidemiologists have begun working with the GIS mapping. GIS mapping has created a means for multiple variables to be reviewed for a specific area. It is anticipated, as MCH continues to work with the system, GIS technical training could be beneficial. One example of how it is currently being used is shown below.

To better understand the number of SUID deaths as it relates to NAS and the geographic location of safe sleep Title V MCH packages, the maps below were created.





MCH sought technical assistance from the CDC to improve the maternal mortality review process. Small steps to expand the scope of the reviews were taken in the past year. It is anticipated the CDC technical assistance will continue as the current MMR process expands to develop strategies to improve the review process and to move the program from data collection to prevention strategies.

In the previous year, with reducing funds available, LHDs, as payor of last resort, have been challenged with paying for prenatal services for non-Medicaid eligible clients. Technical assistance, for a review of the current program to transition from direct services by LHDs for the prenatal population to ensuring linkage of care with community resources and transition of programming to address population health, could improve current programming needs and reduce the financial burden on the LHD.

To improve breastfeeding engagement and duration promotion activities in KY, MCH Nutrition Services branch plans to seek technical assistance from the Coffective™ vendor. This vendor will conduct face-to-face meetings with birthing facility representatives, HANDS representatives, WIC staff, regional breastfeeding coordinators, LHD MCH coordinators, and other providers to conduct a needs assessment specific to breastfeeding engagement successes and barriers. The survey will address current practice and capacity for future promotions/endeavors. Once these meetings occur the needs assessment will extend into the hospitals with front line staff, with education modules designed to address the KY birthing facility's needs. It is anticipated this process of assessment, education, re-education, and follow-up surveys will span 2 years.

CCSHCN areas of needed technical assistance relate to the implementation of specific action steps regarding the two CYSHCN-specific State Performance Measures. In past years, CCSHCN has received technical assistance from the University of Alabama at Birmingham and the MCH Workforce Development Center. CCSHCN relies on expertise from National Centers and AMCHP, as well as other TA providers, and will not hesitate to take advantage of any further opportunities that become available or are recommended. CCSHCN has had informal discussions with AMCHP's Epidemiology Support team regarding infographics and data visualization projects and capacity. A GSEP student placement concentrating on furthering data visualization and mapping occurred in the summer of 2017.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - IV. Title V - Medicaid IAA_MOU.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - MCH Attachments.pdf

Supporting Document #02 - Curriculum Vitae of Shellie May.pdf

Supporting Document #03 - CYSHCN Supporting Documents.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - VI. Organizational Chart.pdf

VII. Appendix

This page is intentionally left blank.

Form 2
MCH Budget/Expenditure Details

State: Kentucky

	FY19 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 10,963,089	
A. Preventive and Primary Care for Children	$ 4,976,163	(45.3%)
B. Children with Special Health Care Needs	$ 3,826,117	(34.8%)
C. Title V Administrative Costs	$ 473,100	(4.4%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 9,275,380	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 28,704,200	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 0	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 27,161,800	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 55,866,000	
A. Your State's FY 1989 Maintenance of Effort Amount $ 22,552,700		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 66,829,089	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.		
10. OTHER FEDERAL FUNDS(Subtotal of all funds under item 9)	$ 122,983,288	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 189,812,377	

OTHER FEDERAL FUNDS	FY19 Application Budgeted
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Sudden Unexpected Infant Death (SUID) Case Registry Program	$ 76,700
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPPs)	$ 386,146
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 208,312
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,076,041
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 107,407,609
US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA)	$ 6,057,324
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects and Developmental Disabilities	$ 210,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > KY Healthy Communities, Tobacco Control, Diabetes Prevention and Control	$ 1,127,751
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Increasing QUIT NOW KY Reach & Sustainability thru Media Strategies, Stakeholder	$ 333,405

	FY17 Annual Report Budgeted		FY17 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 11,034,716		$ 11,256,327	
A. Preventive and Primary Care for Children	$ 6,638,900	(60.2%)	$ 5,068,731	(45%)
B. Children with Special Health Care Needs	$ 3,851,116	(34.9%)	$ 4,119,358	(36.5%)
C. Title V Administrative Costs	$ 544,700	(4.9%)	$ 478,482	(4.3%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 11,034,716		$ 9,666,571	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 31,024,500		$ 30,321,932	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0		$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 0		$ 0	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 26,998,206		$ 23,126,210	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 58,022,706		$ 53,448,142	
A. Your State's FY 1989 Maintenance of Effort Amount $ 22,552,700				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 69,057,422		$ 64,704,469	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.				
10. OTHER FEDERAL FUNDS (Subtotal of all funds under item 9)	$ 120,101,030		$ 118,916,101	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 189,158,452		$ 183,620,570	

OTHER FEDERAL FUNDS	FY17 Annual Report Budgeted	FY17 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPPs)	$ 315,480	$ 284,330
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	$ 9,444,600	$ 5,104,077
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Childhood Comprehensive Systems (ECCS): Building Health Through Integration	$ 140,000	$ 0
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 95,374	$ 79,001
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 103,512,125	$ 106,140,385
US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA)	$ 5,801,747	$ 5,327,392
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Sudden Unexpected Infant Death (SUID) Case Registry Program	$ 76,700	$ 88,896
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 170,463	$ 110,949
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Family to Family Health Information Centers	$ 90,000	$ 90,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 300,976	$ 250,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 153,565	$ 145,821
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects and Developmental Disabilities		$ 148,085

OTHER FEDERAL FUNDS	FY17 Annual Report Budgeted	FY17 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > KY Healthy Communities, Tobacco Control, Diabetes Prevention and Control		$ 991,191
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Increasing QUIT NOW KY Reach & Sustainability thru Media Strategies, Stakeholder		$ 155,974

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, A. Preventive and Primary Care for Children**
	Fiscal Year:	**2019**
	Column Name:	**Application Budgeted**
	Field Note: Preventive and Primary Care for Children includes totals from Infants < 1 year, Children 1-22 years and All Others. Does not include totals for pregnant women	
2.	**Field Name:**	**Federal Allocation, B. Children with Special Health Care Needs**
	Fiscal Year:	**2019**
	Column Name:	**Application Budgeted**
	Field Note: This figure includes infants. Based on ages 0-21.	
3.	**Field Name:**	**6. PROGRAM INCOME**
	Fiscal Year:	**2019**
	Column Name:	**Application Budgeted**
	Field Note: MCH receives cost settlement funds from Medicaid.	
4.	**Field Name:**	**Federal Allocation, A. Preventive and Primary Care for Children:**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Preventive and Primary Care for Children includes totals from Infants < 1 year, Children 1-22 years and All Others. Does not include Pregnant Women.	
5.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Administrative Costs are below 10% as the MCH Title V Program is partially supported from state funds.	
6.	**Field Name:**	**6. PROGRAM INCOME**
	Fiscal Year:	**2017**

	Column Name:	**Annual Report Expended**
	Field Note: Expenditures not as high as budgeted.	
7.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Childhood Comprehensive Systems (ECCS): Building Health Through Integration**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Funding was not renewed.	

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served

State: Kentucky

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY19 Application Budgeted	FY17 Annual Report Expended
1. Pregnant Women	$ 1,687,708	$ 1,589,756
2. Infants < 1 year	$ 1,701,374	$ 1,769,857
3. Children 1 through 21 Years	$ 2,050,098	$ 2,116,959
4. CSHCN	$ 3,826,117	$ 4,119,358
5. All Others	$ 1,224,692	$ 1,181,915
Federal Total of Individuals Served	$ 10,489,989	$ 10,777,845

IB. Non-Federal MCH Block Grant	FY19 Application Budgeted	FY17 Annual Report Expended
1. Pregnant Women	$ 11,941,888	$ 11,907,393
2. Infants < 1 year	$ 12,335,152	$ 12,279,933
3. Children 1 through 21 Years	$ 13,487,936	$ 12,644,799
4. CSHCN	$ 12,774,800	$ 12,581,047
5. All Others	$ 2,772,224	$ 2,710,427
Non-Federal Total of Individuals Served	$ 53,312,000	$ 52,123,599
Federal State MCH Block Grant Partnership Total	$ 63,801,989	$ 62,901,444

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

1.	**Field Name:**	**IA. Federal MCH Block Grant, 3. Children 1 through 21 years**
	Fiscal Year:	**2019**
	Column Name:	**Application Budgeted**
	Field Note: Preventive and Primary Care for Children includes totals for Children 1-22 years	
2.	**Field Name:**	**IA. Federal MCH Block Grant, 3. Children 1 through 21 years**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Preventive and Primary Care for Children includes totals for Children 1-22 years	

Data Alerts:

- Children 1 through 21 Years, Application Budgeted does not equal Form 2, Line 1A, Preventive and Primary Care for Children Application Budgeted. A field-level note indicating the reason for the discrepancy was provided.
- Children 1 through 21 Years, Annual Report Expended does not equal Form 2, Line 1A, Preventive and Primary Care for Children, Annual Report Expended. A field - level note indicating the reason for the discrepancy was provided.

Form 3b
Budget and Expenditure Details by Types of Services

State: Kentucky

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY19 Application Budgeted	FY17 Annual Report Expended
1. Direct Services	$ 1,677,246	$ 1,677,246
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 0	$ 0
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 1,677,246	$ 1,677,246
2. Enabling Services	$ 4,987,990	$ 5,153,509
3. Public Health Services and Systems	$ 4,297,853	$ 4,425,572
4. Select the types of Federally-supported "Direct Services", as reported in II.A.1. Provide the total amount of Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		$ 26,172
Physician/Office Services		$ 1,236,121
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 18,671
Dental Care (Does Not Include Orthodontic Services)		$ 21,833
Durable Medical Equipment and Supplies		$ 333,154
Laboratory Services		$ 6,622
Other		
Other-Orthodontia		$ 34,673
Direct Services Line 4 Expended Total		$ 1,677,246
Federal Total	$ 10,963,089	$ 11,256,327

IIB. Non-Federal MCH Block Grant	FY19 Application Budgeted	FY17 Annual Report Expended
1. Direct Services	$ 19,909,015	$ 522,731
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 4,022,674	$ 0
B. Preventive and Primary Care Services for Children	$ 3,111,541	$ 0
C. Services for CSHCN	$ 12,774,800	$ 522,731
2. Enabling Services	$ 12,872,557	$ 29,349,550
3. Public Health Services and Systems	$ 20,530,428	$ 22,251,318
4. Select the types of Non-Federally-supported "Direct Services", as reported in II.B.1. Provide the total amount of Non-Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		$ 1,196
Physician/Office Services		$ 487,528
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 2,696
Dental Care (Does Not Include Orthodontic Services)		$ 4,688
Durable Medical Equipment and Supplies		$ 21,033
Laboratory Services		$ 763
Other		
Other-Orthodontia		$ 4,827
Direct Services Line 4 Expended Total		$ 522,731
Non-Federal Total	$ 53,312,000	$ 52,123,599

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

None

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: Kentucky

Total Births by Occurrence: 52,442 **Data Source Year: 2017**

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Screen	(B) Aggregate Total Number Presumptive Positive Screens	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	52,012 (99.2%)	2,866	152	152 (100.0%)

Program Name(s)				
3-Hydroxy-3-methyglutaric aciduria	3-Hydroxy-3-methyglutaric aciduria	3-Methylcrotonyl-CoA carboxylase deficiency	Argininosuccinic aciduria	Biotinidase deficiency
Carnitine uptake defect/carnitine transport defect	Citrullinemia, type I	Classic galactosemia	Classic phenylketonuria	Congenital adrenal hyperplasia
Critical congenital heart disease	Cystic fibrosis	Glutaric acidemia type I	Glycogen Storage Disease Type II (Pompe)	Homocystinuria
Isovaleric acidemia	Long-chain L-3 hydroxyacyl-CoA dehydrogenase deficiency	Maple syrup urine disease	Medium-chain acyl-CoA dehydrogenase deficiency	Methylmalonic acidemia (cobalamin disorders)
Methylmalonic acidemia (methylmalonyl-CoA mutase)	Mucopolysaccharidosis Type 1	Primary congenital hypothyroidism	Propionic acidemia	S, ßeta-Thalassemia
S,C disease	S,S disease (Sickle cell anemia)	Severe combined immunodeficiences	ß-Ketothiolase deficiency	Trifunctional protein deficiency
Tyrosinemia, type I	Very long-chain acyl-CoA dehydrogenase deficiency			

2. Other Newborn Screening Tests

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
2-Methyl-3-hydroxybutyric aciduria	52,012 (99.2%)	0	0	0 (0%)
2-Methylbutyryl-CoA dehydrogenase deficiency	52,012 (99.2%)	0	0	0 (0%)
Argininemia	52,012 (99.2%)	5	1	1 (100.0%)
Carnitine acylcarnitine translocase deficiency	52,012 (99.2%)	0	0	0 (0%)
Carnitine palmitoyl transferase deficiency I	52,012 (99.2%)	0	0	0 (0%)
Carnitine palmitoyl transferase deficiency II	52,012 (99.2%)	4	0	0 (0%)
Citrullinemia type II	52,012 (99.2%)	4	0	0 (0%)
Ethylmalonic encephalopathy	52,012 (99.2%)	0	0	0 (0%)
Glutaric acidemia type II	52,012 (99.2%)	1	0	0 (0%)
Hypermethioninemia	52,012 (99.2%)	0	0	0 (0%)
Hyperphenylalinemia	52,012 (99.2%)	0	0	0 (0%)
Isobutyryl-CoA dehydrogenase deficiency	52,012 (99.2%)	1	0	0 (0%)
Krabbe Disease	52,012 (99.2%)	0	0	0 (0%)
Malonic academia	52,012 (99.2%)	0	0	0 (0%)
Medium/Short chain acyl-CoA dehydrogenase deficiency	52,012 (99.2%)	2	0	0 (0%)
Multiple carboxylase deficiency	52,012 (99.2%)	3	0	0 (0%)

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Non-ketotic Hyperglycinemia	52,012 (99.2%)	2	0	0 (0%)
Short-chain acyl-CoA dehydrogenase deficiency	52,012 (99.2%)	29	5	5 (100.0%)
Tyrosinemia type II	52,012 (99.2%)	4	0	0 (0%)
Tyrosinemia type III	52,012 (99.2%)	0	0	0 (0%)
Various Hemoglobinopathies (Hb E)	52,012 (99.2%)	1	1	1 (100.0%)
Ornithine Transcarbamylase deficiency	52,012 (99.2%)	1	0	0 (0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

Long-term follow up on infants that screen positive is not currently conducted in Kentucky.

Form Notes for Form 4:

Older children and women are not routinely screened in KY.

Field Level Notes for Form 4:

1.	**Field Name:**	**Total Births by Occurrence**
	Fiscal Year:	**2017**
	Column Name:	**Total Births by Occurrence Notes**
	Field Note: 2017 data is preliminary and numbers may change.	
2.	**Field Name:**	**Data Source Year**
	Fiscal Year:	**2017**
	Column Name:	**Data Source Year Notes**
	Field Note: 2017 data is preliminary and numbers may change.	

Data Alerts: None

Form 5a
Count of Individuals Served by Title V

State: Kentucky

Annual Report Year 2017

		Primary Source of Coverage				
Types Of Individuals Served	(A) Title V Total Served	(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	1,040	43.7	0.0	3.0	52.9	0.4
2. Infants < 1 Year of Age	19,111	57.3	0.0	7.3	34.6	0.8
3. Children 1 through 21 Years of Age	214,601	61.3	0.0	3.0	35.4	0.3
3a. Children with Special Health Care Needs	89,703	70.9	0.0	24.6	4.4	0.1
4. Others	24,438	49.2	0.0	9.1	40.4	1.3
Total	259,190					

Form Notes for Form 5a:

Data source for form 5a: Custom Data Processing; Patient Services Reporting System client database; Services received during calendar year 2017.

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2017**
	Field Note: Data source for form 5a: Custom Data Processing; Patient Services Reporting System client database; Services received during calendar year 2017.	
2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2017**
	Field Note: Data source for form 5a: Custom Data Processing; Patient Services Reporting System client database; Services received during calendar year 2017. Included in totals are infants served by the Commission for Children with Special Health Care Needs.	
3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2017**
	Field Note: Data source for form 5a: Custom Data Processing; Patient Services Reporting System client database; Services received during calendar year 2017.	
4.	**Field Name:**	**Children with Special Health Care Needs**
	Fiscal Year:	**2017**
	Field Note: Data Source: KY Commission for Children with Special Health Care Needs. Data includes the following services: newborn screening, early intervention, case management/care coordination, clinical, partnership, Family to Family, audiology, OT, PT, ST, support groups, interpreters, transitions, and medically complex foster care support.	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2017**
	Field Note: Others include individuals over the age of 22 receiving a service in the category of the following: dental, family planning, school health, and medical nutrition therapy.	

Data Alerts: None

Form 5b
Total Percentage of Populations Served by Title V

State: Kentucky

Annual Report Year 2017

Populations Served by Title V	Total % Served
1. Pregnant Women	21
2. Infants < 1 Year of Age	99
3. Children 1 through 21 Years of Age	99
3a. Children with Special Health Care Needs	35
4. Others	8

Form Notes for Form 5b:

None

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2017**
	Field Note: Includes services to women receiving HANDS in addition to those pregnant women served by Title V.	
2.	**Field Name:**	**Infants Less Than One Year**
	Fiscal Year:	**2017**
	Field Note: Includes all infants receiving newborn screening.	
3.	**Field Name:**	**Children 1 Through 21 Years of Age**
	Fiscal Year:	**2017**
	Field Note: Data Source: Custom Data Processing; Patient Services Reporting System client database; Services received during calendar year 2017.	
4.	**Field Name:**	**Children With Special Health Care Needs**
	Fiscal Year:	**2017**
	Field Note: Data Source: Commission for Children with Special Health Care Needs	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2017**
	Field Note: Others include individuals over the age of 21 receiving a service in the category of the following: dental, family planning, school health, and medical nutrition therapy, public health outreach and education through Kentucky MCH evidence based packages.	

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Kentucky

Annual Report Year 2017

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non-Hispanic White	(C) Non-Hispanic Black or African American	(D) Hispanic	(E) Non-Hispanic American Indian or Native Alaskan	(F) Non-Hispanic Asian	(G) Non-Hispanic Native Hawaiian or Other Pacific Islander	(H) Non-Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	50,713	40,679	4,680	2,923	35	539	8	0	1,849
Title V Served	28	27	0	0	0	1	0	0	0
Eligible for Title XIX	27,603	19,768	3,455	1,512	26	332	28	0	2,482
2. Total Infants in State	54,810	43,118	5,131	3,241	107	817	48	2,348	0
Title V Served	53,851	43,377	6,262	0	88	729	115	3,280	0
Eligible for Title XIX	34,094	20,859	3,875	1,649	4	384	23	0	7,300

Form Notes for Form 6:

Data Sources: For Deliveries: Total deliveries in state: KY vital statistics files, live birth certificate files, occurrence births for 2017. Title V served: CDP reporting system, PSRS database year 2017. Eligible for Title XIX: KY Medicaid Management Information System, Medicaid data warehouse, year 2017. Currently, race/ethnicity is not a required field for completion for Medicaid enrollment. Due to this, there has been a shift in the race categories. Fewer individuals are reporting race so it appears the Other/Unknown category has increased dramatically when in fact it is a reflection of more individuals not reporting race/ethnicity at time of enrollment.
For Infants: Total infants in the state: US Census Bureau state specific population estimates by single year of age, race, ethnicity for year 2016: Title V served: CDP reporting system, PSRS database year 2017. Eligible for Title XIX: KY Medicaid Management Information System, Medicaid data warehouse year 2017.

Field Level Notes for Form 6:

1.	**Field Name:**	**1. Title V Served**
	Fiscal Year:	**2017**
	Column Name:	**Total**
	Field Note: Ethnicity cannot be provided.	
2.	**Field Name:**	**2. Title V Served**
	Fiscal Year:	**2017**
	Column Name:	**Total**
	Field Note: Ethnicity cannot be provided.	

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Kentucky

A. State MCH Toll-Free Telephone Lines	2019 Application Year	2017 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(800) 462-6122	(800) 462-6122
2. State MCH Toll-Free "Hotline" Name	Kentucky MCH Hotline	Kentucky MCH Hotline
3. Name of Contact Person for State MCH "Hotline"	Jan Bright	Jan Bright
4. Contact Person's Telephone Number	(502) 564-2154 x4405	(502) 564-2154 x4405
5. Number of Calls Received on the State MCH "Hotline"		3,297

B. Other Appropriate Methods	2019 Application Year	2017 Annual Report Year
1. Other Toll-Free "Hotline" Names	CCSHCN Toll Free Line	CCSHCN Toll Free Line
2. Number of Calls on Other Toll-Free "Hotlines"		2
3. State Title V Program Website Address	http://chfs.ky.gov/agencies/dph/dmch	http://chfs.ky.gov/agencies/dph/dmch
4. Number of Hits to the State Title V Program Website		11,408
5. State Title V Social Media Websites	https://www.facebook.com/KYCCSHCN/	http://www.safesleepky.com/
6. Number of Hits to the State Title V Program Social Media Websites		75,346

Form Notes for Form 7:

None

Form 8
State MCH and CSHCN Directors Contact Information

State: Kentucky

1. Title V Maternal and Child Health (MCH) Director	
Name	Henrietta Bada, MD
Title	Director, Maternal and Child Health Division
Address 1	275 East Main Street, HS2W-A
Address 2	
City/State/Zip	Frankfort / KY / 40621
Telephone	(502) 564-4830
Extension	
Email	Henrietta.Bada@ky.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Shellie May
Title	Executive Director
Address 1	310 Whittington Parkway, Suite 200
Address 2	
City/State/Zip	Louisville / KY / 40222
Telephone	(502) 429-4430
Extension	2071
Email	Shellie.May@ky.gov

3. State Family or Youth Leader (Optional)	
Name	Laura Beard
Title	MCH Family Consultant
Address 1	275 E. Main Street
Address 2	
City/State/Zip	Frankfort / KY / 40621
Telephone	(502) 564-2154
Extension	4371
Email	Laura.Beard@ky.gov

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Kentucky

Application Year 2019

No.	Priority Need
1.	Maternal Morbidity
2.	Infant Mortality
3.	Injury (Child Abuse and Neglect)
4.	Overweight and Obesity Among Teens
5.	Oral Health
6.	Substance Abuse
7.	Transitions Services for CSHCN
8.	Access to Care and Services for CSHCN
9.	Adequate Health Insurance Coverage
10.	Data Capacity for CSHCN

Form 9 State Priorities-Needs Assessment Year - Application Year 2016

No.	Priority Need	Priority Need Type (New, Replaced or Continued Priority Need for this five-year reporting period)	Rationale if priority need does not have a corresponding State or National Performance/Outcome Measure
1.	Maternal Morbidity	Continued	
2.	Infant Mortality	Continued	
3.	Child Abuse and Neglect	Continued	
4.	Overweight and Obesity Among Teens	New	
5.	Oral Health	Continued	
6.	Substance Abuse	Continued	
7.	Transitions Services for CSHCN	Continued	
8.	Access to Care and Services for CSHCN	New	
9.	Adequate Insurance for CSHCN	New	
10.	Data Capacity for CSHCN	New	

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10a
National Outcome Measures (NOMs)

State: Kentucky

Form Notes for Form 10a NPMs, NOMs, SPMs, SOMs, and ESMs.

None

NOM 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	79.0 %	0.2 %	42,142	53,367
2015	78.8 %	0.2 %	42,580	54,032
2014	78.7 %	0.2 %	42,872	54,513
2013	75.8 %	0.2 %	40,711	53,732
2012	75.6 %	0.2 %	40,509	53,595
2011	75.3 %	0.2 %	39,973	53,069
2010	73.7 %	0.2 %	39,324	53,370
2009	71.8 %	0.2 %	39,743	55,321

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 1 - Notes:

None

Data Alerts: None

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	116.3	5.5	454	39,041
2014	110.8	4.6	579	52,262
2013	125.2	5.0	648	51,774
2012	123.7	4.9	642	51,916
2011	117.8	4.8	607	51,541
2010	122.3	4.9	643	52,571
2009	104.2	4.4	563	54,030
2008	90.1	4.1	486	53,961

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 2 - Notes:

None

Data Alerts: None

NOM 3 - Maternal mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2012_2016	22.9	2.9	64	279,034
2011_2015	19.4	2.6	54	278,955

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 3 - Notes:

None

Data Alerts: None

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	9.1 %	0.1 %	5,042	55,441
2015	8.7 %	0.1 %	4,846	55,966
2014	8.8 %	0.1 %	4,922	56,158
2013	8.7 %	0.1 %	4,845	55,674
2012	8.7 %	0.1 %	4,823	55,752
2011	9.1 %	0.1 %	5,040	55,350
2010	9.1 %	0.1 %	5,044	55,762
2009	8.9 %	0.1 %	5,141	57,537

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 4 - Notes:

None

Data Alerts: None

NOM 5 - Percent of preterm births (<37 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	11.4 %	0.1 %	6,322	55,430
2015	10.8 %	0.1 %	6,026	55,948
2014	10.7 %	0.1 %	6,033	56,153
2013	11.1 %	0.1 %	6,149	55,653
2012	11.0 %	0.1 %	6,151	55,730
2011	11.3 %	0.1 %	6,226	55,328
2010	11.7 %	0.1 %	6,521	55,757
2009	11.6 %	0.1 %	6,648	57,488

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 5 - Notes:

None

Data Alerts: None

NOM 6 - Percent of early term births (37, 38 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	28.3 %	0.2 %	15,688	55,430
2015	27.6 %	0.2 %	15,454	55,948
2014	28.0 %	0.2 %	15,748	56,153
2013	28.2 %	0.2 %	15,692	55,653
2012	30.5 %	0.2 %	16,993	55,730
2011	30.7 %	0.2 %	17,007	55,328
2010	32.1 %	0.2 %	17,888	55,757
2009	34.3 %	0.2 %	19,728	57,488

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 6 - Notes:

None

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

Data Source: CMS Hospital Compare

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016/Q2-2017/Q1	3.0 %			
2015/Q2-2016/Q1	4.0 %			
2015/Q1-2015/Q4	5.0 %			
2014/Q4-2015/Q3	6.0 %			
2014/Q3-2015/Q2	6.0 %			
2014/Q2-2015/Q1	7.0 %			
2014/Q1-2014/Q4	8.0 %			
2013/Q4-2014/Q3	8.0 %			
2013/Q3-2014/Q2	8.0 %			
2013/Q2-2014/Q1	9.0 %			

Legends:

Indicator results were based on a shorter time period than required for reporting

NOM 7 - Notes:

None

Data Alerts: None

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	6.5	0.3	366	56,152
2014	6.7	0.4	378	56,353
2013	6.7	0.4	376	55,884
2012	7.2	0.4	402	55,955
2011	5.9	0.3	326	55,527
2010	5.6	0.3	313	55,960
2009	6.0	0.3	346	57,732

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 8 - Notes:

None

Data Alerts: None

NOM 9.1 - Infant mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	6.7	0.4	375	55,971
2014	7.1	0.4	400	56,170
2013	6.4	0.3	356	55,686
2012	7.2	0.4	401	55,758
2011	6.4	0.3	356	55,370
2010	6.8	0.4	380	55,784
2009	6.8	0.4	393	57,551

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.1 - Notes:

None

Data Alerts: None

NOM 9.2 - Neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	4.1	0.3	227	55,971
2014	4.3	0.3	242	56,170
2013	3.9	0.3	219	55,686
2012	4.7	0.3	263	55,758
2011	4.0	0.3	219	55,370
2010	3.4	0.3	187	55,784
2009	3.7	0.3	215	57,551

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.2 - Notes:

None

Data Alerts: None

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	2.6	0.2	148	55,971
2014	2.8	0.2	158	56,170
2013	2.5	0.2	137	55,686
2012	2.5	0.2	138	55,758
2011	2.5	0.2	137	55,370
2010	3.5	0.3	193	55,784
2009	3.1	0.2	178	57,551

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.3 - Notes:

None

Data Alerts: None

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	178.7	17.9	100	55,971
2014	185.2	18.2	104	56,170
2013	150.9	16.5	84	55,686
2012	247.5	21.1	138	55,758
2011	175.2	17.8	97	55,370
2010	166.7	17.3	93	55,784
2009	196.4	18.5	113	57,551

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.4 - Notes:

None

Data Alerts: None

NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	153.7	16.6	86	55,971
2014	170.9	17.5	96	56,170
2013	147.3	16.3	82	55,686
2012	123.8	14.9	69	55,758
2011	139.1	15.9	77	55,370
2010	164.9	17.2	92	55,784
2009	144.2	15.8	83	57,551

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.5 - Notes:

None

Data Alerts: None

NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy

FAD Not Available for this measure.

NOM 10 - Notes:

None

Data Alerts: None

NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	22.7	0.8	898	39,524
2014	21.3	0.6	1,125	52,851
2013	15.6	0.6	817	52,518
2012	12.8	0.5	668	52,403
2011	10.9	0.5	564	51,913
2010	8.1	0.4	410	50,733
2009	6.7	0.4	348	51,709
2008	4.8	0.3	231	48,237

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 11 - Notes:

None

Data Alerts: None

NOM 12 - Percent of eligible newborns screened for heritable disorders with on time physician notification for out of range screens who are followed up in a timely manner. (DEVELOPMENTAL)

FAD Not Available for this measure.

NOM 12 - Notes:

None

Data Alerts: None

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

FAD Not Available for this measure.

NOM 13 - Notes:

None

Data Alerts: None

NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	12.4 %	1.9 %	118,487	953,696

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 14 - Notes:

None

Data Alerts: None

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	21.6	2.1	108	500,279
2015	21.3	2.1	107	501,802
2014	20.5	2.0	103	503,138
2013	18.4	1.9	93	505,102
2012	22.0	2.1	112	508,169
2011	23.7	2.2	120	507,072
2010	23.7	2.2	121	510,066
2009	23.3	2.1	118	507,081

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 15 - Notes:

None

Data Alerts: None

NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	45.3	2.8	258	569,804
2015	39.3	2.6	223	566,864
2014	34.0	2.5	193	567,845
2013	31.2	2.3	177	567,768
2012	39.4	2.6	224	568,657
2011	33.5	2.4	193	575,565
2010	40.1	2.6	233	580,949
2009	39.8	2.6	231	581,176

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.1 - Notes:

None

Data Alerts: None

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014_2016	16.9	1.4	145	857,393
2013_2015	15.4	1.3	131	852,073
2012_2014	17.7	1.4	150	849,564
2011_2013	17.1	1.4	146	855,059
2010_2012	18.5	1.5	161	869,224
2009_2011	18.9	1.5	167	883,934
2008_2010	21.8	1.6	195	892,781
2007_2009	25.5	1.7	227	891,367

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.2 - Notes:

None

Data Alerts: None

NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014_2016	11.9	1.2	102	857,393
2013_2015	10.8	1.1	92	852,073
2012_2014	9.5	1.1	81	849,564
2011_2013	9.9	1.1	85	855,059
2010_2012	8.9	1.0	77	869,224
2009_2011	8.4	1.0	74	883,934
2008_2010	8.5	1.0	76	892,781
2007_2009	9.7	1.0	86	891,367

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.3 - Notes:

None

Data Alerts: None

NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	25.4 %	2.0 %	255,861	1,008,041

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.1 - Notes:

None

Data Alerts: None

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	16.1 %	3.1 %	41,113	255,861

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	2.8 %	0.7 %	22,712	822,628

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	11.9 %	1.6 %	97,844	819,440

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	47.9 %	6.0 %	72,660	151,800

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	89.2 %	1.6 %	896,130	1,005,033

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	13.3 %	0.2 %	5,886	44,355
2012	13.5 %	0.2 %	5,877	43,422
2010	18.2 %	0.2 %	8,345	45,761
2008	16.9 %	0.2 %	7,993	47,225

Legends:

Indicator has a denominator <50 or a relative standard error ≥30% and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	18.5 %	1.1 %		
2013	18.0 %	1.2 %		
2011	16.5 %	1.2 %		
2009	17.4 %	1.3 %		
2007	15.4 %	0.8 %		
2005	15.4 %	0.7 %		

Legends:

Indicator has an unweighted denominator <100 and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	19.7 %	2.5 %	81,412	414,415

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	3.2 %	0.3 %	32,400	1,011,308
2015	4.4 %	0.4 %	44,050	1,009,275
2014	4.3 %	0.3 %	43,166	1,014,030
2013	5.9 %	0.4 %	59,952	1,011,219
2012	5.9 %	0.5 %	60,230	1,015,554
2011	5.9 %	0.5 %	59,790	1,021,874
2010	5.8 %	0.4 %	59,114	1,017,772
2009	5.9 %	0.4 %	59,762	1,017,979

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children, ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	74.5 %	3.6 %	58,369	78,322
2015	73.0 %	3.3 %	57,182	78,299
2014	72.4 %	4.0 %	56,597	78,231
2013	72.7 %	4.1 %	56,137	77,268
2012	68.2 %	3.4 %	53,833	78,887
2011	77.6 %	3.5 %	62,510	80,570
2010	51.8 %	3.4 %	42,330	81,740
2009	43.4 %	3.1 %	36,497	84,127

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.1 - Notes:

None

Data Alerts: None

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

Data Source: National Immunization Survey (NIS) – Flu

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016_2017	50.3 %	2.0 %	474,509	944,297
2015_2016	51.7 %	1.9 %	487,389	942,908
2014_2015	51.2 %	1.9 %	489,436	956,116
2013_2014	54.0 %	2.1 %	514,249	951,632
2012_2013	59.0 %	2.7 %	571,430	969,106
2011_2012	48.9 %	2.4 %	464,496	950,390
2010_2011	51.3 %	3.2 %	492,630	960,293
2009_2010	42.6 %	2.4 %	387,505	909,635

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.2 - Notes:

None

Data Alerts: None

NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

Data Source: National Immunization Survey (NIS) - Teen (Female)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	54.8 %	4.7 %	76,045	138,752
2015	57.4 %	4.4 %	79,769	139,055
2014	52.1 %	4.8 %	72,821	139,693
2013	47.6 %	5.0 %	65,891	138,551
2012	51.3 %	5.4 %	71,030	138,600
2011	46.0 %	5.0 %	63,681	138,443
2010	40.1 %	4.7 %	55,571	138,500
2009	31.0 %	3.9 %	42,925	138,660

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

Data Source: National Immunization Survey (NIS) - Teen (Male)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	41.6 %	4.5 %	60,812	146,104
2015	34.8 %	4.2 %	50,837	146,149
2014	23.7 %	4.1 %	34,789	146,603
2013	19.0 %	3.8 %	27,681	145,976
2012	NR	NR	NR	NR
2011	NR	NR	NR	NR

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.3 - Notes:

None

Data Alerts: None

NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	89.0 %	1.9 %	253,491	284,856
2015	84.0 %	2.4 %	239,625	285,204
2014	85.5 %	2.5 %	244,646	286,295
2013	84.4 %	2.6 %	240,214	284,527
2012	80.0 %	2.9 %	227,714	284,736
2011	70.0 %	3.1 %	199,606	285,351
2010	53.1 %	3.2 %	151,024	284,473
2009	37.5 %	2.8 %	106,384	284,013

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.4 - Notes:

None

Data Alerts: None

NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	85.9 %	2.1 %	244,608	284,856
2015	79.0 %	2.7 %	225,212	285,204
2014	78.2 %	2.9 %	223,796	286,295
2013	71.2 %	3.2 %	202,449	284,527
2012	62.9 %	3.5 %	179,159	284,736
2011	55.0 %	3.4 %	156,902	285,351
2010	44.8 %	3.2 %	127,534	284,473
2009	36.3 %	2.7 %	103,104	284,013

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.5 - Notes:

None

Data Alerts: None

NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	30.9	0.5	4,331	140,311
2015	32.2	0.5	4,503	139,704
2014	35.2	0.5	4,877	138,484
2013	39.1	0.5	5,410	138,365
2012	41.1	0.6	5,689	138,362
2011	43.4	0.6	6,111	140,881
2010	46.4	0.6	6,684	144,190
2009	49.7	0.6	7,208	144,977

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 23 - Notes:

None

Data Alerts: None

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

FAD Not Available for this measure.

NOM 24 - Notes:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	2.5 %	0.8 %	24,785	1,008,041

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 25 - Notes:

None

Data Alerts: None

Form 10a
National Performance Measures (NPMs)

State: Kentucky

NPM 2 - Percent of cesarean deliveries among low-risk first births

Federally Available Data		
Data Source: National Vital Statistics System (NVSS)		
	2016	**2017**
Annual Objective	28	27
Annual Indicator	27.4	27.2
Numerator	5,018	4,819
Denominator	18,321	17,748
Data Source	NVSS	NVSS
Data Source Year	2015	2016

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	26.0	25.5	25.0	24.5	24.0	23.5

Field Level Notes for Form 10a NPMs:

None

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	68	68.5
Annual Indicator	66.9	74.9
Numerator	32,863	39,855
Denominator	49,132	53,240
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	69.0	69.5	70.0	70.5	71.0	71.5

Field Level Notes for Form 10a NPMs:

None

NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	18	19.5
Annual Indicator	19.0	18.5
Numerator	9,175	9,330
Denominator	48,213	50,546
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	20.0	20.0	20.5	20.5	21.0	21.5

Field Level Notes for Form 10a NPMs:

None

NPM 5A - Percent of infants placed to sleep on their backs

FAD for this measure is not available for the State.

State Provided Data		
	2016	2017
Annual Objective	72	72
Annual Indicator	71.4	71.4
Numerator		
Denominator		
Data Source	KY PRAMS pilot project	KY PRAMS Pilot Project
Data Source Year	2010/2011	2010/2011
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	73.0	73.0	73.5	74.0	75.0	76.0

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Data for this indicator is reported from the KY PRAMS pilot project conducted in 2010/2011. KY was recently awarded funding through the CDC to become a PRAMS state and has begun data collection for calendar year 2017 and therefore will have data next year for this indicator.
Numerator and denominator data are not available.

NPM 5B - Percent of infants placed to sleep on a separate approved sleep surface

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	none available
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
No state data is available for this part of the indicator.

NPM 5C - Percent of infants placed to sleep without soft objects or loose bedding

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	No state data is available
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
No state data is available for this part of the project.

NPM 7.1 - Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9

Federally Available Data		
Data Source: HCUP - State Inpatient Databases (SID)		
	2016	**2017**
Annual Objective	107	107
Annual Indicator	108.4	145.0
Numerator	606	605
Denominator	558,942	417,308
Data Source	SID-CHILD	SID-CHILD
Data Source Year	2014	2015

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	104.0	104.0	100.0	100.0	97.0	97.0

Field Level Notes for Form 10a NPMs:

None

NPM 8.1 - Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - CHILD		
	2016	**2017**
Annual Objective		
Annual Indicator		30.2
Numerator		90,306
Denominator		299,110
Data Source		NSCH-CHILD
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	45.0	46.0	47.0	48.0	49.0	50.0

Field Level Notes for Form 10a NPMs:

None

NPM 8.2 - Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day

Federally Available Data		
Data Source: Youth Risk Behavior Surveillance System (YRBSS)		
	2016	**2017**
Annual Objective	23	24
Annual Indicator	20.2	20.2
Numerator	37,629	37,629
Denominator	186,195	186,195
Data Source	YRBSS-ADOLESCENT	YRBSS-ADOLESCENT
Data Source Year	2015	2015

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - ADOLESCENT		
	2016	**2017**
Annual Objective		
Annual Indicator		13.1
Numerator		44,811
Denominator		342,824
Data Source		NSCH-ADOLESCENT
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	25.0	26.0	27.0	28.0	29.0	30.0

Field Level Notes for Form 10a NPMs:

None

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care - Children with Special Health Care Needs

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - CSHCN		
	2016	**2017**
Annual Objective		
Annual Indicator		13.6
Numerator		16,553
Denominator		122,086
Data Source		NSCH-CSHCN
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	42.0	43.0	44.0	45.0	46.0	47.0

Field Level Notes for Form 10a NPMs:

None

NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year - Child Health

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH)		
	2016	**2017**
Annual Objective		
Annual Indicator		78.3
Numerator		746,012
Denominator		952,247
Data Source		NSCH
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	79.0	82.0	84.0	86.0	88.0	90.0

Field Level Notes for Form 10a NPMs:

None

NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes - Child Health

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH)		
	2016	**2017**
Annual Objective		
Annual Indicator		24.6
Numerator		244,610
Denominator		992,768
Data Source		NSCH
Data Source Year		2016

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	24.0	23.5	23.0	22.5	22.0	21.5

Field Level Notes for Form 10a NPMs:

None

Form 10a
State Performance Measures (SPMs)

State: Kentucky

SPM 1 - Reduce by 5% the rate of neonatal abstinence syndrome among Kentucky resident live births

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		23.8
Annual Indicator	24.3	22.6
Numerator	1,354	1,144
Denominator	55,714	50,716
Data Source	KY NAS registry and live birth cert files	KY NAS registry and live birth cert files
Data Source Year	2015	2017
Provisional or Final ?	Final	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	22.5	22.0	21.5	21.0	20.5	20.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
The 2017 NAS registry data is still preliminary as edit checks are still being completed on cases to ensure accuracy and complete reporting. It is anticipated this process will be complete by early Aug and an updated final number available at that time. Until then, the data reported is considered preliminary and numbers may change.

SPM 2 - Reduce by 5% the number of Medicaid recipients less than five years of age with pediatric abusive head trauma

Measure Status:	Inactive - Until data refinement is available, this measure is tabled until the future.

State Provided Data		
	2016	2017
Annual Objective		34
Annual Indicator	35	35
Numerator		
Denominator		
Data Source	KY Medicaid Management Information System	KY Medicaid Management Information
Data Source Year	2015	2015
Provisional or Final ?	Final	Final

Field Level Notes for Form 10a SPMs:

None

SPM 3 - Percent of CCSHCN Access to Care Plan components completed

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		90
Annual Indicator	81.3	90.7
Numerator	61	68
Denominator	75	75
Data Source	CCSHCN Access to Care Plan	CCSHCN Access to Care Plan
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	100.0	100.0	100.0	100.0	100.0	100.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: CCSHCN Access to Care Plan score sheet attached in Supporting Documents: CYSHCN (#1)	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: CCSHCN Access to Care Plan score sheet attached in Supporting Documents: CYSHCN (#1)	

SPM 4 - Percent of CCSHCN Data Action Plan components completed

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		60
Annual Indicator	53.3	65.6
Numerator	48	59
Denominator	90	90
Data Source	CCSHCN Data Action Plan	CCSHCN Data Action Plan
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	75.0	90.0	100.0	100.0	100.0	100.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: CCSHCN Data Action Plan score sheet attached in Supporting Documents: CYSHCN (#2)	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: CCSHCN Data Action Plan score sheet attached in Supporting Documents: CYSHCN (#2)	

SPM 5 - Percent of children ages 0 through 17 who are adequately insured

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		78
Annual Indicator	77.9	80.5
Numerator	1,401	
Denominator	1,798	
Data Source	NSCH	NSCH indicator 3.4
Data Source Year	2011-12	2016
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	81.0	82.0	83.0	84.0	85.0	86.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: Same metric as National Performance Measure #15: Percent of children who are adequately insured Survey Items: K3Q20; K3Q22; K3Q21A; K3Q21B	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: Data is from the 2016 National Survey of Children's Health indicator 3.4. Percent of kids aged 0-17 who are adequately insured.	

Form 10a
Evidence-Based or –Informed Strategy Measures (ESMs)

State: Kentucky

ESM 2.1 - Number of outreach activities (data reports, presentations, and technical assistance) on the topic of cesarean deliveries among low-risk first births.

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		9
Annual Indicator	7	9
Numerator		
Denominator		
Data Source	State specific data	State Specific Data
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	11.0	13.0	15.0	17.0	19.0	21.0

Field Level Notes for Form 10a ESMs:

None

ESM 4.1 - Number of hospitals receiving Technical Assistance from Public Health towards becoming baby friendly

Measure Status:	Inactive - Replaced

State Provided Data		
	2016	2017
Annual Objective		34
Annual Indicator	32	30
Numerator		
Denominator		
Data Source	State breastfeeding program	State Breastfeeding Program
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Field Level Notes for Form 10a ESMs:

None

ESM 4.2 - Number of hospitals receiving technical assistance from public health (LHD or State Program) about the 10 steps to successful breastfeeding

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	32.0	33.0	34.0	35.0	36.0

Field Level Notes for Form 10a ESMs:

None

ESM 5.1 - Number of cribs distributed through the Cribs for Kids for Community Partners MCH Evidence Informed Strategy

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		700
Annual Indicator	695	889
Numerator		
Denominator		
Data Source	LHD reporting data	LHD MCH Package reporting data
Data Source Year	FY2016	FY2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	900.0	910.0	920.0	930.0	940.0	950.0

Field Level Notes for Form 10a ESMs:

None

ESM 7.1.1 - Implementation of Child Passenger Safety Strategies in local communities

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		25
Annual Indicator	19	30
Numerator		
Denominator		
Data Source	Catalyst reporting system	Catalyst Reporting System and Safe Kids Coordinato
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	30.0	32.0	34.0	36.0	38.0	40.0

Field Level Notes for Form 10a ESMs:

None

ESM 8.1.1 - Number of early care and education professionals completing online training modules

Measure Status:	Active

State Provided Data	
	2017
Annual Objective	200
Annual Indicator	2,122
Numerator	
Denominator	
Data Source	UK HDI
Data Source Year	2017
Provisional or Final ?	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	2,200.0	2,300.0	2,400.0	2,500.0	2,600.0	2,700.0

Field Level Notes for Form 10a ESMs:

None

ESM 8.2.1 - Increase the proportion of school districts who participate in KY SHAPE Network and Physical Activity Leadership trainings

Measure Status:	Inactive - Replaced

State Provided Data		
	2016	2017
Annual Objective		65
Annual Indicator	64.2	64.2
Numerator	111	111
Denominator	173	173
Data Source	CSH data	CSH
Data Source Year	2016	2016
Provisional or Final ?	Final	Final

Field Level Notes for Form 10a ESMs:

None

ESM 8.2.2 - Number of districts receiving training or technical assistance for strategies to create a healthy school nutrition environment, or evaluation of recess and multi-component education policies.

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	120.0	125.0	130.0	135.0	140.0

Field Level Notes for Form 10a ESMs:

None

ESM 12.1 - Employ Health Care Transitions (HCT) Process Measurement tool towards assessing progress on implementation of Six Core Elements of Health Care Transitions statewide

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		85
Annual Indicator	84	94
Numerator	84	94
Denominator	100	100
Data Source	HCT Process Measurement Tool	HCT Process Measurement Tool
Data Source Year	2016	2017
Provisional or Final ?	Provisional	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	86.0	87.0	88.0	89.0	90.0	91.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Copy of score sheet attached in CYSHCN Supporting Documents (#4). Tool published by Got Transition/Center for Health Care Transition Improvement

ESM 13.2.1 - Fluoride varnish applications for children in local health departments

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		
Annual Indicator	15,580	28,000
Numerator		
Denominator		
Data Source	CDP data system	CDP data system
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	28,500.0	29,000.0	29,500.0	30,000.0	30,500.0	31,000.0

Field Level Notes for Form 10a ESMs:

None

ESM 14.2.1 - Implementation of 100% Tobacco-free School Policies

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		39
Annual Indicator	37	40.5
Numerator	64	70
Denominator	173	173
Data Source	KY Tobacco program	KY Tobacco Program
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	42.0	44.0	46.0	48.0	50.0	52.0

Field Level Notes for Form 10a ESMs:

None

Form 10b
State Performance Measure (SPM) Detail Sheets

State: Kentucky

SPM 1 - Reduce by 5% the rate of neonatal abstinence syndrome among Kentucky resident live births
Population Domain(s) – Perinatal/Infant Health

Measure Status:	Active
Goal:	To reduce the rate of Kentucky resident infants born with neonatal abstinence syndrome
Definition:	**Numerator:** The number of Kentucky resident infants with neonatal abstinence syndrome **Denominator:** The number of Kentucky resident live births **Unit Type:** Rate **Unit Number:** 1,000
Healthy People 2020 Objective:	MICH-11.4: Increase abstinence from illicit drugs among pregnant women
Data Sources and Data Issues:	Kentucky Neonatal Abstinence Syndrome Reportable Disease Registry and Kentucky Office of Vital Statistics, Live Birth Certificate Files
Significance:	Substance abuse is having a devastating effect across all MCH populations in KY as evidenced in the 2015 needs assessment process and quantitative data analysis. It is an issue in every community in KY, and the consequences of this epidemic have been particularly devastating to pregnant women and their infants. These consequences include pregnancy complications, increased risks of relapse, and overdose deaths in women; and for their children, NAS, infant death from co-sleeping with an impaired caregiver, and deaths from pediatric abusive head trauma (PAHT).

SPM 2 - Reduce by 5% the number of Medicaid recipients less than five years of age with pediatric abusive head trauma
Population Domain(s) – Child Health

Measure Status:	Inactive - Until data refinement is available, this measure is tabled until the future.
Goal:	To reduce pediatric abusive head trauma among Kentucky Medicaid recipients less than five years of age
Definition:	**Numerator:** Total number of Medicaid children less than five years of age with diagnosed pediatric abusive head trauma **Denominator:** None **Unit Type:** Count **Unit Number:** 100
Healthy People 2020 Objective:	IVP 37: Reduce child maltreatment deaths IVP 38: Reduce nonfatal child maltreatment
Data Sources and Data Issues:	Kentucky Medicaid Claims Data Warehouse
Significance:	Families in today's society face increasing stress due to a myriad of factors including substance abuse, domestic violence, poverty, unemployment and lack of adequate support systems. The number of child maltreatment victims in Kentucky is increasing, while the number of child maltreatment victims in the US is decreasing. From 2008 to 2012, the number of Kentucky child maltreatment victims increased by 7%; during this same time period in the US, child maltreatment victims decreased by 4%.

SPM 3 - Percent of CCSHCN Access to Care Plan components completed
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active
Goal:	Increase access to care and services for Kentucky's CYSHCN population
Definition:	**Numerator:** Number of completed items on CCSHCN Access to Care Plan **Denominator:** Number of total items on CCSHCN Access to Care Plan **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	AHS-6 Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines DH-4 (Developmental) Reduce the proportion of people with disabilities who report delays in receiving primary and periodic preventive care due to specific barriers
Data Sources and Data Issues:	CCSHCN Access to Care Plan 2015-2016 National Survey of Children's Health may not be comparable to 2009-2010 NS-CSHCN. CCSHCN will analyze NSCH when available. Until such time, CCSHCN Access to Care Plan will be scored annually.
Significance:	Advancing the ability for families to find providers and resources, and easily access services, is a key component of a well-functioning system. CCSHCN's plan addresses multiple aspects of Access to Care, and includes several improvement elements in each of the areas identified in the Needs Assessment - including availability of medical and specialty care; availability of provider networks; and development and promotion of supports and resources.

SPM 4 - Percent of CCSHCN Data Action Plan components completed
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active
Goal:	Increase available data regarding Kentucky's CYSHCN population
Definition:	**Numerator:** Number of completed items on CCSHCN Data Action Plan **Denominator:** Number of total items on CCSHCN Data Action Plan **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	PHI-13.3 Increase the proportion of State public health agencies that provide or assure comprehensive epidemiology services to support essential public health services
Data Sources and Data Issues:	CCSHCN Data Action Plan - this plan has been developed with the assistance of an advisory committee, convened with the support of MCHB technical assistance
Significance:	CCSHCN has identified increasing the capacity to make data-driven decisions as a state priority. Using an instrument and a scoring system developed with expert partners and MCHB technical assistance, Kentucky will assess progress toward the goal of using data to better understand and respond to the needs of CYSHCN in Kentucky.

SPM 5 - Percent of children ages 0 through 17 who are adequately insured
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active
Goal:	Increase the number of children who are adequately insured
Definition:	**Numerator:** Number of children, ages 0-17, who were reported to be adequately insured **Denominator:** Number of children, ages 0-17 **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	Access to Health Services Objective 1, increase the proportion of persons with health insurance Access to Health Services Objective 6, reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines
Data Sources and Data Issues:	National Survey of Children's Health
Significance:	Almost one-quarter of American children with continuous insurance coverage are not adequately insured. Inadequately insured children are more likely to have delayed or forgone care, lack a medical home, be less likely to receive needed referrals and care coordination, and receive family-centered care. The American Academy of Pediatrics highlighted the importance of this issue with a policy statement. The major problems cited were cost-sharing requirements that are too high, benefit limitations, and inadequate coverage of needed services.

Form 10b
State Outcome Measure (SOM) Detail Sheets

State: Kentucky

No State Outcome Measures were created by the State.

Form 10c
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Kentucky

ESM 2.1 - Number of outreach activities (data reports, presentations, and technical assistance) on the topic of cesarean deliveries among low-risk first births.
NPM 2 – Percent of cesarean deliveries among low-risk first births

Measure Status:	Active
Goal:	Increase the availability of Kentucky-specific data, resources, and interventions to reduce the occurrence of cesarean deliveries among low-risk first time births.
Definition:	**Numerator:** Number of data reports, presentations, and technical assistance activities documented by the Kentucky Title V program **Denominator:** None **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	MCH Programmatic Staff Reports
Significance:	The reduction in number of cesarean deliveries will require an increased awareness among providers and the general public on this topic. The measurement of outreach activities will include providing reports and presentations on cesarean sections and early elective deliveries as well as MCH reports for birthing hospitals on these indicators. Targeted technical assistance will also be offered to birthing hospitals with higher percentages of cesarean deliveries.

ESM 4.1 - Number of hospitals receiving Technical Assistance from Public Health towards becoming baby friendly NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Inactive - Replaced
Goal:	Increase the number of birthing hospitals who achieve Baby Friendly status
Definition:	**Numerator:** The number of birthing hospitals in Kentucky who are designated as Baby Friendly **Denominator:** None **Unit Type:** Count **Unit Number:** 48
Data Sources and Data Issues:	MCH Programmatic Data Reports from WIC
Significance:	The promotion of breastfeeding within the birthing facilities helps improve initiation and duration of breastfeeding.

ESM 4.2 - Number of hospitals receiving technical assistance from public health (LHD or State Program) about the 10 steps to successful breastfeeding
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	Increase the number of steps the birthing facilities are implementing to achieve the 10 steps to successful breastfeeding
Definition:	**Numerator:** Number of birthing hospitals who are implementing all 10 steps to successful breastfeeding **Denominator:** none **Unit Type:** Count **Unit Number:** 48
Data Sources and Data Issues:	MCH Breastfeeding Program Data Reports (Nutrition Services Branch)
Significance:	Promotion of breastfeeding (10 steps to successful breastfeeding) within birthing hospitals helps improve initiation and duration of breastfeeding

ESM 5.1 - Number of cribs distributed through the Cribs for Kids for Community Partners MCH Evidence Informed Strategy
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Increase by 10% the number of families in need of a crib that receive one from the local health department
Definition:	**Numerator:** The number of cribs distributed by local health departments through the Cribs for Kids for Community Partners package **Denominator:** None **Unit Type:** Count **Unit Number:** 1,000
Data Sources and Data Issues:	Catalyst Reporting to the Division of Maternal and Child Health for MCH Evidence Informed Strategies. Data is reported on a monthly basis.
Significance:	Kentucky's rate of infant deaths due to Sudden Unexpected Infant Death in 2013 was 1.6 per 1,000 live births, an increase from 1.24 in 2012. In 2013, SUID was the second most common cause of infant deaths in Kentucky, and 90% of SUID cases had at least one sleep-related risk factor. Sleep positioning is one of these risk factors.

ESM 7.1.1 - Implementation of Child Passenger Safety Strategies in local communities
NPM 7.1 – Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9

Measure Status:	Active
Goal:	Increase the number of local health departments that implement the Child Passenger Safety package in their community.
Definition:	**Numerator:** The number of local health departments that implement the Child Passenger Safety package **Denominator:** None **Unit Type:** Count **Unit Number:** 60
Data Sources and Data Issues:	Catalyst Reports from Local Health Departments
Significance:	Education of community on appropriate child restraint use and safe teen driving will reduce the occurrence of non-fatal and fatal motor vehicle injuries in the state.

ESM 8.1.1 - Number of early care and education professionals completing online training modules
NPM 8.1 – Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day

Measure Status:	Active
Goal:	To increase health activities that occur in early care and education settings throughout the state
Definition:	**Numerator:** Number of online trainings completed by early care and education professionals **Denominator:** None **Unit Type:** Count **Unit Number:** 4,000
Data Sources and Data Issues:	Early care and education TRIS system
Significance:	Early care and education professionals have limited knowledge and training on the incorporation of healthy strategies into early care settings such as day cares. With increased awareness of nutrition and physical activity strategies, more young children will have an opportunity to develop healthy habits and have them role modeled.

ESM 8.2.1 - Increase the proportion of school districts who participate in KY SHAPE Network and Physical Activity Leadership trainings
NPM 8.2 – Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day

Measure Status:	Inactive - Replaced
Goal:	Increase the percentage of school districts participating in KY SHAPE Network and Physical Activity Leadership trainings by 2% each year until September 30, 2020
Definition:	**Numerator:** Number of school districts participating in KY SHAPE Network and/or Physical Activity Leader professional development workshops **Denominator:** Number of school districts in Kentucky **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	School Health Tracking Spreadsheet maintained by the Coordinated School Health Program
Significance:	Participation in KY SHAPE and Physical Activity Leader professional development workshops increases the knowledge and skills of participants in implementing school wellness policies and comprehensive school physical activity programs (CSPAP).

ESM 8.2.2 - Number of districts receiving training or technical assistance for strategies to create a healthy school nutrition environment, or evaluation of recess and multi-component education policies.
NPM 8.2 – Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day

Measure Status:	Active
Goal:	To assist all KY school districts with development of policies for students and staff that address creation of a healthy school nutrition, environment and and multi-component physical education opportunities.
Definition:	**Numerator:** Number of school districts receiving technical assistance or professional development training **Denominator:** Number of Kentucky School Districts **Unit Type:** Count **Unit Number:** 173
Data Sources and Data Issues:	Kentucky Coordinated School Health data
Significance:	This measure will allow KY to address measures taken to reduce the obesity rate among adolescents.

ESM 12.1 - Employ Health Care Transitions (HCT) Process Measurement tool towards assessing progress on implementation of Six Core Elements of Health Care Transitions statewide
NPM 12 – Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

Measure Status:	Active
Goal:	Measure the implementation of agency-wide improvements as guided by Health Care Transition Process Measurement Tool for Transitioning Youth to Adult Health Care Providers
Definition:	**Numerator:** Score on HCT tool, as assessed annually **Denominator:** Possible Score on HCT tool **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	Health Care Transition Process Measurement Tool for Transitioning Youth to Adult Health Care Providers, created by Got Transitions, and scored for Kentucky by CCSHCN committee
Significance:	Statewide HCT improvements shall be guided by research-based instrument conforming to consensus statement of best practice and CYSHCN national standards.

ESM 13.2.1 - Fluoride varnish applications for children in local health departments
NPM 13.2 – Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Measure Status:	Active
Goal:	Increase the number of children who receive fluoride varnish applications in local health departments
Definition:	**Numerator:** The number of children receiving fluoride varnish applications in the local health departments **Denominator:** None **Unit Type:** Count **Unit Number:** 40,000
Data Sources and Data Issues:	Custom Data Processing (all local health departments) Reports
Significance:	Fluoride varnish and the application of dental sealants are preventive health strategies used to meet the needs of our youngest Kentuckians who live in pockets of the state without pediatric dentists or where providers do not accept Medicaid or treat uninsured populations. The availability of this service provides dental services to those who may be unable to access services otherwise.

ESM 14.2.1 - Implementation of 100% Tobacco-free School Policies
NPM 14.2 – Percent of children, ages 0 through 17, who live in households where someone smokes

Measure Status:	Active
Goal:	Increase by 10% the proportion of school districts that implement a 100% Tobacco-free School Policy
Definition:	**Numerator:** The number of Kentucky school districts that implement a 100% Tobacco-free School policy **Denominator:** The number of Kentucky school districts **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	Kentucky Tobacco Prevention and Cessation Program
Significance:	100% Tobacco Free School policies prohibit tobacco use, including vapor products and alternative nicotine products, by students, staff, and visitors twenty-four hours a day, seven days a week, inside Board-owned buildings or vehicles, on school owned property, and during school-sponsored student trips and activities. These policies will reduce exposures to secondhand smoke and reduce initiation of tobacco use in youth.

Form 11
Other State Data

State: Kentucky

The Form 11 data are available for review via the link below.

Form 11 Data