

12-CD-02

Committee: Chronic Disease

Title: Developmental and Emerging Indicators for the National Oral Health Surveillance System

I. Statement of the Problem:

Oral health indicators for inclusion in the National Public Health Surveillance System were described in two 1999 CSTE position statements supporting inclusion of oral health indicators in the National Public Health Surveillance System (1, 2). These seven indicators, along with two indicators for oral and pharyngeal cancer (incidence and mortality) from a 1998 CSTE position statement on cancer surveillance (3) formed the initial set of measures for the National Oral Health Surveillance System (NOHSS). Malvitz, *et al.*, (4) described the development of the oral health indicators and status of NOHSS, as of 2009, how the indicators and development process aligned with those of Healthy People 2010 (HP2010) and the Chronic Disease Indicators (CDI) project. Also noted was the intent to review the indicators periodically and revise or add indicators according to the surveillance needs of states.

With CSTE's review of the National Public Health Surveillance System framework (5), the revision of the Chronic Disease Indicators (CDI), and emerging issues driven by health care reform, the Affordable Care Act (ACA), and the Health Information Technology Act (HITECH), including use of the Electronic Health Record (EHR) and development of population health and quality measures for oral health by the National Quality Forum (NQF), the coming decade will be rich in opportunities to improve surveillance and challenges in maintaining indicators that can support monitoring trends over time. A 2012 paper commissioned by NQF proposes integration of population health and quality measures that has implications for national, state and local surveillance, including oral health surveillance (6). Additionally, the operational definition for HP2020 objective OH-16 "Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system" may need to be revised before the end of the HP2020 decade in light of new developments in oral health surveillance.

Assessing the performance of existing surveillance indicators for oral health and engaging in efforts to develop and integrate oral health related population health and quality measures will require the regular attention of a work group made up of representatives from the Association of State and Territorial Dental Directors (ASTDD), CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), and its Division of Oral Health, and CSTE's Chronic Disease/Maternal and Child Health/Oral Health (CD/MCH/Oral Health) Committee. Additional organizations may be identified for permanent or shorter term inclusion in the group as new data sources are identified and indicator development efforts evolve.

Further development of methods and data sources to monitor indicators identified by the work group is needed, as is development of indicators from data emerging from current efforts in electronic health and dental records, the Centers for Medicare and Medicaid Services (CMS), and public health preparedness or syndromic surveillance systems such as CDC's BioSense and similar state syndromic surveillance systems.

II. Statement of the desired action(s) to be taken:

A National Oral Health Surveillance System (NOHSS) work group made up of representatives from the Association of State and Territorial Dental Directors, CDC's National Center for Chronic Disease Prevention and Health Promotion, and its Division of Oral Health, and CSTE's Chronic Disease/Maternal and Child Health/Oral Health Committee should be established. The NOHSS work group may ask other organizations to join the work group on a permanent or shorter term basis as new data sources are identified and indicator development efforts evolve. To date, ASTDD has convened a NOHSS work group at key points in the past decade and should continue in that role.

As an early effort, the work group should develop a paper describing oral health surveillance, and defining what constitutes a state oral health surveillance system, in the context of CSTE's revised framework for a National Public Health Surveillance System, soon to be published (5).

The group should review emerging data sources and identification of new indicators from these sources of use for oral health surveillance two or more times during this decade, and define a regular process for review and evaluation of oral health surveillance indicators. The review work group should include epidemiologists as well as users of the surveillance data and organizations from which new data sources for oral health surveillance are emerging.

A few indicators have been identified by ASTDD's Data Committee as important but requiring further development. The NOHSS work group should develop and test these measures early in the decade, and publish findings of the indicator development process:

1. Dentist participation in Medicaid (Data Source: Centers for Medicare and Medicaid Services, State Dental Licensing Boards)
2. Jurisdictions with 250,000 or more persons and Indian Health Service Regions with 30,000 or more persons with an oral health program directed by a dental professional. (Data Source: ASTDD, IHS, U.S. Census)
3. Number of States with an Oral Health Surveillance System (Data Source: ASTDD, CDC, others to be identified)

Developmental Indicators:

Dentist participation in Medicaid: Medicaid is the primary dental coverage for many low-income children, yet these children still often lack access to dental services due in part to low participation in the program by dentists. A number of states have attempted to increase dentist participation in Medicaid through various policy mechanisms such as utilization of standardized claim forms, streamlining administrative processes, and/or increasing Medicaid reimbursement rates (7). With upcoming direction from the Centers for Medicare and Medicaid Services (CMS) dentist participation in state Medicaid and CHIP programs is likely going to be key in an initiative to increase use of preventive dental services by children <21 year old enrolled in Medicaid and CHIP and increase dental sealant utilization (6-9 year olds).

Jurisdictions with 250,000 or more persons and Indian Health Service regions with 30,000 or more persons with an oral health program directed by a dental professional: State oral health programs are critical to improving the oral health of state residents through policy development, and the management of state-wide interventions such as community water fluoridation and dental sealant programs. State oral health programs typically lead state-wide efforts to collect, analyze, interpret and report oral disease and dental access surveillance data, and information on dental workforce. With the shift of state public health agencies to the core functions and essential services, the actual capacity to provide direct health care services and the daily implementation of population-based preventive care is often delegated to regional and/or city-based agencies.

The ASTDD annual State Synopsis Survey has historically collected information on oral health programs and who directs them. However, survey respondents have noted difficulty in providing accurate responses, as they relate to state, regional, county and local levels, in the absence of a standardized definition of the subdivisions of a state.

The high rates of oral disease and infrastructure issues speak to the need for oral health programs in Tribal areas within the United States. Information on Tribal jurisdictions with 30,000 or more persons has not been part of the State Synopsis Survey.

The indicator on jurisdictions with specified population levels that have an oral health program directed by a dental professional with public health training is a HP2020 indicator.

States and District of Columbia that have an Oral and Craniofacial Health Surveillance System: The ASTDD Data Committee discussed a more detailed definition of what constitutes an oral health surveillance system to include more specific data collection along with dissemination and use of the information. The definition with respect to tracking this indicator in HP2010 had been use of at least 6 of 9 potential data sources that include information related to oral health and the decision with respect to HP2020 is currently to use the same criteria (use of 6 of 9 potential data sources but require the information be within the past five years) (8). An example of the discussions of more specific data collection is use of dental access questions in the Youth Risk Behavior Survey (YRBS), rather than use of YRBS in general (which might include state oral health program use of tobacco use data). The Data Committee also discussed difficulties with setting criteria and monitoring with respect to dissemination and use of surveillance information if the indicator were to include these aspects of surveillance.

III. Public Health Impact:

With the rapid changes in information systems and indicator development underway, and expected to continue during this decade, state oral health programs have few resources to monitor the changes and decide how to adapt to the changing data environment in ways useful to program planning and surveillance. The NOHSS work group will monitor these rapid changes, consider what changes afford the best opportunity for enhancement of state and local oral health surveillance, and provide guidance and tools to state oral health programs to implement the most promising surveillance indicators and methods.

The paper describing oral health surveillance in the context of the revised framework for the National Public Health Surveillance System will serve as a resource to national, state and local agencies engaged in oral health surveillance or using data produced by these surveillance systems. The definition of a state oral health surveillance system developed by the NOHSS work group will inform revisions to the operational definition of the HP2020 objective OH-16 "Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system."

Development and testing of the developmental indicators identified in this statement will support inclusion of these indicators in NOHSS and possibly other measurement development projects underway.

Establishment of the NOHSS work group and a regular process for reviewing and evaluating the NOHSS indicators will assure that national and state oral health surveillance systems can incorporate the best of the new opportunities for surveillance into their systems.

IV. References

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V. Coordination

Agencies for Response:

- (1) Centers for Disease Control and Prevention
Dr. Thomas Frieden
Director
1600 Clifton Road NE
Atlanta, GA 30333
Telephone: 404-639-7000
Email: txf2@cdc.gov
- (1) Association of State and Territorial Dental Directors
Christine Wood, RDH, BS
Executive Director
1838 Fieldcrest Drive
Sparks, NV 89434
775-626-5008
cwood@astdd.org

VI. Submitting Author:

- (1) Gregg M. Reed, MPH, BS, AS
Epidemiologist
North Dakota Dept. of Health
600 East Boulevard Ave., Dept. 301
Bismarck, North Dakota 58505-0200
(701) 328-3209
gmreed@nd.gov



Co-Author:

- (1) Rosemary Duffy, DDS, MPH
Dental Officer, Epidemiologist
Assigned to the Ohio Department of Health from the Centers for Disease Control and Prevention,
National Center for Chronic Disease Prevention and Health Promotion
246 N. HIGH STREET, 6th Floor
Columbus, OH 43215
614.644.8498
RDuffy@cdc.gov