

# EFFECTIVENESS OF CARE

## CHILDHOOD IMMUNIZATION STATUS

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- Medicaid HEDIS continuous enrollment standard of 12 months has been adopted.
- Individual vaccination rates are now required, in addition to an overall combined rate. (Individual vaccination rates were included in Medicaid HEDIS and only recommended in HEDIS 2.5.)
- Two hepatitis B vaccines are required. (Medicaid HEDIS required three hepatitis B vaccines.)
- DTaP is now approved for the first, second and third vaccines as well as the 4th vaccine.
- Specifications for acceptable documentation of immunizations for hybrid methodology have been modified.
- An exclusionary rule has been added for children who are identified as being immunocompromised, for whom the specified immunizations are contraindicated.

### Description

The percentage of Medicaid and commercially enrolled children who turned two years old during the reporting year, who were continuously enrolled for 12 months immediately preceding their second birthday (including members who have had no more than one break in enrollment of up to 45 days during the 12 months immediately preceding their second birthday), and who have received the following immunizations:

- Four DTP or DTaP vaccinations (or an initial DTP or DTaP followed by at least three DTP, DTaP and/or DT) by the second birthday
- Three polio (IPV or OPV) vaccinations by the second birthday
- One MMR between the first and second birthdays
- At least one H influenza type b vaccination between the first and second birthdays
- Two hepatitis B vaccinations by the second birthday (with one of them falling between the sixth month and second birthday)
- A combined rate including children who have received all of the immunizations listed above

### Administrative Data Specification

**Calculation:** This specification uses membership data to identify children who have turned two years old during the reporting year and claims/encounter data to identify those two-year-old members who have received the specified vaccinations. Health plans will report six rates for each payer (i.e., Medicaid and commercial). Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two populations, are derived using all enrolled children whose second birthday occurred during the reporting year, who were members of the plan as of their second birthday and who were continuously enrolled for the 12 months immediately preceding their second birthday

and who were not contraindicated for any of the specified antigens. Members who have had no more than one break in enrollment of up to 45 days during the 12 months preceding their second birthday should be included in this measure.

**Numerator:** The number of members in the denominator for each of the two populations (Medicaid and commercial) who received the following immunizations. Calculate six numerators:

- At least four DTP or DTaP (CPT-4 code 90700 or 90701 or 90711 or 90720 or 90721) with different dates of service by the child's second birthday, or an initial DTP or DTaP followed by at least three DTP, DTaP and/or DT (CPT-4 code 90702)
- At least three polio vaccinations-OPV or IPV-(CPT-4 code 90711 or 90712 or 90713) with different dates of service by the child's second birthday
- At least one MMR (CPT-4 codes 90705 or 90707 or 90708 or 90710 for measles and 90704 or 90707 or 90709 or 90710 for mumps and 90706 or 90707 or 90708 or 90709 or 90710 for rubella) with a date of service falling between the child's first and second birthdays
- At least one H influenza type b (CPT-4 code 90737 or 90720 or 90721) with a date of service falling between the child's first and second birthdays
- Two hepatitis B (CPT-4 code 90731 or 90744 or 90747) with different dates of service by the child's second birthday (with one of them falling between the child's sixth month and second birthday)
- A combined rate including children who have received all of the immunizations listed above.

#### **Hybrid Method Specification**

**Calculation:** This specification uses membership data to identify those children who have turned two years old during the reporting year and claims/encounter data and/or medical record review to identify those children who have received the specified vaccinations. Health plans will report six rates for each payer (i.e., Medicaid and commercial). Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using random samples of 411 Medicaid members and 411 commercial members from the health plan's eligible populations. Eligible members include all children whose second birthday occurred during the reporting year, who were members of the plan as of their second birthday, who were continuously enrolled for the 12 months immediately preceding their second birthday and who were not contraindicated for any of the specified antigens. Members who have had no more than one break in enrollment of up to 45 days during the 12 months preceding their second birthday should be included in this measure.

**Numerator:** The number of members in the denominator for each of the two populations (Medicaid and commercial) who received the following immunizations. Calculate six numerators described below, as documented through either administrative data or medical record review:

- At least four DTP or DTaP (CPT-4 code 90700 or 90701 or 90711 or 90720 or 90721) with different dates of service by the child's second birthday, or an initial

DTP or DTaP followed by at least three DTP, DTaP and/or DT (CPT-4 code 90702)

- At least three polio vaccinations-OPV or IPV.(CPT-4 code 90711 or 90712 or 90713) with different dates of service by the child's second birthday
- At least one MMR (CPT-4 codes 90705 or 90707 or 90708 or 90710 for measles and 90704 or 90707 or 90709 or 90710 for mumps and 90706 or 90707 or 90708 or 90709 or 90710 for rubella) with a date of service falling between the child's first and second birthdays
- At least one H influenza type b (CPT-4 code 90737 or 90720 or 90721) with a date of service falling between the child's first and second birthdays
- Two hepatitis B (CPT-4 code 90731 or 90744 or 90747) with different dates of service by the child's second birthday (with one of them falling between the child's sixth month and second birthday)
- A combined rate including children who have received all of the immunizations listed above.

*Note: For immunization information obtained from patient history, plans may count the immunization in HEDIS reports if the medical record contains the following information: an author-identified and dated immunization history or an author-identified note indicating the place of service, the name(s) of the specific antigen and the date the immunization(s) was given. Entries made in the medical record at the time immunization(s) was given must include either an author-identified note indicating the name(s) of the specific antigen and the date the immunization(s) was given, or the vaccine lot number. A certificate of immunization prepared by an authorized health care provider or agency must include the specific dates and types of immunizations administered. (Refer to the note below on transferred records.) All medical record entries must be dated by the child's second birthday (i.e., entries made retroactively may not be counted). The following do not constitute sufficient evidence of immunization for HEDIS reporting:*

- A note that the "member is up-to-date" with all immunizations, without a listing of the dates all immunizations were given and the names of the immunization agents.
- Records transferred from a previous health care provider or agency without a note that the authorized health care provider, to whom the records were transferred, has reviewed them.

#### Notes

- In states in which the law allows for an exception to children receiving pertussis vaccination, plans may use any combination of four DTP, DTaP and/or DT.
- The 1996 Recommended Childhood Immunization Schedule includes a newly recommended Varicella-Zoster Virus Immunization. The schedule recommends that one dose of the varicella vaccine be administered at 12 to 18 months of age. To reflect the updated Childhood Immunization Schedule, HEDIS will include the varicella vaccine for the 1997 reporting year as a separate rate and not part of the combined rate.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.

- The Centers for Disease Control and Prevention, American Association of Family Physicians and American Academy of Pediatrics recommend that a total of three hepatitis B vaccinations be administered to children before 18 months of age. The first hepatitis B vaccine tends to be administered by hospitals at birth, yet may not be recorded on claims forms. Consequently, information on the first hepatitis B vaccine may not be available in health plan administrative databases. To provide health plans with transition time to develop systems that can track the first hepatitis B immunization, HEDIS specifies that only two vaccinations be provided by the child's second birthday, for reporting years 1996 and 1997. The recommended three hepatitis B vaccines will be required for the 1998 reporting year.
- Children who are identified as being immunocompromised for a specific vaccine may be excluded from the denominator of that specific vaccine rate. If a plan excludes an immunocompromised child from a specific vaccine, then the plan must exclude that child from all other specific vaccine rates, as well as from the overall rate. Thus, the denominator for each specific vaccine, and for the overall rate, will be the same. Plans that choose to exclude immunocompromised children from the measure should look for contraindications as far back as possible in the patient's history, through either administrative data or medical record review. Refer to Table 1A for contraindications and related codes. This is a change from HEDIS 2.5 and Medicaid HEDIS in an effort to produce more accurate rates.

**Table 1A: Contraindications for Childhood Immunizations**

Immunization	Contraindication	ICD-9-CM Code
Any particular vaccine	anaphylactic reaction to the vaccine or its components	999.4
Any particular vaccine	vaccine not rendered due to contraindication	V64.0
DTP/DTaP	encephalopathy within 7 days of previous dose of DTP	323.5
OPV	HIV-infected or household contact with HIV infection	infection V08 symptomatic 042
OPV and MMR	immunodeficiency, including genetic (congenital) immunodeficiency syndromes	279.0x-279.1x, 279.2-279.9
OPV and MMR	cancer of lymphoreticular or histiocytic tissue	200.xx-202.xx
OPV and MMR	multiple myeloma	203.0x, 203.1x, 203.8x, with a fifth digit of '0' or '1'
OPV and MMR	leukemia	204.xx-208.xx, with a fourth digit of '0', '1', '2', '3', '8' or '9'; with a fifth digit of '0' or '1'
MMR	anaphylactic reaction to egg ingestion or streptomycin	995.68, E930.6
IPV	anaphylactic reaction to egg ingestion or neomycin	995.68, E930.8
Hib	none identified	
hepatitis B	anaphylactic reaction to common baker's yeast	995.69

\* MMWR, Jan 28, 1994, Vol. 43, No. RR-1.

## ADOLESCENT IMMUNIZATION STATUS

### New Measure

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#### Description

The percentage of Medicaid and commercially enrolled adolescents whose 13th birthday was in the reporting year, who were continuously enrolled for 12 months immediately preceding their 13th birthday and who received a second dose of MMR by age 13. Members who have had no more than one break in enrollment of up to 45 days during the 12 months preceding their 13th birthday should be included in this measure.

#### Administrative Data Specification

**Calculation:** This specification uses membership data to identify adolescents who turned 13 years old during the reporting year and claims/encounter data to identify adolescents who received a second dose of MMR by age 13. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using all enrolled adolescents whose 13th birthday was in the reporting year, who were members of the health plan as of their 13th birthday, who were continuously enrolled for 12 months immediately preceding their 13th birthday and who were not contraindicated for MMR. Members who have had no more than one break in enrollment of up to 45 days during the 12 months preceding their 13th birthday should be included in this measure.

**Numerator:** The number of adolescents in the denominator for each of the two populations (Medicaid and commercial) who received a second dose of MMR by age 13 (see CPT-4 procedure codes below) or had a seropositive test result for measles, mumps or rubella by their 13th birthday. Health plans need only identify one MMR for this measure and should count members who are identified as having one dose of MMR administered between ages 4 through 12 years.

Measles (CPT-4 codes 90705 or 90707 or 90708 or 90710)

Mumps (CPT-4 codes 90704 or 90707 or 90709 or 90710)

Rubella (CPT-4 codes 90706 or 90707 or 90708 or 90709 or 90710)

#### Hybrid Method Specification

**Calculation:** This specification uses membership data to identify adolescents who turned 13 years old during the reporting year and claims/encounter data and/or medical record review to identify adolescents who received a second dose of MMR by age 13. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using random samples of 411 Medicaid members and 411 commercial members from the plan's eligible populations. Eligible members include,

respectively, Medicaid enrolled adolescents and commercially enrolled adolescents who turned 13 years old during the reporting year, who were members of the plan as of their 13th birthday, who were continuously enrolled for 12 months immediately preceding their 13th birthday and who were not contraindicated for MMR. Members who have had no more than one break in enrollment of up to 45 days during the 12 months preceding their 13th birthday should be included in this measure.

**Numerator:** The number of adolescents in the denominator for each of the two populations (Medicaid and commercial) who received a second dose of MMR or a seropositive test result for measles, mumps or rubella by age 13, as documented by administrative data (see CPT-4 procedure codes below) or medical record review.

Measles (CPT-4 codes 90705 or 90707 or 90708 or 90710)

Mumps (CPT-4 codes 90704 or 90707 or 90709 or 90710)

Rubella (CPT-4 codes 90706 or 90707 or 90708 or 90709 or 90710)

**Note:** For immunization information obtained from patient history, plans may count the immunization in HEDIS reports if the medical record contains the following information: an author-identified and dated immunization history or an author-identified note indicating the place of service, the name(s) of the specific antigen and the date the immunization(s) was given. Entries made in the medical record at the time immunization(s) was given must include either an author-identified note indicating the name(s) of the specific antigen and the date the immunization(s) was given, or the vaccine lot number. A certificate of immunization prepared by an authorized health care provider or agency must include the specific dates and types of immunizations administered. (Refer to the note below on transferred records.) All medical record entries must be dated by the member's 13th birthday (i.e., entries made retroactively may not be counted). The following do not constitute sufficient evidence of immunization for HEDIS reporting:

- A note that the "member is up-to-date" with all immunizations, without a listing of the dates all immunizations were given and the names of the immunization agents.
- Records transferred from a previous health care provider or agency without a note that the authorized health care provider, to whom the records were transferred, has reviewed them.

#### Notes

- Hepatitis B, varicella and tetanus and diphtheria (Td) vaccinations are not required for 1996 reporting. The 1997 Recommended Childhood Immunization Schedule recommends that these vaccinations be administered to adolescents by age 13 years. The Td vaccine is being considered for 1997 reporting. The hepatitis B and varicella vaccinations will be phased-in and required for 1997 reporting. Specifically, documentation of one hepatitis B vaccine by the child's 13th birthday and either one varicella vaccine or documented history of the chicken pox by age 13 will be required.
- We recognize that without identifying the first and second MMR, health plans will be unable to verify that an MMR administered between ages 4 through 12 years is the second MMR. Health plans need only identify one MMR for this measure and should count all members who are identified through either administrative data or medical record review as having one dose of MMR administered between ages 4 through 12 years.

- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.
- Adolescents who are identified as being immunocompromised for the MMR vaccine may be excluded from the denominator of this measure. Plans that choose to exclude these immunocompromised adolescents from the denominator of this measure should look as far back as possible in the patient's history, through either administrative data or medical record review, for contraindications. Refer to Table 1B for the listing of contraindications.

**Table 1B: Contraindications for Adolescent Immunizations**

Immunization	Contraindication	ICD-9-CM Code
Any particular vaccine	anaphylactic reaction to the vaccine or its components	999.4
Any particular vaccine	vaccine not rendered due to contraindication	V64.0
MMR	immunodeficiency, including genetic (congenital) immunodeficiency syndromes	279.0x-279.1x, 279.2-279.9
MMR	cancer of lymphoreticular or histiocytic tissue	200.xx-202.xx
MMR	multiple myeloma	203.0x, 203.1x, 203.8x, with a fifth digit of '0' or '1'
MMR	leukemia	204.xx-208.xx, with a fourth digit of '0', '1', '2', '3', '8' or '9'; with a fifth digit of '0' or '1'
MMR	anaphylactic reaction to egg ingestion or streptomycin	995.68, E930.6

\* MMWR, Jan 28, 1994, Vol. 43, No. RR-1.

## ADVISING SMOKERS TO QUIT

### New Measure

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#### Description

Among Medicaid, commercial and Medicare risk enrolled adults age 18 years and older as of December 31 of the reporting year, who were continuously enrolled during the reporting year, who were either current smokers or recent quitters, and who were seen by a plan provider during the reporting year — the percentage who received advice to quit smoking during the reporting year from a plan provider. Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

#### Specifications

**Calculation:** This specification uses membership data to identify adults age 18 years and older and survey data to identify individuals who had one (or more) visits with a plan provider, who were current smokers or recent quitters and who reported having received advice to quit from a plan provider during the reporting year. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** The denominator for this measure consists of two steps. First, three separate denominators, one for each of the three required calculations, are derived using random samples of Medicaid, commercial and Medicare risk enrolled adults age 18 years and older as of December 31 of the reporting year, who were members of the health plan as of December 31 of the reporting year and who were continuously enrolled during the reporting year. Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included. Sampling will be carried out to assure that at least 107 adult smokers who have seen a physician complete the questionnaire.

Second, select those Medicaid, commercial and Medicare risk members, respectively, who responded to the survey indicating that they were either current smokers or recent quitters and that they had one or more visits with a plan provider during the reporting year. This forms the denominator of this measure.

**Note:** *Current smokers are individuals who smoke cigarettes every day or some days. Recent quitters are individuals who have stopped smoking for less than one year at the time of the survey. Members who respond "Refuse" or "Don't know" to question 2 are dropped from analysis. Members who respond "Refuse" or "Don't know" to question 3 are also dropped from analysis.*

**Numerator:** The number of members in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who reported having received advice to quit from a plan provider during the reporting year as determined through response to all of the following questions:

1. Have you ever smoked at least 100 cigarettes in your entire life?  
(Those answering "yes" are classified as "ever smokers" and would go to question 2; those answering "no" or "don't know/refused" would be done with the smoking survey.)

2. Do you now smoke every day, some days or not at all?  
(Those answering "every day" or "some days" are classified as current smokers and would go to question 4; those answering "not at all" are classified as former smokers and would go to question 3; those answering "don't know/refused" would be done with the smoking survey.)
3. How long has it been since you quit smoking cigarettes?  
(Those responding as having quit <1 year are classified as recent quitters and would go to question 4; those answering as having quit  $\geq 1$  year or don't know/refused would be done with the smoking survey.)
4. During the past 12 months, how many times have you visited a doctor or other health professional in your plan (do not count overnight hospital visits)?  
(Those responding one or more visits are classified as having been seen in the plan in the past year and would go to question 5; those responding "none" would be done with the smoking survey.)
5. On how many of these visits were you advised to quit smoking by a doctor or other health professional in your plan?  
(Those responding one or more times are classified as smokers who have received medical advice to quit; those responding "none" should be classified as smokers who have not received medical advice to quit.)

#### Notes

- Any health care provider who is affiliated with the health plan may provide medical advice to quit smoking (e.g., registered nurses, nurse-practitioners, physician assistants, physicians, etc.).
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for health plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.
- For the commercial population, the five survey questions comprising Advising Smokers to Quit will be included in the Member Satisfaction Survey contained in the Satisfaction with the Experience of Care domain. The information will be collected for Medicare beneficiaries through the Consumer Assessments of Health Plans Study (CAHPS) Medicare survey. The five questions will also be part of the CAHPS Medicaid survey. The CAHPS surveys are expected to be available in March 1997.

## FLU SHOTS FOR OLDER ADULTS

### New Measure

#### Description

The percentage of Medicare risk members age 65 years and older as of January 1 of the reporting year who were continuously enrolled during the reporting year and who received an influenza vaccination during the last four months of the reporting year (i.e., from September 1 through December 31 of the reporting year). Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

#### Specifications

**Calculation:** This specification uses membership data to identify adults, age 65 years and older as of January 1 of the reporting year. Survey data is used to identify individuals who received an influenza vaccination during the last four months of the reporting year.

**Denominator:** A random sample of Medicare risk enrolled adults, age 65 years and older as of January 1 of the reporting year, who were members of the health plan as of December 31 of the reporting year, and who were continuously enrolled during the reporting year. Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure. Sampling will be carried out to assure at least 411 respondents in the denominator.

**Numerator:** The number of members in the denominator who reported having received an influenza vaccination during the last four calendar months of the reporting year (i.e., from September 1 through December 31 of the reporting year) as determined through response to the following questions:

1. Did you get a flu shot last year (i.e., in 199X)? (Circle one)

- a. Yes
- b. No
- c. Don't remember

*(Those answering "yes" should proceed to question 2; those answering "no" or "don't remember" would be done with the HMO influenza survey and should not be counted in the numerator.)*

2. In what month did you get your flu shot? (Circle one)

- |                  |                   |                   |
|------------------|-------------------|-------------------|
| a. January 199X  | f. June 199X      | k. November 199X  |
| b. February 199X | g. July 199X      | l. December 199X  |
| c. March 199X    | h. August 199X    | m. Don't remember |
| d. April 199X    | i. September 199X |                   |
| e. May 199X      | j. October 199X   |                   |

*(Those responding "September 199X," "October 199X," "November 199X" or "December 199X" should proceed to question 3 and should be counted in the numerator;*

those responding "January 199X," "February 199X," "March 199X," "April 199X," "May 199X," "June 199X," "July 199X," "August 199X" or "Don't remember" should proceed to question 3, but should not be counted in the numerator.

3. Where did you go to get your flu shot? (Circle one)
- |   |  |
|---|--|
| a. HMO flu clinic                         | g. Military facility (e.g., Veterans with the plan Administration) |
| b. Clinic outside of HMO                  | h. A store (name of store _____)                                   |
| c. Senior Center                          | i. Other _____   |
| d. Primary care doctor's office           | j. Don't remember  |
| e. County Health Department               |  |
| f. Private doctor's office not affiliated |  |

### Notes

- Health plans should not exclude individuals with a diagnosis of influenza during the reporting year or previous years from this measure.
- Plans must use the Consumer Assessments of Health Plans Study (CAHPS) for the Medicare risk population. The specifications for the Medicare version of the CAHPS survey will contain detailed instructions, including sampling guidelines.
- Plans should substitute the reporting year (e.g., 1996) for all instances in which, "199X" is stated.
- Influenza vaccinations rendered in any setting should count toward the measure (e.g., inpatient, outpatient, SNF).
- This measure is not applicable to the commercial or Medicaid populations because the number of individuals age 65 years and older whose primary coverage is commercial or Medicaid is extremely small. It is therefore not feasible to collect this measure for those populations.
- Plans may identify and exclude the following individuals from the denominator. Plans that choose to exclude these individuals should look back as far as possible in the member's history for these exclusions.
  - Individuals residing in hospice care (UB-92 "Type of Bill" code: 81X or 82X; UB-92 "Revenue" code: 115, 125, 135, 145, 155, 650, 651, 652, 655, 656, 657 or 659).
  - Individuals with an allergy to eggs (ICD-9-CM code: V15.0).
  - Individuals with a history of allergy to the flu vaccine (ICD-9-CM code: V64.0).
  - Individuals with a history of Guillain-Barre Syndrome (ICD-9-CM code: 357.0).

## BREAST CANCER SCREENING

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- Age range has been expanded to include individuals up to age 69 years.
- This measure, which was optional in Medicaid HEDIS, is now required for the Medicaid and Medicare risk populations.
- An exclusionary rule has been added for women who are identified as having had radical bilateral mastectomies.

### Description

The percentage of Medicaid, commercial and Medicare risk women age 52 through 69 years, who were continuously enrolled during the reporting year and the preceding year, and who had a mammogram during the reporting year or the preceding year. Members who have had no more than one break in enrollment of up to 45 days per year should be included in this measure.

### Administrative Data Specification

**Calculation:** This specification uses membership data to identify women age 52 through 69 years and claims/encounter data to identify those women who received one or more mammograms during the reporting year or the year prior to the reporting year. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using all enrolled women age 52 through 69 years as of December 31 of the reporting year, who were members of the plan as of December 31 of the reporting year, who were continuously enrolled during the reporting year and the preceding year and who were not identified as having had a radical bilateral mastectomy. Members who have had no more than one break in enrollment of up to 45 days per year should be included in this measure.

**Numerator:** The number of members in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who have had one (or more) mammogram(s) during the reporting year or the year prior to the reporting year. A woman is considered to have had a mammogram if a submitted claim/encounter meets any of the following criteria:

CPT-4 code: 76090 or 76091 or 76092

OR

Revenue code: 401 or 403

OR

ICD-9-CM procedure code: 87.37 or 87.36

OR

Revenue code: 320 or 400 in conjunction with the following breast-related ICD-9-CM diagnosis codes: 174.xx, 198.81, 217, 233.0, 611.72, 793.8, V10.3, V76.1.

### Hybrid Method Specification

**Calculation:** This specification uses membership data to identify women age 52 through 69 years. Claims/encounter data and/or medical record review is used to identify those women who received one or more mammograms during the reporting year or the year prior to the reporting year. Separate calculations are required for the Medicaid, commercial, and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using random samples of 411 Medicaid members, 411 commercial members and 411 Medicare risk members from the plan's eligible populations. Eligible members include Medicaid enrolled women or commercially enrolled women or Medicare risk enrolled women age 52 through 69 years as of December 31 of the reporting year, who were members of the plan as of December 31 of the reporting year, who were continuously enrolled during the reporting year and the preceding year and who were not identified as having had a radical bilateral mastectomy. Members who have had no more than one break in enrollment of up to 45 days per year should be included in this measure.

**Numerator:** The number of enrolled women in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who have had one (or more) mammogram(s) during the reporting year or the year prior to the reporting year as documented through either administrative data or medical record review. Documentation in the medical record must include, at a minimum, an author-identified note indicating the date the mammogram was performed and the result or finding.

### Notes

- Plans may exclude from the denominator those women who are identified as having had a radical bilateral mastectomy. Plans that choose to exclude these individuals should look for bilateral mastectomies as far back as possible in the patient's history, through either administrative data or medical record review. Refer to Table 1C for exclusionary codes. This is a change from HEDIS 2.5 and Medicaid HEDIS in an effort to produce more accurate rates.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.

**Table 1C: Breast Cancer Screening Exclusionary Codes**

Mastectomy Status	ICD-9-CM Codes	CPT-4 Codes
Surgical codes for mastectomy	85.44	19240-50 or 19240 and 09950
	85.46	19200-50 or 19200 and 09950
	85.48	19220-50 or 19220 and 09950

## CERVICAL CANCER SCREENING

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

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- Medicaid HEDIS continuous enrollment standard of 12 months has been adopted.
  - HEDIS 2.5 age specification has been adopted.
  - An exclusionary rule has been added for women who are identified as having had a hysterectomy.
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### Description

The percentage of Medicaid and commercially enrolled women age 21 through 64 years, who were continuously enrolled during the reporting year, and who received one or more Pap tests during the reporting year or the two years prior to the reporting year. Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

### Administrative Data Specification

**Calculation:** This specification uses membership data to identify women age 21 through 64 years and claims/encounter data to identify those women who received one or more Pap tests during the reporting year or the two years prior to the reporting year. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using all enrolled women age 21 through 64 years as of December 31 of the reporting year, who were members of the plan as of December 31 of the reporting year, who were continuously enrolled during the reporting year and who were not identified as having had a hysterectomy with no residual cervix. Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

**Numerator:** The number of members in the denominator for each of the two populations (Medicaid and commercial) who have had one (or more) Pap tests during the reporting year or the two years prior to the reporting year. A woman is considered to have had a Pap test if a submitted claim/encounter meets any of the following criteria:

CPT-4 code: 88150 or 88151 or 88155 or 88156 or 88157

OR

Revenue code: 923

OR

Revenue code: 300 or 310 in conjunction with one of the following cervical-related ICD-9-CM diagnosis codes: 180.x, 233.1, 622.x, 795.0, 795.1, V72.3, V76.2

OR

ICD-9-CM procedure code: 91.46

**Hybrid Method Specification**

**Calculation:** This specification uses membership data to identify women age 21 through 64 years. Claims/encounter data and/or medical record review is used to identify those women who received one or more Pap tests during the reporting year or the two years preceding the reporting year. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using random samples of 411 Medicaid members and 411 commercial members from the plan's eligible populations. Eligible members include all women age 21 through 64 years as of December 31 of the reporting year, who were members of the plan as of December 31 of the reporting year, who were continuously enrolled during the reporting year and who were not identified as having had a hysterectomy with no residual cervix. Members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

**Numerator:** The number of enrolled women in the denominator for each of the two populations (Medicaid and commercial) who have had one (or more) Pap tests during the reporting year or the two years prior to the reporting year as detected through either administrative data or medical record review. Documentation in the medical record must include, at a minimum, an author-identified note indicating the date the test was performed and the result or finding.

**Notes**

- Plans may exclude from the denominator those individuals who have been identified as having had a hysterectomy with no residual cervix. Plans that choose to exclude these individuals should look for hysterectomies as far back as possible in the patient's history, through either administrative data or medical record review. Refer to Table 1D for exclusionary codes. This is a change from HEDIS 2.5 and Medicaid HEDIS in an effort to produce more accurate rates.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.

**Table 1D: Cervical Cancer Screening Exclusionary Codes**

Hysterectomy Status	ICD-9-CM Codes	CPT-4 Codes
Surgical codes for hysterectomy	68.4	58150, 58152, 58200
	68.5, 68.51, 68.59	56308, 58260, 58262, 58263, 58267, 58270, 58275, 58280
	68.6	58210
	68.7	58285
	68.8	58240
		59135

## PRENATAL CARE IN THE FIRST TRIMESTER

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- This measure, from HEDIS 2.5, now applies to the Medicaid population as well.
- Continuous enrollment has been changed from 12 months to 44 weeks prior to delivery.
- The age specification has been removed.

### Description

The percentage of Medicaid and commercially enrolled women who delivered a live birth during the reporting year, who were continuously enrolled for 44 weeks prior to delivery, and who had a prenatal care visit 26 to 44 weeks prior to delivery (or prior to Estimated Date of Confinement (EDC), if known). Members who have had no more than one break in enrollment of up to 45 days during the 44 weeks prior to delivery should be included in this measure.

### Administrative Data Specification

**Calculation:** This specification uses hospital discharge and membership data to identify the number of enrolled women who delivered (a) live birth(s) during the reporting year. Encounter data is used to identify those women who received prenatal care during the first trimester. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using all women who delivered (a) live birth(s) during the reporting year and who were continuously enrolled in the plan for 44 weeks prior to delivery. Members who have had no more than one break in enrollment of up to 45 days during the 44 weeks prior to delivery should be included in this measure.

**Note:** To ensure the completeness and validity of live-birth information, plans often use several data sources with different coding schemes. Codes are differentiated by their ability to denote deliveries resulting in a live birth; some codes may be used alone while others may be used as part of a combination of codes (e.g., V codes may be used alone; CPT-4 procedure codes may be used in conjunction with ICD-9-CM diagnosis codes). Regardless of the method employed by the health plan to document live births, the plan is responsible for verifying that only live births are included in this measure.

To identify deliveries resulting in live births, women who have been discharged with one of the following codes should be counted:

DRG codes: 370-375. Only deliveries resulting in live births should be included.

The plan is responsible for documenting its method for validating live births when using DRGs.

OR

ICD-9-CM codes: An ICD-9-CM diagnosis code of 650.

OR

V codes: V code of V27.0, V27.2, V27.3, V27.5 or V27.6.

OR

An equivalent method used by the plan to document live births. The plan must document the method, including codes used, for validating live births.

*Suggestion for verifying live births*

To verify V codes for live births, the following ICD-9-CM diagnosis codes may be used:

640.0x-648.9x with a fifth digit equal to "1" or "2"

OR

651.0x-656.3x with a fifth digit equal to "1" or "2"

OR

656.5x-676.9x with a fifth digit equal to "1" or "2"

OR

669.5x-669.7x

To verify ICD-9-CM codes for live births, CPT-4 codes 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620 or 59622 may be used in conjunction with one or more of the ICD-9-CM codes listed above.

**Numerator:** The number of women in the denominator for each of the two populations (Medicaid and commercial) who had a prenatal care visit 26 to 44 weeks prior to delivery (or prior to EDC, if known). Refer to Table 1E, which identifies the specifications or markers for early prenatal care obtainable from administrative data. Note that the numerator is calculated retroactively from time of delivery or EDC.

*Note: Table 1E is recommended and should be used by plans as the basis of their search to identify prenatal care visits in the first trimester. Plans may use any of the three rules presented in Table 1E to search for evidence of prenatal care; a woman's record need satisfy only one of the rules. Plans should document their method for identifying prenatal care whether or not these decision rules are followed.*

**Hybrid Method Specification**

**Calculation:** This specification uses hospital discharge and membership data to identify the number of enrolled women who delivered (a) live birth(s) during the reporting year. Encounter data and/or medical record review is used to identify those women who received prenatal care during the first trimester. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using random samples of 411 Medicaid members and 411 commercial members from the plan's eligible populations. Eligible members include all women who delivered (a) live birth(s) during the reporting year, and who were continuously enrolled for 44 weeks prior to delivery. Members who have had no more than one break in enrollment of up to 45 days during the 44 weeks prior to delivery should be included in this measure.

*Note: To ensure the completeness and validity of live-birth information, plans often use several data sources with different coding schemes. Codes are differentiated by their ability to denote deliveries resulting in a live birth; some codes may be used alone while others may be used as part of a combination of codes (e.g., V codes may be used alone; CPT-4 procedure codes may be used in conjunction with ICD-9-CM diagnosis codes). Regardless of the method employed by the health plan to document live births, the plan is responsible for verifying that only live births are included in this measure.*

To identify deliveries resulting in live births, women who have been discharged with one of the following codes should be counted:

DRG codes: 370-375. Only deliveries resulting in live births should be included. The plan is responsible for documenting its method for validating live births when using DRGs.

OR

ICD-9-CM codes: An ICD-9-CM diagnosis code of 650.

OR

V codes: V code of V27.0, V27.2, V27.3, V27.5 or V27.6.

OR

An equivalent method used by the plan to document live births. The plan must document the method, including codes used, for validating live births.

*Suggestion for verifying live births*

To verify V codes for live births, the following ICD-9-CM diagnosis codes may be used:

640.0x-648.9x with a fifth digit equal to "1" or "2"

OR

651.0x-656.3x with a fifth digit equal to "1" or "2"

OR

656.5x-676.9x with a fifth digit equal to "1" or "2"

OR

669.5x-669.7x

To verify ICD-9-CM codes for live births, CPT-4 codes 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620 or 59622 may be used in conjunction with one or more of the ICD-9-CM codes listed above.

**Numerator:** The number of enrolled women in the denominator for each of the two populations (Medicaid and commercial) who had a prenatal care visit 26 to 44 weeks prior to delivery date (or prior to EDC, if known). The visit may be identified through administrative data (see Table 1E) or medical record review. For a prenatal care visit(s) to a midwife or OB provider, documentation in the medical record must include an author-identified note indicating the date on which the prenatal care visit(s) occurred and evidence of one of the following:

A basic physical obstetrical examination that includes either auscultation for fetal heart tone, or pelvic exam with obstetric observations or measurement of fundus height (a standardized prenatal OB form may be used).

OR

Evidence that a prenatal care procedure was performed, such as a screening test in the form of either an obstetric panel, or a rubella antibody test/titer with an Rh incompatibility (ABO/Rh) blood typing, and/or echography of a pregnant uterus.

OR

Evidence that a diagnosis of pregnancy has been established, in the form of a complete medical and obstetrical history and documentation of last menstrual period (LMP) or EDC.

OR

Documentation of LMP or EDC in conjunction with either prenatal risk assessment and counseling/education or a complete obstetrical history.

For a prenatal care visit(s) to a family practitioner or other primary care provider, documentation in the medical record must include an author-identified note indicating the date on which the prenatal care visit(s) occurred and evidence of one of the following:

A basic physical obstetrical examination that includes either auscultation for fetal heart tone, or pelvic exam with obstetric observations or measurement of fundus height (a standardized prenatal OB form may be used).

OR

Evidence that a prenatal care procedure was performed, such as screening test in the form of either an obstetrical panel, or a rubella antibody test/titer with an Rh incompatibility (ABO/Rh) blood typing, and/or echography of a pregnant uterus, and evidence that a diagnosis of pregnancy has been established, in the form of a complete medical and obstetrical history and documentation of LMP or EDC.

OR

Evidence that a prenatal care procedure was performed, such as a screening test in the form of either an obstetric panel, a rubella antibody test/titer with an Rh incompatibility (ABO/Rh) blood typing, an antenatal screen, and/or echography of a pregnant uterus, and evidence that a diagnosis of pregnancy has been established in the form of a documented LMP or EDC in conjunction with either prenatal risk assessment and counseling/education or a complete obstetrical history.

Note that the numerator is calculated retroactively from time of delivery or EDC.

### Notes

- For a prenatal care visit to a family practitioner or other primary care provider, documentation in the medical record at the time of the prenatal care visit need not include a complete medical history if the primary care provider is the patient's regular doctor and has documented the patient's medical history elsewhere in the medical record.
- A prenatal care visit to a family practitioner or other primary care provider requires both diagnosis-based and procedure-based evidence of prenatal care to ensure that prenatal care services were rendered in addition to the member's pregnancy status.

- Evidence of prenatal care may be completed during any visit(s) during the first trimester.
- By specifying the population at risk to include only live births, HEDIS captures only a percentage of plan members' pregnancies.
- Live births that occurred in a birthing center should be included in this measure.
- When counting prenatal visits, include visits to physicians, nurse practitioners and midwives, as well as registered nurses provided that evidence of co-signature by a physician is present, if required by state law.
- The numerator includes visits that take place 26 to 44 weeks prior to delivery. Forty-four weeks was specified to ensure inclusion of first trimester visits for women who deliver post-term, thereby recognizing the imprecise nature of estimated delivery dates.
- EDC is calculated by subtracting three months from the first day of the last menstrual period and adding seven days.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.
- Plans may map state-specific HCPCS Level II or Level III codes (i.e., codes beginning with 'W', 'X', 'Y', and 'Z') to the corresponding CPT-4 codes in this measure.

**Table 1E: Markers for Early Prenatal Care Obtainable from Administrative Data**

<b>Decision Rule 1</b>	
<b>Marker Event:</b>	<b>Specifications:</b>
Prenatal care visit to a midwife, OB provider or family practitioner or other primary care provider with documentation of when prenatal care was initiated.	CPT-4 = 59400* or 59510* or 59610* or 59618* or 59425** or 59426**
<b>OR</b>	
<b>Decision Rule 2</b>	
<b>Marker Event:</b>	<b>Specifications:</b>
Any visit to a midwife or OB provider with either Procedure-based evidence of prenatal care in the form of screening tests such as an obstetric panel-alone, or torch antibody panel alone or rubella antibody/titer with Rh incompatibility (ABO/Rh blood typing), or ultrasound (echography) of a pregnant uterus.	CPT-4 = 99201-99205, 99211-99215; or Revenue code 514 with either CPT-4 = 80055 alone or 80090 alone, or 86762 with 86900 or 86901; or CPT-4 = 76805, 76815, or 76816
OR Diagnosis-based evidence of prenatal care in the form of pregnancy-related diagnosis or ICD-9-CM V code for prenatal care.	OR ICD-9-CM = (640.0x-648.9x or 651.0x-659.9x) where x (5th digit)=3 or ICD-9-CM = V22.0-V23.9 or V28.x
<b>OR</b>	
<b>Decision Rule 3</b>	
<b>Marker Event:</b>	<b>Specifications:</b>
Any visit to a family practitioner or other primary care provider with both Procedure-based evidence of prenatal care in the form of screening tests such as an obstetric panel-alone, or torch antibody panel alone or rubella antibody/titer with Rh incompatibility (ABO/Rh blood typing), or ultrasound (echography) of a pregnant uterus.	CPT-4 = 99201-99205, 99211-99215; or Revenue code 514 with both CPT-4 = 80055 alone or 80090 alone or 86762 with 86900 or 86901; or CPT-4 = 76805, 76815, or 76816
AND Diagnosis-based evidence of prenatal care in the form of pregnancy-related diagnosis or ICD-9-CM V code for prenatal care.	AND ICD-9-CM = (640.0x-648.9x or 651.0x-659.9x) where x (5th digit)=3 or ICD-9-CM = V22.0-V23.9 or V28.x
<b>OR</b>	
<b>Decision Rule 4</b>	
<b>Marker Event:</b>	<b>Specifications:</b>
Any visit to a family practitioner or other primary care provider with Diagnosis-based evidence of prenatal care in the form of a documented LMP or EDC with either a complete obstetrical history or risk assessment and counseling/education.	CPT-4 = 99201-99205, 99211-99215; or Revenue code 514 with internal plan code for an obstetrical history or risk assessment and counseling/education (if applicable).

\* Generally these codes are used on the date of delivery, not the first date for OB care, so this code will be useful only if the claim form indicates when prenatal care was initiated.

\*\* This code will be useful only if the claim form indicates when prenatal care was initiated.

Source: Harvard Pilgrim Health Care

## LOW BIRTH-WEIGHT BABIES

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- This measure, from HEDIS 2.5 and Medicaid HEDIS, is not required for the 1996 reporting year. It is being deferred because of the persistent problems with risk adjustment and ability to identify low birth-weight infants based on administrative data. Improved specifications will be developed, and the measure will be required for the 1997 reporting year.
- HEDIS 2.5 continuous enrollment standard of 12 months has been adopted.
- The age limits for the mother applied in HEDIS 2.5 have been removed.

### Description

Two birth-weight measures are to be calculated: 1) the percentage of infants whose birth weight is less than 1,500 grams and 2) the percentage of infants whose birth weight is less than 2,500 grams. Babies in the very low birth-weight category are a subset of the babies in the low birth-weight category. Female members who have been continuously enrolled for 12 months prior to delivery and who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

### Administrative Data Specification

**Calculation:** This specification uses hospital discharge data to identify the number of live deliveries to enrolled women during the reporting year. Hospital discharge data and/or birth certificate data identifies infants weighing less than 1,500 grams and/or less than 2,500 grams. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using all live births delivered to women who were continuously enrolled for 12 months prior to delivery. Female members who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

**Note:** To ensure the completeness and validity of live-birth information, plans often use several data sources with different coding schemes. Codes are differentiated by their ability to denote deliveries resulting in a live birth; some codes may be used alone while others may be used as part of a combination of codes (e.g., V codes may be used alone; CPT-4 procedure codes may be used in conjunction with ICD-9-CM diagnosis codes). Regardless of the method employed by the plan to document live births, the plan is responsible for verifying that only live births are included in this measure.

1: Identify women who have had at least one live birth during the reporting year. These are deliveries with one of the following codes:

DRG codes: 370-375. Only deliveries resulting in live births should be included. The plan is responsible for documenting its method for validating live births when using DRGs.

OR

ICD-9-CM codes: An ICD-9-CM diagnosis code of 650.

OR

V codes: V code of V27.0, V27.2, V27.3, V27.5 or V27.6.

OR

An equivalent method used by the plan to document live births. The plan must document the method, including codes used, for validating live births.

*Suggestion for verifying live births*

To verify V codes for live births, the following ICD-9-CM diagnosis codes may be used:

640.0x-648.9x with a fifth digit equal to "1" or "2"

OR

651.0x-656.3x with a fifth digit equal to "1" or "2"

OR

656.5x-676.9x with a fifth digit equal to "1" or "2"

OR

669.5x-669.7x

To verify ICD-9-CM codes for live births, CPT-4 codes 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620 or 59622 may be used in conjunction with one or more of the ICD-9-CM codes listed above.

2: Of these women, include those who were continuously enrolled for 12 months prior to delivery.

3: Include in the denominator all live births (i.e., a count of all live babies, not deliveries) to the women who were continuously enrolled for 12 months prior to delivery. Discharge abstracts for live newborns have a principal ICD-9-CM diagnosis code of V30.x-V39.x.

**Numerator:** The numerator to calculate the very low birth-weight rate is the number of infants weighing less than 1,500 grams. The numerator to calculate the low birth-weight rate is the number of infants in the denominator with birth weights of less than 2,500 grams. Birth-weight information can be obtained from the child's discharge abstract, medical record or birth certificate.

If the baby's discharge abstract data are used, identify low birth-weight infants by the fifth digit of ICD-9-CM codes 764 (slow fetal growth and fetal malnutrition) and 765 (disorders relating to short gestation and unspecified low birth weight).

The numerator to calculate the very low birth-weight rate is the number of babies in the denominator for each of the two populations (Medicaid and commercial) with an ICD-9-CM code of:

764.x1, 764.x2, 764.x3, 764.x4, 764.x5, 765.x1, 765.x2, 765.x3, 765.x4 or 765.x5, where x can be 0, 1, 2 or 9.

The numerator to calculate the low birth-weight rate is the number of babies, reflected in the denominator for each of the two populations (Medicaid and commercial), with

an ICD-9-CM code of:

764.x1, 764.x2, 764.x3, 764.x4, 764.x5, 764.x6, 764.x7, 764.x8, 765.x1, 765.x2, 765.x3, 765.x4, 765.x5, 765.x6, 765.x7 or 765.x8, where x can be 0, 1, 2 or 9.

### Notes

- If the reliability of the fifth-digit ICD-9-CM coding of low birth-weight infants is low, plans should consider alternative sources of data (e.g., birth certificates, medical records).
- Include births that occur in birthing centers in the calculation of this measure.
- Some plans do not complete discharge abstracts for newborns discharged at the same time as their mothers. These plans should follow the approximation method described in Table 1F to identify the number of live infants born to the mother. The plan should then develop a method (e.g., one based on birth certificates) to identify infants who had low or very low birth weights. Plans should carefully document their method.
- Low birth weight is an outcome measure that can be influenced by many variables. No adjustment for these variables is made in this measure. Thus, the measure is best trended over time for an individual health plan.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.
- Most plans will want to calculate their low birth-weight rates using hospital discharge abstract data. Because there is concern about the reliability of fifth-digit ICD-9-CM coding on the discharge abstract, we recommend that health plans conduct an internal audit to verify the completeness and accuracy of coded birth-weight data. Specifically, we encourage health plans to select a sample of births and compare the discharge abstract birth-weight information to the medical record. Plans should include the results of the internal audit as a part of their HEDIS reports. If the reliability of the discharge abstract data is low, health plans should consider alternative sources of data (e.g., birth certificates).

### Hybrid Method Specification

Because the cost associated with estimating low birth-weight rates through the random sampling of medical records would be prohibitively high, and the low birth-weight rate for the majority of plans is very low (e.g., around 5%) that using a sample to calculate this measure results in a relative margin of error so great that the reported rate would be meaningless, only an administrative data specification for this measure is provided.

**Table 1F: Method to Approximate the Number of Newborns in the Absence of Newborn Claims**

After excluding all deliveries without a live birth (V27.1, V27.4, V27.7, V35), classify the remaining deliveries according to the following algorithm:

	ICD-9 Code	OR	ICD-9 Code	OR	ICD-9 Code	OR	ICD-9 Code	OR	ICD-9 Code	OR	ICD-9 Code	OR	ICD-9 Code	OR	ICD-9 Code	# Live Newborns		
If Dx code	651.3	OR	V27.0	OR	V27.3	OR	V30.xx	OR	V32.xx	OR	V35.xx					Then count as one newborn		
If Dx code	651.0	OR	651.4	OR	651.5	OR	651.6	OR	V27.2	OR	V27.6	OR	V31.xx	OR	V33.xx	OR	V36.xx	Then count as two newborns
If Dx code	651.1	OR	651.9	OR	V27.5	OR	V37.xx											Then count as three newborns
If Dx code	651.2	OR	V34.xx															Then count as four newborns
If Dx code	651.8																	Then count as five newborns

If more than one of the above codes exists in the same discharge record, resolve conflicts as follows:

1. If a code on a discharge record indicates one newborn (codes on the first row = 651.3, V27.0, V27.3, V30.xx or V32.xx) but another code on the discharge record indicates two or three newborns (codes on the second and third row), then plans should use the higher number of newborns. For example, 651.3 indicates one newborn and code 651.0 indicates two newborns. Plans should count two newborns.
2. On the other hand, if a code indicates one, two or three newborns (codes on first, second and third row) and another code indicates four or five newborns, then plans should use the lower number. For example, 651.1 indicates three newborns and code 651.8 indicates five newborns. Plans should use only three newborns in their count.
3. If a plan does not have any of the above codes or a system to determine the number of newborns, it should count only one newborn for every delivery.

## CHECK-UPS AFTER DELIVERY

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- This measure, optional in Medicaid HEDIS, is now required for Medicaid and commercial populations.

### Description

The percentage of Medicaid and commercially enrolled women who delivered (a) live birth(s) during the reporting year who were continuously enrolled 42 days after delivery, with no breaks in enrollment, who had a postpartum visit by the 42nd day after delivery.

### Administrative Data Specification

**Calculation:** This specification uses hospital discharge and membership data to identify the number of women who delivered (a) live birth(s) during the reporting year. Claims/encounter data is used to identify those women who received postpartum care. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using all enrolled women who delivered (a) live birth(s) from January 1 through November 18 of the reporting year and who were continuously enrolled for 42 days after delivery, with no breaks in enrollment.

**Note:** To ensure the completeness and validity of live-birth information, plans often use several data sources with different coding schemes. Codes are differentiated by their ability to denote deliveries resulting in a live birth; some codes may be used alone while others may be used as part of a combination of codes (e.g., V codes may be used alone; CPT-4 procedure codes may be used in conjunction with ICD-9-CM diagnosis codes). Regardless of the method employed by the health plan to document live births, the plan is responsible for verifying that only live births are included in this measure.

To identify deliveries resulting in live births, women who have been discharged with one of the following codes should be counted:

DRG codes: 370-375. Only deliveries resulting in live births should be included. The plan is responsible for documenting its method for validating live births when using DRGs.

OR

ICD-9-CM codes: An ICD-9-CM diagnosis code of 650.

OR

V codes: V code of V27.0, V27.2, V27.3, V27.5 or V27.6.

OR

An equivalent method used by the plan to document live births. The plan must document the method, including codes used, for validating live births.

**Suggestion for verifying live births**

To verify V codes for live births, the following ICD-9-CM diagnosis codes may be used:

640.0x-648.9x with a fifth digit equal to "1" or "2"

OR

651.0x-656.3x with a fifth digit equal to "1" or "2"

OR

656.5x-676.9x with a fifth digit equal to "1" or "2"

OR

669.5x-669.7x

To verify ICD-9-CM codes for live births, CPT-4 codes 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620 or 59622 may be used in conjunction with one or more of the ICD-9-CM codes listed above.

**Numerator:** The number of women in the denominator for each of the two populations (Medicaid and commercial) who had a postpartum visit by the 42nd day after delivery. A woman is considered to have had a postpartum visit if a submitted claims/encounter includes any of the following codes and has a date of service between the hospital discharge date and the 42nd day after the delivery.

**ICD-9-CM codes:**

V24.1 Lactating mother (supervision of lactation)

V24.2 Routine postpartum follow-up

OR

**CPT-codes:**

59400 Vaginal delivery: Routine obstetric care including antepartum care, vaginal delivery and postpartum care

59410 Vaginal delivery, including postpartum care

59430 Postpartum care only (separate procedure)

59510 Cesarean delivery: Routine obstetric care including antepartum care, cesarean delivery and postpartum care

59515 Cesarean delivery, including postpartum care

59610 Routine obstetric care, including postpartum care

59614 Routine obstetric care, including postpartum care

59618 Routine obstetric care, including postpartum care

59622 Cesarean delivery, including postpartum care

### Hybrid Method Specification

**Calculation:** This specification uses hospital discharge and membership data to identify the number of women who delivered (a) live birth(s) during the reporting year. Claims/encounter data and/or medical record review is used to identify those women who received postpartum care by the 42nd day after delivery. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived using random samples of 411 Medicaid members and 411 commercial members from the health plan's eligible populations. Eligible members include Medicaid and commercially enrolled women who delivered (a) live birth(s) from January 1 through November 18 of the reporting year and who were continuously enrolled for 42 days after delivery, with no breaks in enrollment.

**Note:** To ensure the completeness and validity of live-birth information, plans often use several data sources with different coding schemes. Codes are differentiated by their ability to denote deliveries resulting in a live birth; some codes may be used alone while others may be used as part of a combination of codes (e.g., V codes may be used alone; CPT-4 procedure codes may be used in conjunction with ICD-9-CM diagnosis codes). Regardless of the method employed by the plan to document live births, the plan is responsible for verifying that only live births are included in this measure.

To identify deliveries resulting in live births, women who have been discharged with one of the following codes should be counted:

DRG codes: 370-375. Only deliveries resulting in live births should be included. The plan is responsible for documenting its method for validating live births when using DRGs.

OR

ICD-9-CM codes: An ICD-9-CM diagnosis code of 650.

OR

V codes: V code of V27.0, V27.2, V27.3, V27.5 or V27.6.

OR

An equivalent method used by the plan to document live births. The plan must document the method, including codes used, for validating live births.

#### *Suggestion for verifying live births*

To verify V codes for live births, the following ICD-9-CM diagnosis codes may be used:

640.0x-648.9x with a fifth digit equal to "1" or "2"

OR

651.0x-656.3x with a fifth digit equal to "1" or "2"

OR

656.5x-676.9x with a fifth digit equal to "1" or "2"

OR

669.5x-669.7x

To verify ICD-9-CM codes for live births, CPT-4 codes 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620 or 59622 may be used in conjunction with one or more of the ICD-9-CM codes listed above.

**Numerator:** The number of enrolled members in the denominator for each of the two populations (Medicaid and commercial) who had a postpartum visit by the 42nd day after delivery as documented through either administrative data medical record review.

#### Notes

- By specifying the denominator population to include only women with live births, this measure captures only a percentage of a plan members' pregnancies.
- Women who delivered in a birthing center should be included in this measure.
- When counting postpartum visits, include visits to physicians, nurse practitioners and midwives.

## TREATING CHILDREN'S EAR INFECTIONS

### New Measure

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#### Description

The percentage of Medicaid and commercially enrolled children who were diagnosed with an uncomplicated episode of acute otitis media during the reporting year, who were continuously enrolled for six months immediately preceding the diagnosis or, if the child was younger than six months old at the time of diagnosis, continuously enrolled since birth, and who were dispensed an antibiotic other than a preferred antibiotic. The rate reported is  $1 - (\text{numerator}/\text{denominator})$ .

Health plans should only count the first uncomplicated episode of acute otitis media occurring during the reporting year, and no child should be counted more than once in this measure. Plans should count in this measure only those members who have had no breaks in enrollment during the six months preceding the first episode or, if the child was younger than six months old at the time of diagnosis, since birth.

*Note: The inverted rate is reported in this measure to be consistent with other Effectiveness of Care measures: a higher rate indicates better performance.*

#### Administrative Data Specification

**Calculation:** This specification uses membership data and claims/encounter to identify children at least six weeks old but less than 60 months (five years) old who were diagnosed with an uncomplicated episode of acute otitis media during the reporting year. Pharmacy data is used to identify children who were dispensed an antibiotic other than a preferred antimicrobial agent. Separate calculations are required for the Medicaid and commercial populations.

**Denominator:** Two separate denominators, one for each of the two required calculations, are derived from the number of enrolled children who meet the following criteria:

Who were diagnosed during the reporting year with an uncomplicated episode of acute otitis media. Plans should use the following ICD-9-CM principal diagnosis codes to identify an uncomplicated episode of acute otitis media: 382.4, 382.9, 382.00 or 382.01.

AND

Who were at least six weeks old but less than 60 months (five years) old at the time of diagnosis.

AND

Who were continuously enrolled for six months immediately preceding the diagnosis or, if the child was younger than six months old at the time of diagnosis, since birth.

AND

Who were not identified as having a diagnosis of an infectious comorbidity or underlying disorder of immunity (refer to Table 1G) occurring on the same date of service or within six months prior to the diagnosis of acute otitis media.

AND

Who were not identified as having a previous diagnosis of acute otitis media within the preceding six months (i.e., ICD-9-CM diagnosis codes 382.4, 382.9, 382.00 or 382.01).

Note: Health plans should use only the first uncomplicated episode in the reporting year to calculate this measure.

Numerator: The number of children in the denominator for each of the two populations (Medicaid and commercial) who were dispensed an antibiotic other than a preferred antimicrobial (either amoxicillin or trimethoprim-sulfamethoxazole). The prescription for any antibiotic other than amoxicillin or trimethoprim-sulfamethoxazole should have been dispensed within two days of the diagnosis to ensure that it was prescribed for the acute otitis media episode. The following prescriptions correspond to trimethoprim-sulfamethoxazole and do not count in the numerator: Bactrim, Septra and Sulfatrim Suspension.

Rate:  $1 - (\text{Numerator}/\text{Denominator})$ .

#### Hybrid Method Specification

Calculation: This specification uses membership and claims/encounter to identify children at least six weeks old but less than 60 months (five years) old who were diagnosed with an uncomplicated episode of acute otitis media during the reporting year. Pharmacy data and/or medical record review is used to identify children who were dispensed an antibiotic other than a preferred antimicrobial agent. Separate calculations are required for the Medicaid and commercial populations.

Denominator: Two separate denominators, one for each of the two required calculations, are derived using random samples of 411 Medicaid enrolled children and 411 commercially enrolled children who meet the following criteria:

Who were diagnosed during the reporting year with an uncomplicated episode of acute otitis media. Plans should use the following ICD-9-CM principal diagnosis codes to identify an uncomplicated episode of acute otitis media: 382.4, 382.9, 382.00 or 382.01.

AND

Who were at least six weeks old but less than 60 months (five years) old at the time of diagnosis.

AND

Who were continuously enrolled for six months immediately preceding the diagnosis or, if the child was younger than six months old at the time of diagnosis, since birth.

AND

Who were not identified as having a diagnosis of an infectious comorbidity or underlying disorder of immunity (refer to Table 1G) occurring on the same date of service or within six months prior to the diagnosis of acute otitis media.

AND

Who were not identified as having a previous diagnosis of acute otitis media within the preceding six months (i.e., ICD-9-CM diagnosis codes 382.4, 382.9, 382.00 or 382.01).

*Note: Health plans should use only the first uncomplicated episode in the reporting year to calculate this measure.*

**Numerator:** The number of children in the denominator for each of the two populations (Medicaid and commercial) who were dispensed an antibiotic other than a preferred antimicrobial (either amoxicillin or trimethoprim-sulfamethoxazole) as documented through either the pharmacy data or medical record review. The prescription for any antibiotic other than amoxicillin or trimethoprim-sulfamethoxazole should have been dispensed within two days of the diagnosis to ensure that it was prescribed for the acute otitis media episode. The following prescriptions correspond to trimethoprim-sulfamethoxazole and do not count in the numerator: Bactrim, Septra and Sulfatrim Suspension.

**Rate:**  $1 - (\text{Numerator}/\text{Denominator})$ .

#### Notes

- Plans should only include children in the denominator for whom the plan manages or provides a pharmacy benefit in order to accurately identify children who were not dispensed a preferred antibiotic and document the percentage of children who were at least six weeks old but less than 60 months old during the reporting year for whom the plans manages or provides a pharmacy benefit.
- A child who is not treated with any antibiotic should be counted in the denominator but should not be counted in the numerator.
- Plans may identify those children for whom a previous diagnosis of otitis media occurred within the continuous enrollment period and exclude them from the measure.
- Plans should only count the first episode of acute otitis media occurring during the reporting year. No child should be counted more than once in this measure.
- Plans may exclude from the denominator children who are identified as either having an allergy to amoxicillin and trimethoprim-sulfamethoxazole or having an infectious comorbidity or underlying immunity disorder on the same date of service or within six months prior to the diagnosis of acute otitis media as documented through either administrative data or medical record review. Refer to Table 1G for the list of comorbidities or underlying immunity disorders and related codes.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.

Table 1G: Infectious Comorbidities or Underlying Disorders of Immunity

Infection	ICD-9-CM Code
Intestinal infection	001.x-002.x, 003.0-003.1, 003.2x, 003.8-003.9, 004.x-007.x, 008.xx, 009.x
Tuberculosis	011.xx-018.xx
Zoonotic bacterial disease	020.x-023.x, 024, 025, 026.x-027.x
Leprosy & other mycobacterial diseases	030.x-031.x
Diphtheria	032.xx
Whooping cough	033.x
Erysipelas	035
Meningococcal infection	036.xx
Septicemia	038.xx
Actinomycotic disease	039.x
Other bacterial infection	040.xx, 041.xx
HIV infection	042
Chlamydial disease	076.x, 077.xx-079.xx
Rickettsioses & arthropod disease	080, 081.x1-083.x, 087.x-088.x
Syphilis & other venereal diseases	090.xx-091.xx, 092.x, 093.xx-094.xx, 095.x, 096, 097.x, 098.0, 098.1x, 098.2, 098.3x, 098.4x, 098.5x, 098.6, 098.7, 098.8x, 099.0, 099.1, 099.2, 099.3, 099.4x, 099.5x, 099.8, 099.9
Other spirochetal disease	100.x, 101, 102.x-104.x
Other infectious & parasitic diseases	130.x, 131.0x, 131.8, 131.9, 136.x
Malignant neoplasm	140.x-165.x, 170, 170.x, 171.x, 172.x, 173.x, 174.x, 175.x, 176.x, 179, 180.x, 181, 182.x, 183.x, 184.x, 185, 186.x, 187.x, 188.x, 189.x, 190.x, 191.x, 192.x, 193, 194.x, 195.x, 196.x, 197.x, 198.x, 199.x, 200.xx-202.xx, 203.x0-208.x0, 203.x1-208.x1, 230.x-235.x, 236.xx, 237.xx, 238.x-240.x
Immune disease	279.0x-279.1x, 279.2-279.4, 279.8, 279.9
Sickle cell disease and other hemoglobinopathy	282.6x, 282.7
Disease of white blood cells	288.x
Other disease of spleen	289.5x
Bacterial meningitis	320.0, 320.1, 320.2, 320.3, 320.7, 320.8x, 320.9
Meningitis	321.x-323.x
Intracranial and intraspinal abscess	324.0, 324.1, 324.9
Purulent endophthalmitis	360.0x-360.1x
Infection of conjunctiva	372.0x-372.3x
Inflammation of eyelids	373.xx
Disorders of the orbit	376.0x-376.1x
Disorders of external ear	380.0x-380.2x
Chronic otitis media	381.1x-381.2x, 381.3, 381.5x-381.6x, 381.7, 381.8x, 381.9, 382.1-382.3
Mastoiditis	383.xx
Disorders of tympanic membrane NEC	384.0x, 384.1, 384.2x, 384.8x, 384.9

**Table 1G: Infectious Comorbidities or Underlying Disorders of Immunity**

<b>Infection</b>	<b>ICD-9-CM Code</b>
Disorders middle ear and mastoid NEC	385.0x-385.3x, 385.8x, 385.9
Otorrhea	388.6x
Acute rheumatic fever	390, 391.x, 392.0, 392.9, 393, 398.0, 398.9x
Pericarditis/Endocarditis/Myocarditis	420, 420.0, 420.9x, 421.x, 422.0, 422.9x, 429.0
Acute laryngitis/tracheitis	464.0, 464.1x-464.3x, 464.4
Acute bronchiolitis	466.1
Chronic pharyngitis and nasopharyngitis	472.1, 472.2
Chronic sinusitis	473.0, 473.1, 473.2, 473.3, 473.8, 473.9
Chronic T&A disease	474.0, 474.1x, 474.2, 474.8, 474.9
Peritonsillar abscess	475
Chronic laryngitis and laryngotracheitis	476.0, 476.1
Other respiratory disease	478.0, 478.1, 478.2x, 478.3x, 478.4-478.6, 478.7x, 478.8, 478.9
Pneumococcal pneumonia	481
Other bacterial pneumonia	482.0, 482.1, 482.2, 482.3x, 482.4, 482.8x, 482.9
Pneumonia other specified organism	483.0, 483.8
Pneumonia in other infectious disease	484.x
Bronchopneumonia	485
Pneumonia unspecified	486
Chronic bronchitis	491.0, 491.1, 491.2x, 491.8, 491.9
Bronchiectasis	494
Chronic airway obstruction, NEC	496
Pleurisy	511.0, 511.1, 511.8, 511.9
Lung abscess	513.0, 513.1
Other respiratory system diseases	519.x
Oral soft tissue infection	528.3
Appendicitis	540.0, 540.1, 540.9, 541, 542
Cholecystitis	574.6x-574.8x, 575.0, 575.1x
Cholangitis	576.1
Pancreatitis	577.0, 577.1, 577.9
Acute glomerulonephritis	580.0, 580.4, 580.8x, 580.9
Kidney infection	590.0x-590.1x, 590.2, 590.3, 590.8x, 590.9
Cystitis	595.0-595.4, 595.8x, 595.9

**Table 1G: Infectious Comorbidities or Underlying Disorders of Immunity**

<b>Infection</b>	<b>ICD-9-CM Code</b>
Urethritis	597.0, 597.8x
Urinary tract infection	599.0
Orchitis and epididymitis	604.0, 604.9x
Infection of the male genitals	607.1, 607.2, 608.4
Female pelvic inflammatory disease	614.x, 615.0, 615.1, 615.9
Other female genital inflammatory disease	616.0, 616.1x, 616.2-616.4, 616.5x, 616.8, 616.9
Infection of skin and soft tissue	680.x, 681.xx, 682.x, 683, 684, 685.0, 685.1, 686.0, 686.1, 686.8, 686.9
Infectious arthropathy	711.0x, 711.4x, 711.9x
Infectious myositis	728.0
Fasciitis, unspecified	729.4
Osteomyelitis	730.xx

## BETA BLOCKER TREATMENT AFTER A HEART ATTACK

### New Measure

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#### Description

The percentage of Medicaid, commercial and Medicare risk members age 35 years and older during the reporting year, who were hospitalized and discharged alive during the reporting year with a diagnosis of acute myocardial infarction (AMI) and who received a prescription for beta blockers upon discharge.

#### Administrative Data Specification

**Calculation:** This specification uses membership data and claims/encounter data to identify adults age 35 years and older during the reporting year who were hospitalized and discharged alive during the reporting year with a diagnosis of AMI. Hospital discharge abstract data and pharmacy data are used to identify a prescription for beta blockers at the time of discharge. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using all members age 35 years and older as of December 31 of the reporting year who were hospitalized and discharged alive during the reporting year with a principal diagnosis of AMI (ICD-9-CM code 410.xx) and who were not identified as having a contraindication to beta blockers. Refer to Table 1H for a list of conditions and related ICD-9-CM codes for exclusions from the measure.

**Numerator:** The number of adults in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who received a prescription for beta blockers within seven days after discharge from the hospital with a diagnosis of AMI or within 30 days prior to the hospitalization for AMI. The following prescriptions correspond to beta blockers and count toward this measure:

Acebutolol HCl, Atenolol, Betaxolol HCl, Bisoprolol Fumarate, Carteolol HCl, Esmolol HCl, Labetalol HCl, Metoprolol Succinate, Metoprolol Tartrate, Nadolol, Penbutolol Sulfate, Pindolol, Propranolol HCl, Sotalol Hcl and Timolol Maleate.

#### Hybrid Method Specification

**Calculation:** This specification uses membership data and claims/encounter data to identify adults age 35 years and older during the reporting year who were hospitalized and discharged alive during the reporting year with a diagnosis of AMI. Hospital discharge abstract data, pharmacy data and/or medical record review are used to identify a prescription for beta blockers at the time of discharge. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using random samples of 411 Medicaid members, 411 commercial members and 411 Medicare risk members drawn from the health plan's eligible populations. Eligible members include, respectively, Medicaid adults, commercial adults and Medicare risk adults age 35 years and older as of December 31 of

the reporting year who were hospitalized and discharged alive during the reporting year with a principal diagnosis of AMI (ICD-9-CM code 410.xx), and who were not identified as having a contraindication to beta blockers. Refer to Table 1H for a listing of conditions and related ICD-9-CM diagnosis codes for exclusions from the measure.

**Numerator:** The number of adults in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who received a prescription for beta blockers within seven days after discharge from the hospital with a diagnosis of AMI or within 30 days prior to the hospitalization for AMI as documented through either administrative data or medical record review. The following prescriptions correspond to beta blockers and count toward this measure:

Acebutolol HCl, Atenolol, Betaxolol HCl, Bisoprolol Fumarate, Carteolol HCl, Esmolol HCl, Labetalol HCl, Metoprolol Succinate, Metoprolol Tartrate, Nadolol, Penbutolol Sulfate, Pindolol, Propranolol HCl, Sotalol HCl and Timolol Maleate.

### Notes

- Plans are **strongly encouraged** to exclude from the denominator members who are identified through either administrative data or medical record review as having a contraindication to beta blocker therapy, because the number of individuals with contraindications is likely to be relatively large. Refer to Table 1H for the listing of contraindications to beta blocker therapy.
- Plans are strongly encouraged to exclude from the denominator members who are identified through either administrative data or medical record review as having had a previous failure with beta blocker therapy.
- In cases where patients have had more than one episode of AMI (as indicated by ICD-9-CM diagnosis code 410.xx) during the reporting year, only the first episode should be included in this measure. Any episode with ICD-9-CM diagnosis code 410.x2 (AMI, subsequent episode of care) should be excluded from this measure.
- Plans should document the percentage of members in the denominator for whom the plan manages or provides the pharmacy benefit. The denominator of this measure includes all members who have been diagnosed during the reporting year with an AMI regardless of whether the plan manages or provides the pharmacy benefit because the number of members eligible for this measure is likely to be small.

**Table 1H: Contraindications to Beta Blockers**

Description of Contraindication	ICD-9-CM Code
Insulin dependent diabetes mellitus	250.x1, 250.x3
History of asthma	493.xx
Heart block > 1 degree	426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.54, 426.7
Sinus bradycardia	427.81
CHF	398.91, 402.01, 402.11, 402.91, 404.01, 404.11, 404.91, 404.03, 404.13, 404.93, 428.0
Left ventricular dysfunction	428.1
COPD	491.20, 491.21, 492.0, 492.8, 496, 518.2, 506.4

## EYE EXAMS FOR PEOPLE WITH DIABETES

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- ▶ *The upper age limit has been removed.*
- ▶ *Specifications for the denominator have been modified: Method A in Medicaid HEDIS and Method 1 in HEDIS 2.5 have been deleted.*
- ▶ *This measure, optional in Medicaid HEDIS, is now required for Medicaid members.*
- ▶ *This measure now applies to the Medicare risk population.*

### Description

The percentage of Medicaid, commercial and Medicare risk members with diabetes (Type I and Type II) age 31 years and older, who were continuously enrolled during the reporting year, and who had a retinal examination during the reporting year. Enrollees who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure.

### Administrative Data Specification

**Calculation:** This specification uses ambulatory claims/encounter data or pharmacy data to identify members with diabetes and ambulatory claims/encounter data to identify members who received a retinal exam during the reporting year. Separate calculations are required for the Medicaid, commercial, and Medicare risk populations.

**Note:** Method A from Medicaid HEDIS and Method 1 from HEDIS 2.5 were deleted in favor of what was referred to as Method B or Method 2, because Method B/2 is preferred to capture diabetics treated through diet and exercise.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using all members age 31 years or older as of December 31 of the reporting year, who were members of the health plan as of December 31 of the reporting year, who were continuously enrolled during the reporting year (including enrollees who have had no more than one break in enrollment of up to 45 days during the reporting year) and identified as diabetic:

Those who were dispensed insulin and/or oral hypoglycemics during the reporting year on an ambulatory basis.

OR

Those who had two face-to-face encounters in an ambulatory setting or one face-to-face encounter in an inpatient or emergency room setting with a diagnosis of diabetes (ICD-9-CM code 250.xx, 357.2, 362.0x or 366.41). Use the following codes to identify ambulatory, inpatient and ER encounters:

UB-92 revenue codes (Form Locator 42):

10X, 11X, 12X, 13X, 14X, 15X, 16X, 17X, 20X, 21X, 22X, 45X, 49X, 50X, 51X, 52X, 53X, 55X, 57X, 58X, 59X, 65X, 66X, 72X, 76X, 80X, 82X, 83X, 88X, 92X, 94X, 96X, 97X and 98X.

**CPT-4 codes:****Office or other outpatient services**

99201-99205

99211-99215

99217-99220

99241-99245

99271-99275

99281-99288

**Inpatient Services**

99221-99223

99231-99233

99238-99239

99251-99255

99261-99263

99291-99292

**Prolonged physician service**

99354-99357

**Preventive medicine**

99381-99387

99391-99397

99401-99404

99411-99412

99420-99429

**Home services**

99341-99343

99351-99353

**Comprehensive nursing facility assessments**

99301-99303

**Subsequent nursing facility care**

99311-99313

**Domiciliary, rest home or custodial care services**

99321-99323

99331-99333

## Other evaluation and management services

99499

## Ophthalmology and optometry

92002-92014

*Note: Many plans find a high rate of false positives when they use laboratory data to identify diabetics, because diabetes diagnosis codes frequently are reported on laboratory tests used to rule out diabetes. Therefore, laboratory data should not be used to identify diabetics.*

**Numerator:** The number of members in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who have a retinal ophthalmoscopic examination performed by an eye-care professional during the reporting year.

A person is counted as having a retinal ophthalmoscopic examination if he or she has had a claim/encounter with a service date during the reporting year in which one or more of the following services were provided:

## CPT-4 codes:

- 92002 Ophthalmic services, intermediate, new patient
- 92004 Ophthalmic services, comprehensive, new patient
- 92012 Ophthalmic services, intermediate, established patient
- 92014 Ophthalmic services, comprehensive, established patient
- 92018 Ophthalmic exam, general anesthesia, complete
- 92019 Ophthalmic exam, general anesthesia, limited
- 92225 Ophthalmoscopy, extended-initial
- 92226 Ophthalmoscopy, extended-subsequent
- 92235 Fluorescein angiography (includes multiframe imaging) with medical diagnostic evaluation
- 92250 Fundus photography with medical diagnostic evaluation

**Hybrid Method Specification**

**Calculation:** This specification uses ambulatory claims/encounter data or pharmacy data to identify members with diabetes. Ambulatory claims/encounter data and/or medical record review are used to identify individuals who received a retinal exam during the reporting year. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using random samples of 411 Medicaid members, 411 commercial members and 411 Medicare risk members from the plan's eligible populations. Eligible members include Medicaid, commercial and Medicare risk members with diabetes age 31 years or older as of December 31 of the reporting year, who were members as of December 31 of the reporting year and who were continuously

enrolled during the reporting year. Enrollees who have had no more than one break in enrollment of up to 45 days during the reporting year should be included in this measure. See the administrative data specification for definition of the diabetic population by ambulatory prescription drug and claim/encounter records.

**Numerator:** The number of members in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) who received a retinal examination during the reporting year, as documented through either administrative data or medical record review. For medical record review, a retinal examination is documented by:

A note or letter from an ophthalmologist, optometrist or other health care provider summarizing the date the procedure was performed and the results of an evaluation performed by an eye-care professional.

OR

A chart or photograph of retinal abnormalities. If fundus photography was used, there must be documentation in the medical record indicating the date the procedure was performed and evidence that the results were reviewed by an eye-care professional.

OR

An author-identified note, which may be prepared by a primary care provider, indicating the date the procedure was performed and that an ophthalmoscopic exam was completed by an eye-care professional, with results of the exam.

### Notes

- The CPM recognizes that the frequency of retinal screening in diabetics is influenced by the type of diabetes and the presence and degree of retinopathy. In summary, annual screening may not be indicated for every diabetic patient. Therefore, one would not necessarily expect a screening rate of 100% in each plan. Ideally, this measure should report diabetic retinal screening stratified on the basis of risk for developing vision-threatening retinopathy. The feasibility and validity of specifications that allow such stratification of the diabetic population will be evaluated during 1997.
- For purposes of this measure, an "eye-care professional" is an optometrist or ophthalmologist.
- This measure calculates the rate of performance of a regular eye exam in a defined patient population. The performance does not demonstrate whether effective treatment was provided to the patient.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.

- The likelihood that a member has received a retinal exam based on the presence of the CPT-4 codes cited is uncertain. A number of CPT-4 codes for other ophthalmic services have been excluded. It is unclear whether their exclusion will lead to underreporting of the rate of retinal exams.
- There is consensus among the American Diabetes Association, National Eye Institute, and American Academy of Ophthalmology that dilation of the pupil is necessary to ensure optimal examination of the retina. However, the current coding structure permits us to know only whether an eye exam was performed and not whether the pupil was dilated. This measure represents a minimum rather than an optimum standard, but the CPM believes that it is nonetheless valuable in improving existing preventive eye care for diabetics.
- A plan with as few as 10,000 enrollees would be expected to have at least 100 diabetics.
- Plans that use only pharmacy data to identify their diabetic population should also document the percentage of all their members age 31 years and older for whom the health plan manages or provides a pharmacy benefit.
- Plans may exclude members who, through medical record review, are identified as not being diabetic.

## THE HEALTH OF SENIORS

### New Measure

#### Description

The percentages of senior Medicare risk plan members, age 65 years and older, whose self-reported health status has improved, stayed the same or worsened. Change is measured over two years and has two components — mental and physical.

#### Specifications

**Calculation:** The SF-36, plus additional items for risk adjustment, will be mailed at the outset and two years later; the additional items are a checklist of morbid conditions, self-evaluated change in status, a three-level income question, number in household, social support, education, race, age and sex. The mental and physical components are scored according to published methodology<sup>1</sup>. The change in the responses from year 1 to year 3 will be compared to an expected change. Individual members will be categorized as 'worse' if the change in their functional scores are negative and larger than expected. They will be classified as 'same' if the change in functional scores are within the expected range, and 'better' if the change in their scores is positive and larger than expected. The resulting percentages in each category will be adjusted for the additional comorbid conditions and socioeconomic factors collected in the survey.

**Denominator:** A random sample of 1,000 Medicare risk enrolled adults age 65 years and older who have been continuously enrolled for at least six months; these members will be surveyed at baseline and again after two years. For the mental component, the denominator consists of all persons who complete both surveys. For the physical component, the denominator also includes persons who die or who move into long-term facilities and do not return the questionnaire. In these last two cases, the members will be counted as having worsened.

**Numerators:** Three numerators are calculated using the number of respondents two years later who fall in the following categories.

- "Better" — change in functional scores positive and larger than expected
- "Same" — change in functional scores not larger than expected in either direction
- "Worse" — change in functional scores negative and larger than expected

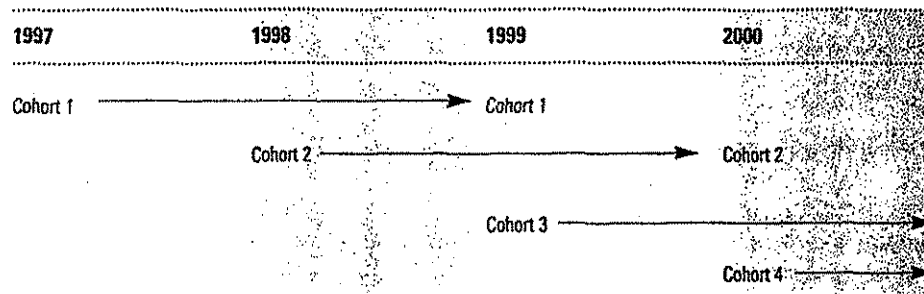
Separate rates are reported for mental and physical scores and will be risk-adjusted as described below, incorporating the additional items collected.

#### Implementation Approach

**Sampling:** Each year, a new cohort will be selected from the eligible enrollment. The survey will be administered as described in the table below. Two years after each cohort receives the survey, they will receive it again, and their baseline compared to the two-year score. The comparison is denoted by the arrowed lines:

<sup>1</sup> SF-36 Physical and Mental Summary Scales: User's Manual, Ware et al pp. 4:3-4:4

### Cohort Surveys and Comparisons



**Analysis:** Two sets of analysis are performed in the calculation of the measure:

- **Significance of Change in Status** — For each respondent who completed both a baseline and a two-year follow-up survey, the functional health score from the first questionnaire is subtracted from the second score. The difference between mental health scores is classified as “better,” “same” or “worse” according to the direction of change and whether the amount is greater or less than expected from chance variation. This will be accomplished by comparing the difference to the 95% confidence interval for an individual scale<sup>2</sup>. The physical health score will also be compared to expected performance; in addition, respondents who died or moved to a long-term facility after completing the first survey will be counted as worse on the physical score.
- **Risk Adjustment** — The proportions of individuals who are “better,” “same” or “worse” will be adjusted using multinomial logistic regression models. These adjusted proportions will be the final reported measures. See the Risk Adjustment Methodology below for more detail regarding these calculations.

**Responsibilities of the Plan:** The plan will provide its complete eligible enrollment file to an external party each year for sampling. Single-year rates by plan will be reported to HCFA, beginning in 1997, to establish baseline functional status associated with plan. Change scores will first be available in 1999.

**Information Reports to Plans:** Each year the plan will receive aggregated physical and mental scores, as well as the scales that make up those aggregated scores:

#### Physical Health

- Physical Functioning
- Role-Physical
- Bodily Pain
- General Health

#### Mental Health

- Vitality
- Social Functioning
- Role-Emotional
- Mental Health

<sup>2</sup> SF-36 Physical and Mental Summary Scales: User's Manual, Ware et al pp. 5:10

The plan will not receive data on individual responses, for reasons of confidentiality and scientific validity.

**Responsibilities of External Parties:** All survey administration, data collection and analysis will be done external to the plan.

### Notes

- NCOA is sensitive to the additional burden this very important measure places on plans, and is working closely with HCFA to examine possibilities for burden reduction. Plans will be notified by NCOA when details are available.
- To order the SF-36 Health Survey Manual and Interpretation Guide, call the Medical Outcomes Trust at 1 (800)-572-9394.

### Risk Adjustment Methodology

Suppose the variables for risk adjustment are  $x_1$ ,  $x_2$ , etc. Two functions are calculated for each individual:

$$L_{\text{better}} = \exp(b_0 + b_1 * x_1 + b_2 * x_2 + \dots)$$

$$L_{\text{worse}} = \exp(c_0 + c_1 * x_1 + c_2 * x_2 + \dots),$$

where  $b_0, b_1, \dots, c_0, c_1, \dots$  are coefficients supplied from models developed in the MOS and NHSF studies in the first report and (" \* ") represents multiplication. (In subsequent years, the data collected from this effort will be used to refine the model.)

For each individual, the probability of getting better is

$$X_{\text{better}} = L_{\text{better}} / (L_{\text{better}} + L_{\text{worse}} + 1).$$

The probability of staying the same is

$$X_{\text{same}} = 1 / (L_{\text{better}} + L_{\text{worse}} + 1).$$

The probability of getting worse is

$$X_{\text{worse}} = L_{\text{worse}} / (L_{\text{better}} + L_{\text{worse}} + 1).$$

The percentages better, same and worse observed for equivalent individuals (i.e., risk-adjusted percentages) will be reported, as follows:

$$A_{\text{better}} = X_{\text{better}} / (X_{\text{better}} + X_{\text{same}} + X_{\text{worse}})$$

$$A_{\text{same}} = X_{\text{same}} / (X_{\text{better}} + X_{\text{same}} + X_{\text{worse}})$$

$$A_{\text{worse}} = X_{\text{worse}} / (X_{\text{better}} + X_{\text{same}} + X_{\text{worse}})$$

## FOLLOW-UP AFTER HOSPITALIZATION FOR MENTAL ILLNESS

### Summary of changes from HEDIS 2.5 and/or Medicaid HEDIS

- The expanded mental health diagnosis codes specified in Medicaid HEDIS have been adopted.
- ICD-9-CM code 300.3 has been added.
- The age range has been expanded to include individuals age 6 through 10 years and 65 years and older.
- This measure, from HEDIS 2.5 and Medicaid HEDIS, now applies to the Medicare risk population as well.
- An exclusionary rule has been added for members who have been discharged directly from the hospital to another inpatient facility (e.g., nursing facility, residential treatment facility).

### Description

The percentage of Medicaid, commercial and Medicare risk members age six years and older who were hospitalized for treatment of selected mental health disorders who were continuously enrolled without breaks for 30 days after discharge, and who were seen on an ambulatory basis or were in day/night treatment within 30 days of hospital discharge.

### Administrative Data Specification

**Calculation:** This specification uses either hospital inpatient discharge summaries or the UB-92 to identify those members who have been discharged with a selected mental health diagnosis and uses encounter data (HCFA 1500, UB-92, or equivalent) to identify those who have received appropriate follow-up care. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived by counting discharges for members age six years and older at the time of discharge who have been hospitalized with a discharge date occurring during the first 330 days of the reporting year and a principal ICD-9-CM diagnosis code indicating a mental health disorder specified below, and who were continuously enrolled without breaks for 30 days after discharge.

**Note:** This measure is restricted to inpatient hospitalization. Do not count members discharged from residential care or rehabilitation programs.

The following mental health diagnoses are included in this measure:

ICD-9-CM 295.xx	Schizophrenic disorders
ICD-9-CM 296.0x	Manic disorder, single episode
ICD-9-CM 296.1x	Manic disorder, recurrent episode
ICD-9-CM 296.2x	Major depressive disorder, single episode
ICD-9-CM 296.3x	Major depressive disorder, recurrent episode
ICD-9-CM 296.4x	Bipolar affective disorder, manic

ICD-9-CM 296.5x	Bipolar affective disorder, depressed
ICD-9-CM 296.6x	Bipolar affective disorder, mixed
ICD-9-CM 296.7x	Bipolar affective disorder, unspecified
ICD-9-CM 296.8x	Manic-depressive psychosis, other and unspecified
ICD-9-CM 296.9x	Other and unspecified affective psychoses
ICD-9-CM 297.x	Paranoid states
ICD-9-CM 298.x	Other nonorganic psychoses
ICD-9-CM 299.xx	Psychoses with origin specific to childhood
ICD-9-CM 300.3	Obsessive-compulsive disorders
ICD-9-CM 301.x	Personality disorders
ICD-9-CM 308.x	Acute reaction to stress
ICD-9-CM 309.xx	Adjustment reaction
ICD-9-CM 311	Depressive disorder, not otherwise classified
ICD-9-CM 312.xx	Disturbance of conduct, not elsewhere classified
ICD-9-CM 313.xx	Disturbance of emotions specific to childhood and adolescence
ICD-9-CM 314.xx	Hyperkinetic syndrome of childhood

If a member has more than one discharge during the 330-day period with a diagnosis of one of the selected mental health disorders listed above, that member may be reflected more than once in the rate. Therefore, a plan should count discharges, not individuals. However, if a discharge for one of the selected mental health disorders is followed by a readmission for any mental health or chemical dependency diagnosis within the 30-day follow-up period, only the readmission discharge should be counted. Although the rehospitalization might not be for one of the selected mental health disorders, it most likely is for a related condition.

**Numerator:** The number of discharges in the denominator for each of the three populations (Medicaid, commercial and Medicare risk) that were followed by an ambulatory mental health encounter or day/night treatment within 30 days of hospital discharge. To identify ambulatory follow-up encounters, use the CPT-4 codes listed below or the UB-92 revenue codes of 901 (psychiatric/psychological treatments, electroshock treatment), 911 (rehabilitation), 912 (psychiatric/psychological services, day care), 913 (psychiatric/psychological services, night care), 914 (individual therapy), 915 (group therapy), 916 (family therapy) or 513 (clinic-psychiatric). The follow-up visit must be with a mental health provider and can be for any mental health diagnosis. Health plans may use Level III HCPCS codes to identify follow-up visits, as long as the codes can be mapped to the service categories represented by the following codes:

**CPT-4 codes:**

90801	Diagnostic assessment
90820	Interactive interview examination
90841	MD psychotherapy
90842	MD psychotherapy

90843	MD psychotherapy
90844	MD psychotherapy
90845	Medical psychoanalysis
90847	Family psychotherapy
90849	Multifamily group therapy
90853	Group psychotherapy
90855	Individual psychotherapy
90857	Group psychotherapy
90862	Pharmacology management
90870-90871	Electroconvulsive therapy

### Hybrid Method Specification

**Calculation:** This specification uses either hospital inpatient discharge summaries or the UB-92 to identify those members who have been discharged with a selected mental health diagnosis and uses encounter data (HCFA 1500, UB-92, or equivalent) to identify those who have received appropriate follow-up care. Separate calculations are required for the Medicaid, commercial and Medicare risk populations.

**Denominator:** Three separate denominators, one for each of the three required calculations, are derived using random samples of 411 Medicaid members, 411 commercial members and 411 Medicare risk members from the plan's eligible populations. Using hospital discharge data, identify discharges for Medicaid, commercial and Medicare risk members who were age six years and older at the time of discharge, hospitalized with a discharge date occurring during the first 330 days of the reporting year and a principal ICD-9-CM diagnosis code indicating the mental health disorders specified below, and who were continuously enrolled without breaks for 30 days after discharge.

The following mental health disorder diagnoses are used for this measure:

ICD-9-CM 295.xx	Schizophrenic disorders
ICD-9-CM 296.0x	Manic disorder, single episode
ICD-9-CM 296.1x	Manic disorder, recurrent episode
ICD-9-CM 296.2x	Major depressive disorder, single episode
ICD-9-CM 296.3x	Major depressive disorder, recurrent episode
ICD-9-CM 296.4x	Bipolar affective disorder, manic
ICD-9-CM 296.5x	Bipolar affective disorder, depressed
ICD-9-CM 296.6x	Bipolar affective disorder, mixed
ICD-9-CM 296.7x	Bipolar affective disorder, unspecified
ICD-9-CM 296.8x	Manic-depressive psychosis, other and unspecified
ICD-9-CM 296.9x	Other and unspecified affective psychoses
ICD-9-CM 297.x	Paranoid states

ICD-9-CM 298.x	Other nonorganic psychoses
ICD-9-CM 299.xx	Psychoses with origin specific to childhood
ICD-9-CM 300.3	Obsessive-compulsive disorders
ICD-9-CM 301.x	Personality disorders
ICD-9-CM 308.x	Acute reaction to stress
ICD-9-CM 309.xx	Adjustment reaction
ICD-9-CM 311	Depressive disorder, not otherwise classified
ICD-9-CM 312.xx	Disturbance of conduct, not elsewhere classified
ICD-9-CM 313.xx	Disturbance of emotions specific to childhood and adolescence
ICD-9-CM 314.xx	Hyperkinetic syndrome of childhood

If a member has more than one discharge during the 330-day period with a diagnosis of one of the selected mental health disorders listed above, that member may be reflected more than once in the sampling frame. However, if a discharge for one of the selected mental health disorders is followed by a readmission for any mental health or chemical dependency diagnosis within the 30-day follow-up period, only the readmission discharge should be counted. Although the rehospitalization might not be for one of the selected mental health disorders, it most likely is for a related condition.

**Numerator:** The number of discharges in the denominator for each of the three populations (Medicaid, commercial, and Medicare risk) for which there is documentation of an ambulatory mental health encounter or day/night treatment within 30 days of discharge, as documented through either administrative data or medical record review. The follow-up visit must be with a mental health provider and can be for any mental health diagnosis.

#### Notes

- If a Medicaid, commercial or Medicare risk member identified in the denominator of this measure is rehospitalized for a non-mental health, non-chemical dependency diagnosis within 30 days of discharge for one of the selected mental health disorder hospitalizations, that member should be dropped from this measure, because the rehospitalization may prevent an ambulatory follow-up visit from taking place.
- Plans may exclude from the denominator those individuals who have been discharged directly from the hospital to a non-acute setting (e.g., nursing facility, residential treatment facility). This is a change from HEDIS 2.5 and Medicaid HEDIS in an effort to produce more accurate rates.
- For plans that offer a Medicaid product and apply a full-month eligibility criterion to its beneficiaries and for plans that verify enrollment in monthly intervals (i.e., in increments of one month) on their information systems, a 45-day break in enrollment is the equivalent of a 30-day or one-month eligibility period.