

# The Central Massachusetts Oral Health Initiative (CMOHI): a successful public–private community health collaboration

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## Abstract

**Objectives:** The Central Massachusetts Oral Health Initiative (CMOHI) aimed to improve access to quality oral health care in central Massachusetts.

**Methods:** A broad-based public and private organization partnership with local and national funding created a steering committee to organize school administrators, community leaders, and a medical school to collaborate on five goals: advocate for changes in oral health policy, increase oral health care access, provide school-based dental

services for underserved children, establish a Dental General Practice Residency, and educate medical professionals about oral health.

**Results:** A state legislative Oral Health Caucus helped secure sought-after policy improvements; more regional dentists now accept Medicaid; community health center capacity to provide dental services was expanded; school-based programs were designed and delivered needed dental services; a dental residency was created; and methods of educating medical professionals were established.

**Conclusions:** Significant sustainable gains in oral health care access were created through our multifaceted approach, ongoing evaluation and communication, coordination of CMOHI partner resources, and collaboration with other involved parties.

## Introduction

The provision of dental care to underserved populations is recognized as a major challenge in the United States (1). The Governing Council of the American Public Health Association has expressed a need for more innovative programs

to help reduce these disparities (2). In its Best Practices Approach for State and Community Oral Health Programs, the Association of State and Territorial Dental Directors (ASTDD) calls for “expanding the traditional delivery system, developing community-based collaborative delivery systems, and increasing the health care workforce” (3). Furthermore,

the Surgeon General specifically called for more public-private partnerships to promote oral health access in its 2003 National Call to Action (4).

The Central Massachusetts Oral Health Initiative (CMOHI) began in 2000 as a multifaceted, community-based collaborative that aligned with the ASTDD's Best Practices Approach and the National Call to Action. Other oral health collaborations have developed in response to specific problems or have focused on advocacy alone, while CMOHI aimed its efforts at both advocacy and practical service goals (5). The purpose of this report is to describe the evolution of CMOHI during its first 8 years of funding and highlight the effectiveness of strategies employed to achieve our goals.

The focus of CMOHI was Worcester City and parts of Worcester County in central Massachusetts (population 784,000) (6). Worcester city, with a population of 175,000 is home to rich ethnic and socioeconomic diversity (15.1% Hispanic/Latino, 6.9% Black, and 4.9% Asian; 28.1% speak a language other than English at home; 17.9% are below the federal poverty level) (7).

## Methods

The leadership of Worcester District Dental Society (WDDS) acted as a catalyst for the formation of CMOHI. During

CMOHI's initial 8 years, strategies and programs were refined through regular partner meetings and continuous evaluation. The steering committee, comprised of providers and community organization members, met monthly to provide project oversight. Collaboration helped each partner understand the challenges and opportunities for developing and implementing programs. Best practices were shared for the delivery of oral health services and education. CMOHI goals were accomplished while respecting the individual interests of each partner (see Table 1).

Initial and continuing funding was provided by The Health Foundation of Central Massachusetts. CMOHI was also able to leverage additional funding [e.g., Massachusetts Dental Society (MDS), WDDS, Oral Health Foundation (now Catalyst Foundation), Kellogg Foundation, United Way of Webster/Dudley, and Robert Wood Johnson Foundation] in order to meet its five core goals.

### Goal 1: advocate for changes in oral health policy

CMOHI partnered with the statewide Oral Health Advocacy Task Force (OHATF)<sup>1</sup> to create an Oral Health Caucus. (The Caucus is believed to be the first of its kind in the country.) The OHATF developed relationships with State Senator Chandler and Representative Teahan around oral health issues. The legislators suggested that oral health policy would best move forward if their peers were educated about the issues through the formation of a caucus. The OHATF agreed to be the staff support for the new caucus. The bipartisan caucus continues to sponsor oral health legislation, conduct public meetings, and hold press conferences with support from the OHATF staff.

### Goal 2: increase oral health care access

To improve access for those in need, two initiatives were undertaken. The first consisted of a three-phased plan to increase the number of private practice dentists caring for MassHealth (Medicaid in Massachusetts) patients. Phase one, the Volunteer Program, asked dentists to donate time seeing underserved patients at a central location. Next, the Partnering Program asked dentists to work with local community health centers (CHCs) by accepting a few MassHealth patients into their private practice and accepting the

<sup>1</sup> OHATF is a statewide collaboration focused on oral health promotion administered by Health Care for All, a grassroots organization dedicated to universal health care. OHATF was founded in 2002 as a response to state Medicaid funding being cut for adult dental care.

**Table 1** CMOHI Partner Organizations (8)

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Commonwealth of Massachusetts Legislature
*Family Health Center of Worcester
*Great Brook Valley Health Center
Health Care for All and Health Law Advocates
Massachusetts Coalition for Oral Health
Massachusetts Delta Dental Foundation
Massachusetts Dental Society
Massachusetts Department of Public Health
Massachusetts Society for the Prevention of Cruelty to Children (MSPCC)
Oral Health Initiative of North Central Massachusetts
*Quinsigamond Community College Dental Hygiene Program
South Worcester Neighborhood Center
Southbridge Public Schools
Southern Worcester Neighborhood Center
*The Health Foundation of Central Massachusetts
*UMass Medical School's Office of Community Programs
*UMass Memorial Health Care
*United Way of Webster and Dudley
Webster Public Schools
Worcester City Council
Worcester Department of Public Health
*Worcester District Dental Society
Worcester District Hygienists' Association
Worcester Public Schools

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\* Organization represented on the steering committee. CMOHI, Central Massachusetts Oral Health Initiative.

MassHealth reimbursement<sup>2</sup> (billed through the CHCs) without officially becoming MassHealth providers. Building on these two phases and reacting to positive legislative changes, the final phase, the MassHealth Recruitment Program, recruited dentists to become MassHealth providers. Methods included legislative changes (see goal 1) followed by recruitment efforts via dental society meetings, personal calls, office-based presentations and from patient appeal letters.

A second initiative focused on broadening the capacity of existing CHCs to provide preventive and restorative services to uninsured and MassHealth patients. Grant funds were used for expansion of staff, facilities, and improved practice management.

### **Goal 3: provide school-based dental services**

Dental services were offered to 28 high-need Worcester county schools through four partner providers: Family Health Center of Worcester, Great Brook Valley Health Center, Quinsigamond Community College Dental Hygiene program, and the UMass Memorial Ronald McDonald Care Mobile (a medical/dental retrofitted recreation vehicle).

Working closely with teachers, school nurses and administrators, providers offered both preventive services (screenings, exams, cleanings, fluoride varnish, sealants, education) and referrals to local dentists or CHCs for further treatment and to establish a dental home.

### **Goal 4: establish a dental residency**

In 2003, CMOHI established a Dental General Practice Residency program within UMass Medical School (UMMS) to address the local and state need for an increase in dental resources for the underserved. The dental residency program was strategically designed to promote the integration of oral health education within the medical school community. Three residents per year provide outpatient services in a local CHC and also treat hospital-based patients (emergency department and inpatient call and procedures, anesthesiology, and oral surgery).

### **Goal 5: educate medical professionals about oral health issues**

Educational programs for health professionals evolved over the lifetime of the project. Prior to the CMOHI, there was 1

<sup>2</sup> In Massachusetts, for oral health services, community health centers are paid based on a fee schedule (not per encounter). The partnering community-based dentists were paid the Medicaid fee schedule reimbursement for each service they provided. As an incentive to the health centers to partner with private dentists, they were given an extra administrative reimbursement.

hour of oral health curriculum at UMMS and a total of 4 hours presented over 8 years to residents or practicing physicians. The new curriculum for medical students, residents, and practicing physicians includes topics covering adult and geriatric oral health, prenatal, pediatric and urgent oral health issues. The curriculum is based on The Smiles for Life materials (a national oral health training program for nondental providers created by family physicians) (8). This training acknowledges that patients interact with the medical system long before they find a dental home; therefore, medical personnel need appropriate skills and knowledge.

## **Results**

The following results have been documented in detail in a full report (9).

### **Goal 1: advocate for changes in oral health policy**

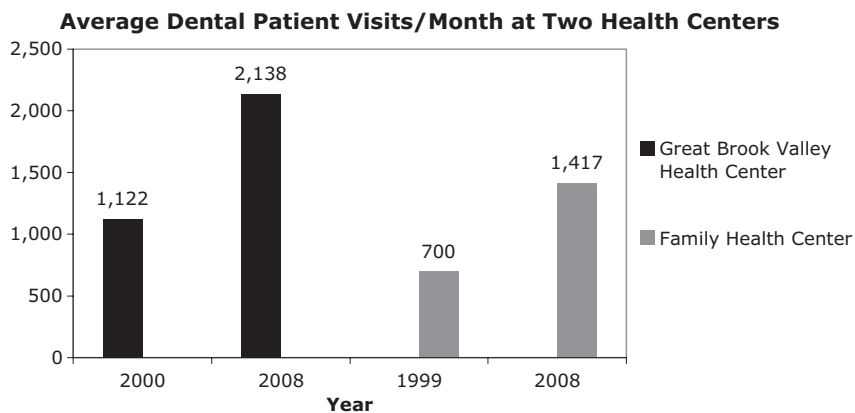
Overall, the partnership of CMOHI, OHATF, and the Oral Health Caucus led to more oral health policy change than had been created in the previous decade. In 2006, comprehensive MassHealth dental benefits were reinstated for pregnant women and new mothers (~40,000 women) (10). The Massachusetts House and Senate also fully restored comprehensive dental benefits to all adults enrolled in MassHealth (10) and eventually increased MassHealth reimbursement rates for children (11).

Second, the MassHealth dental benefit administrative system was criticized as inefficient by private dentists at past MDS member meetings and a major barrier to dentists accepting MassHealth; it was replaced with a new third-party vendor (12). CMOHI worked with the new administrator, Doral Dental (now Dentaquest), to aggressively recruit dentists into MassHealth through presentations at MDS meetings, regional meetings, and in dental offices by a hired dental hygienist.

Third, new legislation enabled dentists to “cap” or limit the number of MassHealth patients in their practices (formerly illegal in Massachusetts due to antidiscrimination laws) (13). The combination of these changes led to an increase in the number of dentists accepting MassHealth in Worcester County (see goal 2).

### **Goal 2: increase oral health care access**

From 2002 to 2004, the Volunteer Program resulted in 1,363 patient visits and the completion of 2,544 procedures by 60 dentists. Scheduling was a major barrier. An important outcome of the Volunteer Program, verified through an infor-



**Figure 1** Dental patient visits at participating health centers (8). Due to availability of data, the average dental patient visits/month value corresponds to 1999 for Family Health Center and 2000 for Great Brook Valley Health Center. There is no such discrepancy for 2008.

mal survey, was a heightened awareness among local private practice dentists about the severe dental problems in the MassHealth population.

In the Partnering Program, which followed, nine dentists saw 147 patients for a total of 474 visits. This program was reportedly unattractive to local dentists because they still distrusted the MassHealth system and felt reimbursement was low.

Overall, the goal of CMOHI was for the Recruitment Program to attract 157 dentist members (or 50% of practicing member dentists) of WDDS to treat MassHealth patients by the end of 2008. As of September 2008, 188 members (60%) were participating according to MassHealth and confirmed through contact with each dental office.

Significant improvements were seen with regard to expansion of CHC capacity. At both of Worcester’s CHCs, the number of dental visits (which had been stagnant during the previous decade) doubled over the lifespan of CMOHI (see Figure 1).

Finally, the UMassMemorial Care Mobile provided care in designated locations around the region. The local CHCs reserved appointments for referrals from the Care Mobile to continue treatments.

**Goal 3: provide school-based dental services**

During the 8 years, 20,000 screening and prevention oral health service visits were conducted in the school-based programs (see Methods section, goal 3 for details). In 2008, restoration services began in one school. An average of 40% of school children in the 28 participating Worcester City schools were reached (see Table 2). There were originally significant problems in getting permission slips back from parents to obtain services for children, and schools adopted a variety of strategies to try to increase permission rates. The strategy that saw the largest direct increase in positive response was garnering a commitment from all teachers and school leaders through face-to-face meetings and having a program coordinator do periodic site visits.

**Goal 4: establish a dental residency**

After the Commission on Dental Accreditation approval in 2005, the dental residency program was successful in attracting dentists who wanted to serve the MassHealth population. Of the 12 residents who completed the program, six currently work in a public health setting or are caring for MassHealth

**Table 2** CMOHI School Program Results, 2001-2008 (8)

Program year	Total number of participating schools	Total number of students in participating grades	Total number of students who received service
2001-2002	14	Unavailable	438
2002-2003	16	3,309	2,310
2003-2004	19	3,898	2,441
2004-2005	24	7,499	2,680
2005-2006	24	9,666	4,128
2006-2007	25	10,606	4,226
2007-2008	28	11,174	4,423

CMOHI, Central Massachusetts Oral Health Initiative.

patients, three practice in Worcester County, and three practice in other parts of Massachusetts.

### Goal 5: educate medical professionals about oral health issues

The UMMS oral health curriculum has expanded to all years of medical and nursing education and the dental residents participate in the teaching. This includes 2 hours of dental anatomy/clinical examination and a mandatory 4-hour oral health symposium and an optional 2-week community oral health selective.

Oral health education has been expanded to medical faculty and residents at UMMS in the departments of obstetrics, internal medicine, family medicine, and pediatrics and in the hospital's multispecialty grand rounds and state medical meetings for a total of 10 hours per year.

### Discussion

Health collaborations can serve as effective vehicles for exchanging knowledge and strategies, developing community support, mobilizing diverse resources, and maximizing the effectiveness of direct action (3). The success of CMOHI is based on this synergistic approach, accomplishing each of its five goals through cooperation, communication, and well defined goals.

For CMOHI, leadership, personal and political will, and ongoing evaluation served a vital role. The steering committee served as a catalyst for communicating ideas, maintaining momentum, and coordinating the capacities of each partner. Finally, working to transform oral health legislation was essential and was accomplished by joining a statewide coalition.

CMOHI partners worked hard throughout the initiative to create sustainability beyond the funding period. This long-term sustainability was engineered through direct billing-for-services, new grants from new sources, and train-the-trainer formats. The steering committee continues to meet quarterly to maintain communication and to foster and coordinate future plans. Projects within the five domains continue to improve and evolve.

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