Minnesota Head Start serves over 15,000 children (ages 3-5) in 34 grantee programs and has sustained a strong commitment to the importance of oral health by implementing innovative approaches to increase compliance of the Federal Office of Head Start Program Performance Standards related to oral health. Over decades, multiple successful dental delivery models have been used for Minnesota Head Start children including partnerships with private practices, Federally Qualified Health Centers (FQHC), community and safety net dental clinics, volunteerism, engaging primary care medical providers, and service-learning outreach opportunities for dental and dental hygiene education programs. In 2002 “expanding the role of allied dental professionals” was identified in the Minnesota Head Start Association’s (MHSA) vision statement* and serves as the basis for this newly created innovative model of care.

Despite progressively improving rates of compliance, in 2006 Minnesota programs were cited by the Federal Office of Head Start (OHS) as being out of compliance on Head Start Program Performance Standards related to dental examination rates.

**Figure 1.** Minnesota Head Start Performance Standard Reporting Compared with National Data

[Graph showing compliance rates over time]

*Head Start Program Information Report for Minnesota, FY04-07*
*Federal Head Start Program Information Report for the 2006-2007 Program Year, December 07, 2007*
**Significant Policy and Regulatory Timeline**

1999
- Dental Access Advisory Committee is convened to study access to dental care as mandated by the Minnesota Legislature.

2001 – 2005 (Minnesota Statute 150A.10, subd.1a)
- Collaborative practice was established to permit dentists and qualified dental hygienists to enter into written agreements that allow the dental hygienist to provide care to underserved populations without the presence of or prior examination by a dentist.

April – June 2006
- Dialogue was initiated between Minnesota Head Start Association (MHSA), Minnesota Dental Association (MDA), Minnesota Dental Hygienists’ Association (MNDHA), Apple Tree Dental (ATD), Minnesota Department of Human Services (DHS), and the Federal Office of Head Start (OHS).
- Building on previous innovative state dental workforce regulation, with visionary collaboration and a commitment to correct dental compliance deficiencies, MHSA and dental partners developed a Community Collaborative Practice Head Start Oral Health Model with the following objectives:
  - Provide earliest possible preventive services and education to minimize dental disease.
  - Standardize “assessment, triage, and referral”** by calibrated dental hygienists to allow the determination of treatment urgency and the interval in which Head Start children should be treated by a dentist.
  - Create and strengthen linkages with dentists to ensure timely restorative dental treatment.

July – October 2006
- Minnesota Department of Human Services recognized the collaborative practice model as fulfilling the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Medicaid dental exam standard.
- Documentation was forwarded to Region V Office of Head Start with a request for approval to utilize calibrated collaborative practice dental hygienists to fulfill the Head Start dental exam mandate when using an adaptation of the Association of State and Territorial Dental Directors (ASTDD) Basic Screening Survey (BSS) to perform standardized “assessment, triage, and referral”.

December 2006
- Approval was granted by the Federal Office of Head Start for calibrated Minnesota dental hygienists holding collaborative agreements with dentists to fulfill the Head Start dental examination mandate.
- Calibration sessions began for dental hygienists.
- Implementation of the new model began.

March 2007
- Minnesota Department of Human Services established a Medicaid reimbursement mechanism for “assessment, triage, and referral” provided by collaborative practice dental hygienists.

**Evaluation Methods**

To evaluate the first year of the new Community Collaborative Practice Head Start Oral Health Model, data collection and analysis was conducted in Spring 2008. The impact of implementation on Head Start grantees, collaborative dentists and collaborative practice dental hygienists was examined.

**Email, telephone, and online surveys** were conducted of 37 state-wide collaborative practice dental hygienists who had completed calibration. Twenty-seven respondents reported affiliation with Head Start programs and provided information about program process and perceived value of their services.

An **online survey** of 34 Minnesota Head Start health coordinators collected specific oral health program information. Twelve of the 27 respondents met the target evaluation criteria of Head Start grantees holding direct contracts with collaborative practice dental hygienists using the BSS for “assessment, triage, and referral” in center-based programs.

**Site visits** were conducted at three Head Start grantees identified by the MHSA Director as having successfully implemented the Community Collaborative Practice Head Start Oral Health Model: Southwest Minnesota Opportunity Council in Worthington; West Central Minnesota Communities Action, Inc. in Alexandria; Child Care Resource and Referral, Inc. in Rochester. Site visits included program observation and interviews with the health coordinators, collaborative practice dental hygienists and dentists.
Key Findings

- Over 35 percent (12) of Minnesota Head Start grantees have established collaborative practice models.
- Collaborative practice dental hygienists served at least 1,527 Head Start children from September 1, 2007 through March 31, 2008.
- Collaborative practice in Head Start varies significantly according to local needs and resources while emphasizing early oral health education, prevention and timely referrals.

**Figure 2.** In addition to “assessment, triage, and referral” the collaborative practice dental hygienists provide preventative services for Head Start children adding to the health value of the collaborative practice model.

“Without the on-site services the collaborative hygienist so kindly provides, many of our children would not have the opportunity to receive oral care.” (Head Start Health Coordinator)

“This is a wonderful opportunity for Head Start children and the dental community. Many of these children only need preventive care, and what a cost effective model of providing these services.” (Collaborative Practice Dental Hygienist)

**Figure 3.** When asked their preference, a majority of health coordinators consider the services of both dentists and collaborative practice dental hygienists to be valuable.

“Without the on-site services the Collaborative Practice Dental Hygienist provides, our staff would be spending a considerable amount of time struggling to find a dental provider for our children.” (Head Start Health Coordinator)

“The system needs to be further developed to assure the dental needs are met to include the dental home aspect.” (Head Start Health Coordinator)
Conclusions and Recommendations

It was observed and reported that Head Start programs and collaborative practice dental hygienists use the model of care that works best given their local needs and resources. The services may be entirely at the enrolled center in more urban areas or provided at one central location for rural programs with multiple, small, geographically dispersed centers. Programs utilize various referral processes ranging from non-profit organizations in which dental hygienists refer internally to those that refer to dentists within the community. Some programs require parents to accompany their child for preventative services while others do not. Collaborative practice dental hygienists may be compensated directly by Head Start grantees, by their employers, or individually bill health plans. In some cases, non-profit status has been established to utilize advantages such as grant writing.

Collaborative practice dental hygienists reported overwhelming satisfaction when working with Head Start grantees. They cite that center-based care is an advantage for parent and child convenience and that familiarity with the center leads to increased cooperativeness. More opportunities for mentorship with experienced colleagues to help ensure effective models of care were requested by the collaborative practice dental hygienists. They also noted that calibration updates and an online resource center would assist them in seeking advice for quality improvement.

Through this collaborative practice model, dentists receive prioritized referrals for children assessed with dental disease thus allowing the best use of their time and expertise in providing restorative treatment. The dentists use a range of venues to treat the children: private practices, safety net clinics and non-profit dental organizations. They serve the children as volunteers, practice owners, or employees. Interviewed dentists generally agree that the system is working for them though they cite concern about liability.

The creation of an online accessible data and surveillance center for statewide and local initiatives was important to nearly all interviewed dentists, dental hygienists, and health coordinators. A state registry of local initiatives is strongly recommended to assure public health and monitor long term progress.

Further study on the public health, professional and community impact of the collaborative practice model is recommended in the following areas: analysis of year-end BSS data; rates of referral and treatment completion as a result of the “assessment, triage, and referral” model; oral health knowledge of Head Start staff and parents; sibling oral health relative to the oral health of the Head Start child. Other studies may result from this evaluation at the discretion of MHSA and its dental partners.

This evaluation report provides a snapshot of the Community Collaborative Practice Head Start Oral Health Model in Minnesota. It is intended to provide information for policy development and to encourage the replication of innovative programs to provide oral health services for Head Start children.

This report was produced in partnership with the Minnesota Head Start Association, Inc., the Minnesota Dental Association, the Minnesota Dental Hygienists’ Association, Apple Tree Dental and Evaluation Consultant, Midge Pfeffer, RDH, BS, CDHC, Sheboygan, WI.

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*A complete description of Minnesota Head Start Association oral health initiatives and partnerships can be viewed at: www.mnheadstart.org

**For more information on the “assessment, triage, and referral” approach see the Normandale Community College collaborative practice website: www.normandale.edu/dental