

## Comprehensive Well Baby/Child Care

### About the Title V Block Grant

The federal Title V Maternal and Child Health (MCH) Block Grant helps states ensure the health of all mother and children. As part of Minnesota's Title V Block Grant activity requirements, the MDH conducts a statewide needs assessment every five years. The needs assessment provides guidance to Title V activities for the next five years by identifying priority issues. This fact sheet describes one of Minnesota's priority issues.

### Seriousness of the Issue

Children 0-18 years comprise about ¼ of Minnesota's (MN) population. Over 70,000 babies are born in MN each year<sup>1</sup> and all MN infants are in need of regular well child checkups and age appropriate immunizations. Preventive health care can detect and treat conditions early and promote healthy development, nutrition and safety.

While U.S. childhood mortality and infectious disease rates have decreased significantly over the past century, there are growing numbers of children with serious chronic diseases including childhood obesity, diabetes, asthma, mental health disorders and intentional and unintentional injuries. The long-term consequences of these disorders are significant, because unhealthy children become unhealthy adults.

Routine well-child care saves long term costs by encompassing a variety of health-promoting and disease preventing services and by providing opportunities to detect and treat conditions early. Regular preventive health care for children is associated with fewer adverse health care effects, suggesting improved health outcomes.<sup>2,3</sup> For example, studies have shown one component of well-child care, immunizations, saves an estimated \$10-\$14 in health care for every \$1 spent.<sup>4</sup>

National data indicate that more than ¼ of US children (< 18 years) do not receive the American Academy of Pediatrics (AAP) recommended visits for well-child care, an outcome that is associated with poor health

status.<sup>5</sup> Child and Teen Checkups (C&TC) is the MN Early Periodic Screening, Diagnosis and Treatment program. The Department of Human Services (DHS) reports an overall participation rate for C&TC of 68% in 2008.<sup>6</sup>

Although guidelines encourage the routine provision of developmental screening, a substantial proportion (57%) of parents with children 10-35 months of age do not recall their child ever being screened.<sup>7</sup> According to national survey data, about 58% of MN parents with children age 4 months to 5 years completed a standardized developmental and behavioral screening.<sup>8</sup>

Children living in Greater MN are less likely to receive well-child checkups than children living in the Twin Cities metropolitan area.<sup>9</sup> DHS C&TC participation data (children on Medical Assistance and MinnesotaCare) show that children in Hennepin (75%) and Ramsey (72%) counties had higher rates of participation than in many rural counties and tribes such as Roseau (37%), Traverse (37%) and Red Lake Indian Reservation (38%).<sup>10</sup>

### Evidence-Based Strategies

The third edition of *Bright Futures* (2008) which was published by the AAP, is a collection of evidence-based guidelines for health supervision of infants, children and adolescents. This text serves as a resource for MN providers engaged in well child screening and offers rationale and research surrounding each screening component. *Bright Futures* recommends 7 preventive health care visits within the first year of life for a child with an optional prenatal visit. Seven additional visits are recommended in early childhood (12 months to 4 years of age) and 17 visits during middle childhood and adolescence (5 years to 21 years of age). The content of these visits varies by age, but generally includes history, anticipatory guidance, measurements, sensory screening, developmental/behavioral assessment, physical examination, procedures (i.e. laboratory screening, immunizations, etc) and oral health screening.<sup>11</sup>



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The AAP recommends developmental surveillance at all well child exams and developmental screening with a standardized instrument to occur at the 9, 18 and 30 (or 24) month visits.<sup>12</sup> A recent study conducted in Oregon found that when participating providers implemented developmental screening and surveillance, referral rates of children with possible developmental delays increased by 224%.<sup>13</sup>

The AAP recommends a medical home for every child that provides “accessible, continuous, comprehensive, family-centered, coordinated, compassionate and culturally effective care.” A medical home helps providers develop trusting relationships with patients/families, promotes partnering with and learning from patients and families, uses a team approach for the care of chronic conditions, which includes planned, proactive visits, coordinates care, assists with transitions, provides connections with community organizations, is satisfying for patients/families, providers and clinic staff and continuously works on quality improvement<sup>14</sup>

### Current Resources and Capacity

There are multiple public health programs in MN that promote comprehensive well baby/child care:

- C&TC Coordinators in every county and in some tribes provide timely information to eligible families and children about the health care benefits of the C&TC program and assist families in accessing C&TC services.
- Home visiting activities conducted by communities and public health agencies aim to increase well child exams by linking families to local health care providers. Family home visitors report the percentages of infants and children screened for developmental and social-emotional milestones with a standardized instrument, children who achieve and do not achieve age-appropriate developmental and social-emotional milestones, and infants and children who are current on well child exams.<sup>15</sup>
- The MDH C&TC staff, in collaboration with DHS, provides training to public health, tribal and private healthcare providers to assure high quality, evidence-based pediatric screening practices.
- MN Children with Special Health Needs (MCSHN) section at MDH has been involved in the development of medical home in MN since the early 1990's. Collaboration is an important factor in the success of medical homes in MN and currently, state agencies and private sector organizations including DHS, AAP, Family

Voices, Wilder Research Foundation and the University of MN have formed collaborations. As a medical home grows and expands, enhanced collaboration with stakeholder groups across the state will be essential to future success and implementation.

The MN Child Health Improvement Partnership (MnCHIP) is a collaboration of the MN Chapter of the AAP, DHS, MDH, pediatric healthcare professionals and families working to improve the quality of health care for Minnesota's children, youth and adolescents. MnCHIP creates and supports continuous quality improvement projects. The first project, Healthy Development through Primary Care, assisted primary care clinics in implementing standardized developmental, mental health, and maternal depression screening instruments in practice. 100% (9/9) of participating clinics conducted developmental screening using a standardized instrument.<sup>16</sup> MnCHIP is exploring strategies to expand this project to other clinical sites.

The MN Interagency Developmental Screening Task Force was convened in spring 2004 to assure the quality and effectiveness of and provide a standard of practice for the developmental component of the screening of children birth to age five. Partners include the Minnesota Departments of Education (MDE), MDH, DHS and the University of MN, Irving B. Harris Center for Infant and Toddler Development. Developmental and social-emotional screening instruments that meet evidence-based criteria for instrument purpose, developmental domains, reliability, validity and sensitivity/specificity are considered for recommendation.

<sup>1</sup> MDH Center for Health Statistics Retrieved 08/14/09 from <https://pqc.health.state.mn.us/mhsq/frontPage.jsp>.

<sup>2</sup> Hakim R. & Bye B. (2001). Effectiveness of compliance with pediatric preventive guidelines among Medicaid beneficiaries. *Pediatrics*, 108:90.

<sup>3</sup> Keller. (1983). Study of selected outcomes of the early and periodic screening, diagnosis and treatment program in Michigan. *Public Health Reports*, 98:110.

<sup>4</sup> Wagner, et al. (1992). Insurance coverage for preventive immunizations in children. *New England Journal of Medicine*, 768.

<sup>5</sup> Yu, S., Hilary A., Bellamy, H., Kogan, M., Dunbar, J., Schwalberg, H., Schuster, M. (2002). Factors that influence receipt of recommended preventive pediatric health and dental care. *Pediatrics*, 110(6).

<sup>6</sup> DHS Performance Measurement and Quality Improvement Division. CMS-416, FFY 2008 C&TC

Participation Report for the period of October 1, 2007 through September 30, 2008.

<sup>7</sup> Halfon, N., Regalado M., Sareen H., Inkelas M., Peck Reuland, C., Glascoe F., & Olson ,L., (2004). Assessing development in the pediatric office. *Pediatrics*, 113(6).

<sup>8</sup> Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health website. Retrieved 08/14/09 from [www.nschdata.org](http://www.nschdata.org)

<sup>9</sup> Wagner, et al. (1992). Insurance coverage for preventive immunizations in children. *New England Journal of Medicine*, 768.

<sup>10</sup> County/Tribe Comparison – C&TC Federal 416 Calculation Method of Line 10 Participation Rates for October 2007 through September 2008.

<sup>11</sup> Hagan JF, Shaw JS, Duncan PM, eds. 2008. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*, Third Edition. Elk Grove Village, IL: American Academy of Pediatrics.

<sup>12</sup> American Academy of Pediatrics. "Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening" *Pediatrics*. 2006. 118:1

<sup>13</sup> Hix-Small H, Marks K, Squires J, Nickel R. (2007). "Impact of Implementing Developmental Screening at 12 and 24 Months in a Pediatric Practice." *Pediatrics*. 120 pp. 381-390.

<sup>14</sup> American Academy of Pediatrics, National Center of Medical Home Initiatives, 2009. Retrieved 8/26/09 from <http://www.medicalhomeinfo.org/>

<sup>15</sup> MDH. "Outcomes and Indicators for Evaluating Family Home Visiting." 12/2008.

<sup>16</sup> Minnesota Child Health Improvement Partnership (MnCHIP). Healthy Development through Primary Care Project- Preliminary Findings. 2009.