Systems of Health Approach to Oral Health

Missouri Oral Health Preventive Services Program

Missouri Department of Health and Senior Services
The methodology of the program is:
- To provide a standardized oral health screening of the children in the community. (Screening results will be forwarded to the Oral Health Program for analysis.)
- To provide at the time of screening oral health education information and instruction, a toothbrush, and an application of fluoride varnish.
- To schedule children identified as high-risk for an additional screening, varnish treatment, and educational intervention within a four-month period.
- To provide a structure to organize community response to the rising need for oral health services for all populations.

The basic structures of organization (community and program), education, screening, and clinical preventive services are examined in this report.
Organization

Essential to the implementation and success of the Missouri Oral Health Preventive Services Program is the involvement and support of a community-wide coalition to assure program participation and support of the various segments of the community, (e.g., schools, childcare facilities, clinicians, hospital, etc.).

Defining Community-Based Coalitions

In order to be community-based, the coalition must be driven, directed, and evaluated by and responsive to the people in the community. Also, the coalition must be outcomes-oriented (i.e., to improve the health status of all community members) and must be structured to address the needs of the community.

The coalition must be focused on individual and community health status and have the capacity to identify services and methods for their delivery, as determined by the needs of the community members. The coalition should include representatives of each of the systems represented in the Systems of Health and Life Quality Model (www.dhss.mo.gov/PrimaryCareRuralHealth/), as well as the “community” at large (e.g., local governments, businesses, education, social services, health professionals, news media, etc.).

The program is most effective when implemented/driven by a community-based coalition. The coalition can then provide the justification for program implementation (needs assessment) as well as the outreach and community support needed to assure compliance and participation of the target population (children in the community). The coalition can provide the assurance that the entire community, including local governments, businesses, social service agencies, schools and the population in general, are supportive of the program and are informed as to the impact, or potential impact, the program can have on the overall health of the community.

Program Roles and Responsibilities

In order for the program to have an impact on the target community, roles and responsibilities should be clearly outlined and mutually agreed to by the program and community partners.

State Role:
The Missouri Department of Health and Senior Services (DHSS) will provide the following support services to the community to facilitate program implementation.

- **Program coordinator.** DHSS will support a dental hygienist to act as program coordinator for the community’s start-up of the program. In addition, DHSS will provide support from the Oral Health Program dental consultant and the services of other registered dental hygienists employed by DHSS.

- **Statewide and community-specific media campaign.** This campaign will focus on the elements of nutrition, self-care, and the impact of oral health on overall health. Tag lines will be developed and provided on local radio stations. DHSS will support a local contact to facilitate referrals, program information, and dissemination of educational materials.

- **Educational materials.** DHSS will provide, in collaboration with state and national partners, printed educational materials on oral health care, nutrition, and other oral health related topics. DHSS will also provide toothbrushes to be distributed to participating children in the community.

- **Screening supplies and materials.** DHSS will provide the permission and screening forms, mouth mirrors, and analysis of the data derived from the screening forms. The evaluation will include a comparison to the statewide sample conducted in school year 2004/2005.
• *Fluoride varnish supplies.* DHSS will provide the fluoride varnish for application on all participating children.

• *Screener and fluoride varnish application training.* DHSS will provide in-service education/training for participating oral health professional screeners (per surveillance system standards/protocols) and for fluoride varnish application.

• *Support for community agency.* DHSS will contract with a local agency that will provide funds for local administrative support for the start-up of the efforts.

**Community Role:**
The community, coordinated through the community coalition, should provide the following support services to the community to facilitate program implementation.

• *Program contact.* A local phone number and clerical support are needed to provide a contact point for community members seeking information or providing responses on programmatic issues.

• *Local contacts and scheduling assistance.* The community should provide assistance in contacting Head Start offices, childcare facilities and schools to encourage participation in the program and to facilitate scheduling of program activities.

• *Screening and fluoride varnish personnel recruitment.* Local dental hygienists should be recruited (when possible) to assist in the overall screening process and send the approved screening documents to the Oral Health Program for analysis. In addition, local public health nurses, school nurses and other similar local personnel should be identified to apply the fluoride varnishes to participating children.

• *Referral system development.* The community coalition is the vehicle to obtain participation from local hospital(s), physicians, dentists, and other health care facilities in the referral network. The expectation would be to obtain participatory agreements to refer/accept individuals presenting at emergency rooms and those program participants identified through the screening process as needing immediate care but not having a dental home.
Education
Each participant in the program must receive, at minimum, instruction on oral self-care (i.e., brushing and flossing), nutrition, the importance of dental care, the impact of oral health on overall health, and services available through or from the program. DHSS will provide specific printed materials, video instruction, and toothbrushes to facilitate the education process.

Screening
Essential to program implementation and evaluation is the use of a standardized oral health screening process. This process will provide a baseline of oral health of the target population prior to program intervention(s). The data collected at the screening can be compared to the Oral Health Surveillance Project state results so that a community can determine how to target its oral health efforts. The screening procedures and processes are described in the program procedures and processes section.

Clinical Preventive Services
The preferred clinical preventative service provided through the program is the application of fluoride varnishes. Fluoride varnish is a thin coating of resin that is applied to the tooth surface to protect it from decay. According to the Food and Drug Administration, fluoride varnish falls under the category of “drugs and devices” that presents minimal risk and is subject to the lowest level of regulation. The purpose of applying fluoride varnish is to retard, arrest, and reverse the process of cavity formation within the target population. Application of fluoride varnish also provides an opportunity for individual oral health evaluation, education and the provision of service that has been shown to reduce caries in certain populations. The clinical preventive services procedures and processes are described in the program procedures and processes section.

Program Procedures and Processes

Participant Community Criteria
The Missouri Oral Health Preventive Services Program should only be implemented in those communities with effective community coalitions, an identified need, and community support for oral health interventions. Criteria for determining community effectiveness should include an evaluation of coalition participants in comparison with the Systems of Health and Life Quality Model (www.dhss.mo.gov/PrimaryCareRuralHealth/).

Service Site Identification and Preparation
Community program staff should identify appropriate contact sites for program implementation, (e.g., Head Start, childcare facilities and local schools - elementary, middle and high schools). Program staff should then contact the school nurse or administrator of the identified school or facility to provide a program description and a request for participation. Once a facility has agreed to participate, the coordinator and local program staff should provide an in-service for the participating facility to outline screening/clinical preventive service/educational program implementation and detail requirements of both program and facilities.

Program and facility staff should conduct a review of the physical plant of the service site to determine the best location for service provision. Facility arrangements should include a holding area, student chairs to conduct the screening and varnish, a trash can, and a surface for writing. Also, the facility should provide an area where students waiting for the services (perhaps the holding area) can view a video presentation of proper tooth brushing instruction, receive a toothbrush, and practice the technique. Not only does this allow an excellent education opportunity, it also prepares the teeth for the screening and varnish application.
**Preparatory Activities**

The school nurse or facility administrator should send a letter home with each student to provide information about the program and request parental consent for the child’s participation. A return envelope addressed to the school nurse will be attached to insure confidentiality. The nurse will hold all survey and non-consent information until the day of the event, when the material can be given to the screening dental hygienist.

In addition to the school/facility activities, the community coalition and state-sponsored radio spots should work to increase awareness of the program within the community to enhance participation and increase education opportunities by coalition members. Examples of marketing steps include articles in local newspapers and on radio programs, flyers/posters, and presentations to other community groups.

Materials provided by the program will include permission and program description forms to be disseminated to parents of the target population as well as other supporting educational and informational materials.

**Oral Health Screening and Preventive Services**

The dental hygienist will assemble a team of volunteers to assist with the dental screenings and application of fluoride varnish. The team may consist of dental hygienists, dental assistants, nurses, and teachers. Dental hygiene students may also be utilized as team members, if available. Each team member will be trained in his or her specific role or task by the program coordinator or a designee.

Homeroom teachers escort the students into the waiting area. There, the students receive toothbrushes and are shown the brushing video. The student should spend approximately two minutes “dry brushing” according to the instructions on the video. This activity should be monitored to assure adequate cleaning of the tooth surfaces.

The students are then led into the screening/treatment area, according to the number of screening/treatment stations. The hygienists will screen the students while the assistants will record data. The student will then move to the varnish area, where the assistants will apply the varnish. From here, the student will be returned to the waiting area or back to the classroom, as determined by the school.

The program will provide the video presentation, disposable mouth mirrors, flashlights, screening forms, home report forms, gloves, face masks, hand cleanser, surface disinfectant, toothbrushes, fluoride varnish, and oral health education literature.
Once students are taught brushing, screened, and varnished, a report will be completed and returned to the school nurse who will send it home to the parents. Accompanying that report will be oral health education materials to reinforce the instruction students received. The report states the findings of the screening as either: no obvious problems, early care needed, or urgent care needed, and defines the student’s risk status.

Criteria for urgent care are signs or symptoms that include pain, infection, swelling, or soft tissue ulceration of more than two weeks (as determined by questioning). The need for early care is defined as tooth decay without accompanying signs or symptoms, spontaneous bleeding of the gums, suspicious white or red soft tissue areas, or an ill-fitting appliance. Low-risk students are those who exhibit little or no history of decay, and/or have sealants already in place, and/or whose home survey indicates low incidence of decay, and/or have good oral hygiene, and/or have adequate fluoride exposure. High-risk students are those preschoolers who have ever had a cavity or school-age children who exhibit decay on multiple teeth, and/or have never had a dental exam, and/or whose home survey indicates a high incidence of decay, and/or have poor oral hygiene, and/or have inadequate fluoride exposure, and/or have developmental disabilities, and/or exhibit enamel defects.

Referral for urgent care is recommended within 24 hours. Referral for early care is recommended within several weeks. Referral of early and urgent care of students for dental treatment will be made through contact with the child’s dentist, if available, or to an area clinic. The community coalition will facilitate arrangements ahead of time with local providers. Preference will be given to those with urgent care needs.