TEAM KENTUCKY

CABINET FOR HEALTH AND FAMILY SERVICES

OFFICE OF DATA ANALYTICS
DIVISION OF ANALYTICS

DISPARITIES IN THE RECEIPT OF GUIDELINE-COMPLIANT CARE AND OUTCOMES AMONG KENTUCKY MEDICAID ENROLLED PATIENTS WITH DIABETES

Summary Prepared by the Office of Data Analytics Division of Analytics

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What is Known on This Topic? Diabetes is a serious health condition that impacts proportionately more Kentuckians than it does Americans more generally.

What Did this Project Do? This project used guidelines to investigate the rate of diabetic Medicaid beneficiaries receiving recommended A1c tests, statin, and foot exams. This study showed trends of usage pre- and post-Medicaid expansion. It identified different factors that did or did not contribute to differential uptake rates amongst the target population. Notably, there was a large variance by MCO.

What Could Medicaid Do with These Conclusions? Medicaid could partner with MCOs to identify what may be causing care gaps and create standard guidelines for care requirements for diabetic beneficiaries. Additionally, Medicaid could consider making a public dashboard tracking the rates of recommended services used amongst the population.

Introduction

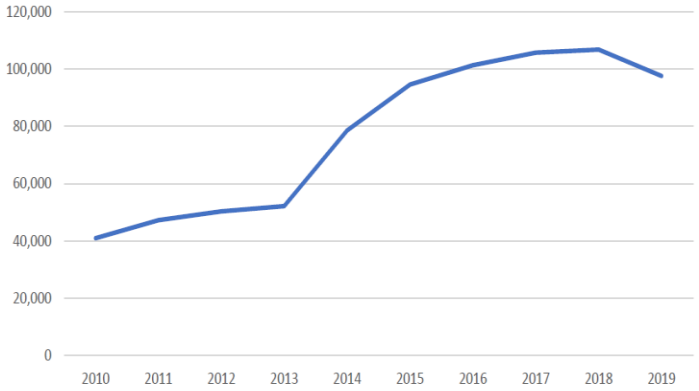
Diabetes is a common condition amongst Kentuckians, with 13.3% of the adult population considered diabetic in 2019.[1] For all ages, the 2019 national average of diabetes is 8.7%[2]. Unfortunately, the Commonwealth's rate of diabetes in its adult population has almost doubled since 2000.[1] Diabetes can damage an individual's systematic health and require expensive care. Kentucky has the 4th highest mortality rate from diabetes in the U.S., costing Medicaid $345 million in diabetes claims and associated drug costs in 2019.[1] This does not include associated ED visits and hospital stays from diabetes complications. Improving outcomes for diabetes patients could be beneficial to promoting population health and cost savings to Medicaid.

This study found that the uptake of guideline-recommended care for appropriate populations among diabetic Medicaid beneficiaries was lower than desired. This area for improvement could help with preventative intervention for Kentucky's patients with diabetes.

Project Methods & Results

This study created a dataset of continuously enrolled Medicaid beneficiaries aged 18 through 64. The research team then used diagnosis and procedure codes to construct the cohort to identify beneficiaries with diabetes and related diabetes A1c tests, foot exams, and statin usage. The sample included Medicaid beneficiaries that fit the inclusion criteria from 2010 through 2019. There were 97,574 individuals with diabetes identified in 2019. For statin uses, the sample was restricted to diabetic beneficiaries in the recommended age range for treatment.

Figure 1. *Number of KY Medicaid Beneficiaries with Diabetes*



Note: Figure 1 appears as Figure 1 in the SUP report.

Results found that the trends in guideline-compliant care utilization fell short of recommended levels. Figure 2 illustrates the utilization trends. Statin usage has increased over the period, A1c tests are similar to 2010, and foot exams are lower than in 2010. Noticeably, statin compliance is significantly lower than A1c tests and foot exam utilization at all measurement points. No disparities were observed for statin drugs. While statin usage did not reveal inequities in the population, A1c testing and foot exams differed by geographic region, enrollment type, and by MCO the beneficiaries was enrolled with. .

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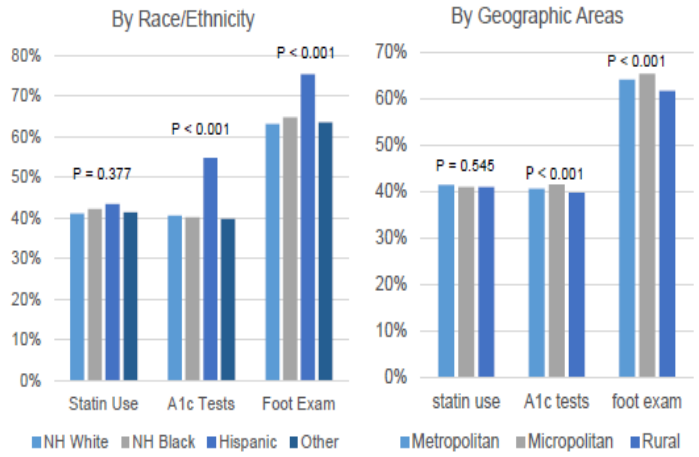
Beneficiaries in urban areas had the highest utilization of A1c testing and foot exams. The graph below illustrates the differential uptake of A1c tests and foot exams by MCOs. FFS and unknown MCO beneficiaries received the least care relative to other MCO groups.

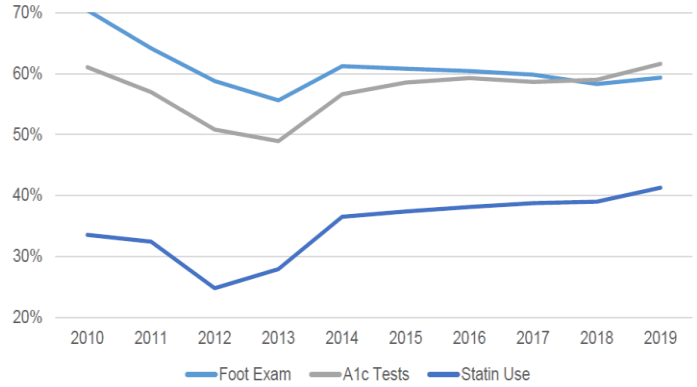
Figure 2. *Guideline-Compliant Care, by Demographics*



Note: *Figure 2 appears as Figure 3 in the SUP report.*

When looking at the difference between Medicaid beneficiaries by those enrolled pre-expansion vs. post-expansion, the researchers found that those enrolled post-expansion had higher adherence to guidelines. This is potentially signaling that those that qualified for traditional Medicaid may need additional outreach. Figure 3 below displays trends in guideline-compliant care for A1c tests, diabetic foot exams, and utilization of statin drugs.

Figure 3. *Trends in Guideline-Compliant Care Across Time*



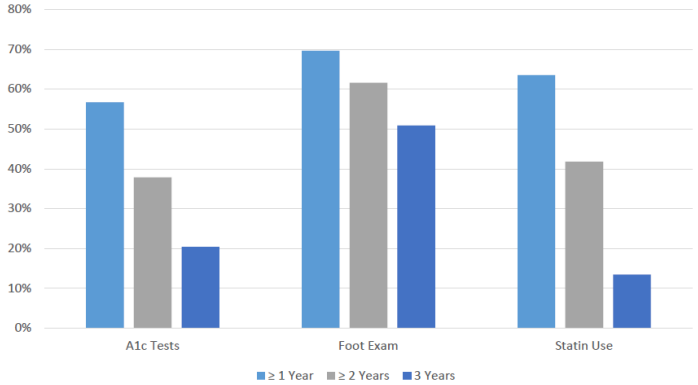
Note: *Figure 3 appears as Figure 2 in the SUP report.*

Additionally, the researchers found that guideline-compliant care dramatically decreased over time, with fewer beneficiaries receiving guideline care consistently for three years relative to a single year of compliance. This identifies a gap in care. Catching diabetic complications early is necessary to intervene. Figure 4 illustrates the fall-off in guideline adherence. A1c tests and statin usage show the largest decline over time while foot exam decline is much more moderate.

"The Medicaid program may consider instituting guideline compliance as an evaluation criterion for MCO performance. Statin use, in fact, is already a HEDIS measure. Tracking and publishing uptake of these services over time on the CHFS website may be another option to consider."

Broadly speaking, this study suggests that Kentucky's Medicaid-enrolled patients with diabetes are not at a sufficient point of receiving guideline-compliant care. Study authors note that Kentucky's rates are 16% - 18% below national averages.

Figure 4. *Consistent Compliance Across the Study Period*



Note: *Figure 4 appears as Figure 5 in the SUP report.*

Conclusion

Diabetes is a serious public health concern in Kentucky. Increasing guideline-compliant services utilization amongst diabetic beneficiaries could result in more efficient medical care. Given that hospitalizations are costly, preventing beneficiaries from reaching the point of needing these services would be beneficial.

While statin usage is lower than A1c testing and foot exams, it is worth noting that claims data is an imprecise means of assessing clinical decisions. A physician will know their patient's unique needs with greater granularity, and sometimes it may make sense to deviate from a guideline. For example, a statin may have an adverse reaction with other medications a patient needs, or the patient may be allergic to a statin medication. Understanding what is causing the rate changes in guideline compliance could be an area for future research.

References

1. Cabinet for Health and Family Services, Department for Public Health, Office for Health Data and Analytics, et al. 2021 Kentucky Diabetes Report. Published online 2021.

2. Prevalence of Diagnosed Diabetes | Diabetes | CDC. Published September 21, 2022. Accessed March 20, 2023. https://www.cdc.gov/diabetes/data/statistics-report/diagnosed-diabetes.html