Life Course Indicator: Early Childhood Health Screening-EPSDT

The Life Course Metrics Project

As MCH programs begin to develop new programming guided by a life course framework, measures are needed to determine the success of their approaches. In response to the need for standardized metrics for the life course approach, AMCHP launched a project designed to identify and promote a set of indicators that can be used to measure progress using the life course approach to improve maternal and child health. This project was funded with support from the W.K. Kellogg Foundation.

Using an RFA process, AMCHP selected seven state teams, Florida, Iowa, Louisiana, Massachusetts, Michigan, Nebraska and North Carolina, to propose, screen, select and develop potential life course indicators across four domains: Capacity, Outcomes, Services, and Risk. The first round of indicators, proposed both by the teams and members of the public included 413 indicators for consideration. The teams distilled the 413 proposed indicators down to 104 indicators that were written up according to three data and five life course criteria for final selection.

In June of 2013, state teams selected 59 indicators for the final set. The indicators were put out for public comment in July 2013, and the final set was released in the Fall of 2013.

Basic Indicator Information

Name of indicator: Early Childhood Health Screening – EPSDT (LC-19)

Brief description: Percent of Medicaid-enrolled children who received at least one initial or periodic screen in past calendar year

Indicator category: Early Life Services

Indicator domain: Service/Capacity

Numerator: Number of Medicaid enrollees ages zero to 21 (enrolled for 90+ continuous days) receiving at least one initial or periodic screen

Denominator: Total Medicaid-enrolled children ages zero to 21 enrolled for 90+ continuous days

Potential modifiers: Age group, sex, race/ethnicity

Data source: CMS - Annual Medicaid EPSDT Participation Report

Notes on calculation: The Annual Medicaid EPSDT Participation Report can be found here: http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Early-Periodic-Screening-Diagnosis-and-Treatment.html(towards bottom of the page). The report does not provide breakdowns by sex or race/ethnicity; Medicaid data from the state or jurisdiction would be needed to examine this indicator by those potential modifiers.

Similar measures in other indicator sets: Title V Health Systems Capacity Indicator #02 – The percent of Medicaid enrollees whose age is less than one during the reporting year who received at least one initial periodic screen; MIECHV (Maternal, Infant, and Early Childhood Home Visiting Benchmark 1 – Maternal and Newborn Health – Construct 1.7: Well-Child Visits)

Life Course Criteria

Introduction

Medicaid is the major public health insurance program for children and adolescents through the age of 20 in the United States. Early, Periodic, Screening, Diagnosis and Treatment (EPSDT) is the federally mandated package of services that Medicaid children receive. The emphasis of EPSDT is health promotion, prevention and comprehensive care. Through EPSDT, assessments are made and problems are identified early (Early); children's health is checked at age-appropriate intervals (Periodic); physical, mental, developmental, dental hearing, vision and other screening tests are provided to detect problems (Screening); diagnostic tests are performed to follow up when a health risk is available (Diagnostic); and treatment is provided to correct, reduce or control an identified health problem (Treatment) (Medicaid.gov). The goals of EPSDT are to identify early conditions that can impede child growth and development to avoid the costs and health effects of disability and to ameliorate acute and chronic medical and mental health conditions. Consistent with life course theory, EPSDT plays a critical role in early and sensitive periods of child and adolescent growth and development when conditions can be detected and treated, thus improving outcomes, saving costs and potentially decreasing inequities.

Implications for equity

Children and adolescents covered by Medicaid are more likely to be born with low birth weights, have poor health, developmental delays or learning disabilities and medical conditions such as asthma that require ongoing care and medications, making EPSDT an important vehicle through which low-income children and adolescents receive quality health care (Medicaid.gov). EPSDT has been especially important to children with disabilities enrolled in Medicaid. These children are more likely to need services, such as physical, occupational and speech therapy and mental health services that are covered through EPSDT, but are often excluded or limited in other health plans (Kaiser Commission on Medicaid and the Uninsured, 2005).

Children and adolescents who participate in Medicaid are often at higher risk for poorer health outcomes, making it important to ensure that they receive the care they need through EPSDT. According to the 2013 Annual EPSDT Participation report (medicaid.gov), there is room for improvement in meeting the EPSDT screening schedule, particularly among the older age groups. In 2013 (for DC and all but one state), only 33 percent of Medicaid enrollees 19 to 20 years old, 58 percent of those 15 to 18 years old, 69 percent of those 10 to 14 years old and 78 percent of the six to nine year old enrollees received the expected number of screens. The highest percent of screens were found among two year olds (100 percent), and those under one (97 percent). By age three, this number dropped to 87 percent. The data on the percent of Medicaid children and adolescents who received at least one of the expected initial or periodic screens were similar. Only 25 percent of 19 to 20 year olds and 46 percent of 15 to 18 year olds, compared to 90 percent of those under one, received these screens.

The percentages above were based on the periodicity scheduled established by the states, and there are differences. States may develop their own schedules, as long as they have input from pediatric providers. For example, whereas three quarters of the states require six or seven visits in the first year, about 20 percent require only five, and one state requires four visits. Among six to nine year olds, about one half of the states required four visits, another half require two visits, and one state requires one visit. It also is important to note that there is not a consensus on the numbers of visits needed, but many of the states follow the guidelines of the Academy of Pediatrics (American Academy of Pediatrics, 2014).

One explanation for the low screening rates could be the availability of pediatric and adolescent providers who accept Medicaid; a major factor has been Medicaid's historically low reimbursement rates compared with private insurers (Adams, 2001). The availability of Medicaid providers may become an even larger issue with Medicaid expansions and the need for additional providers. It will be important to determine who the children and adolescents are that will be covered under the expansion to conduct additional outreach.

Public health impact

With its emphasis on health promotion and prevention, EPSDT represents a major public health effort that impacts some of the most vulnerable children and adolescents in the United States. Through EPSDT, children and adolescents receive preventive services (e.g., vaccinations), as well as the management and treatment of medical and developmental issues. Annually, EPSDT touches millions of lives. In 2010, more than 32 million children and adolescents, representing about one third of this population, were enrolled in Medicaid (DHHS, 2010). Through EPSDT, Medicaid children and adolescents

receive comprehensive services designed to ensure the best possible outcomes in both the short and long term. In the early years of EPSDT, a cost benefit analysis of the program demonstrated substantial savings if the program was introduced nationally. In 1974, a study at the University of Texas estimated a $30 billion savings from EPSDT over 20 years (Britt et al., 1974). More research is needed, however, especially given the current variability in the EPSDT schedules across the states.

Leverage or realign resources

EPSDT offers many opportunities to leverage and align resources. Professional organizations, such as the American Academy of Pediatrics (AAP) and state medical societies are strong collaborators. An important collaboration with AAP has been the alignment of the EPSDT periodicity schedules in many states with the AAP/Bright Futures well-child visit schedules.

States also have opportunities to leverage federal programs, like the Title V programs for maternal and child health and children with special health care needs to improve EPSDT services. By federal law, Medicaid and the Title V agencies are required to collaborate to improve child health. Partnering with the other initiatives like the Maternal, Infant and Early Childhood Home Visiting (MIECHV) program and Early Childhood Comprehensive System initiatives also could facilitate coordination of services for families.

There also are many opportunities to partner with the Center for Medicare and Medicaid Services (CMS) and providers, such as those in Federal Qualified Health Centers and other “look alike” community health centers. In December 2010, CMS convened a National EPSDT Improvement Workgroup to help CMS identify the most critical areas for improvement of EPSDT. The group discussed steps that the federal government might undertake in partnership with states and others to both increase the number of children accessing services, and improve the quality of the data reporting that enables a better understanding how effective the U.S. Department of Health and Human Services (HHS) is putting EPSDT to work for children. Community health centers have long histories of providing comprehensive care to low-income children and adolescents, and are natural partners in quality improvement initiatives around the care of children and adolescents.

Finally, as the *Patient Protection and Affordable Care Act* (ACA) continues to roll out, with Medicaid expansions providing coverage to more people and states finalizing their essential benefit packages, there will be opportunities to provide more EPSDT services to Medicaid children and adolescents and there may be opportunities to add EPSDT-like coverage to other plans like the Children’s Health Insurance Program (CHIP), which covers children whose family incomes exceed Medicaid but are too low for private insurance, as well as other health plans.

Predict an individual’s health and wellness and/or that of their offspring

There is some research on the use of EPSDT on outcomes, but more research is needed. One of the challenges in assessing the effects of EPSDT on health and well-being is the variability in the EPSDT schedules, but also in the numbers of children and adolescents that receive services according to the established schedules. AAP has recommended further research on the effectiveness of EPSDT. Although more research is needed, EPSDT does give providers the opportunity to provide advice and guidance to families on topics, such as tobacco use, nutrition and exercise, which can have long-lasting effects on the health of children through adulthood.

One study found that children who were up-to-date on their visit schedules were less likely to be hospitalized than those who were not up-to-date (Hayim and Bye, 2001). Another study found that children with the recommended EPSDT visits (per the AAP schedule) had 23 percent higher adjusted odds of being ready for school than those that did not (Pittard et al., 2012). Additionally, there is established evidence of the effect of childhood immunization on reduced mortality and morbidity (CDC, 1999, Roush and Murphy, 2007); and immunizations are a core EPSDT service.

Data Criteria

Data availability

The Form CMS-416 is used by CMS to collect basic information on state Medicaid and CHIP programs to assess the effectiveness of EPSDT. Annually, states must provide CMS with the following information on three key aspects of the mandatory EPSDT benefits package: 1) Number of children provided child health screening services; 2) Number of children referred for corrective treatment; and 3) Number of children receiving dental services. States also provide data on

the expected vs. received total screens as well as at least one of the initial or scheduled screens. The most current data available for all states are 2010; 2013 data are available for all but one state.

Data quality

As noted above, periodicity schedules are established by the states, so the data collected for this indicator are based on the states' periodicity schedule, not a universal schedule. However, this indicator is assessing whether at least one initial or periodic screen was received, not the adherence to the periodicity schedule established by the state and therefore is comparable across state Medicaid programs. This indicator is used in another form by Title V (percent of Medicaid enrollees less than one who received at least one initial periodic screen. The indicator is comprised of unduplicated counts of Medicaid enrollees, and therefore relies on the ability of the Medicaid program to accurately track and de-duplicate enrollees. The instructions for completing the form can be found here: medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Downloads/CMS-416-instructions.pdf.

Simplicity of indicator

This indicator is already calculated in the Medicaid report from CMS and is therefore simple to calculate. As noted above, other programs such as Title V and MIECHV use similar indicators around receiving initial or periodic screens from Medicaid. This indicator should be easy to interpret and explain.

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