Level of Implementation

-- 10 FQHC Dental Centers within the Marshfield Clinic Health System operated by Family Health Center of Marshfield, Inc. (FHC) in Wisconsin

Target Populations

-- Patients seeking dental care at Marshfield Clinic Dental Centers

Improvement Goal

- -- Establish an oral health quality improvement culture among dental providers and staff.
- -- Understand health system's baseline oral health data around few quality measures
- -- Develop a dental quality analytics dashboard to monitor practice changes in near real time

Essential Partners

- -- Family Health Center of Marshfield, Inc.
- -- Marshfield Clinic
- -- Marshfield Clinic Research Institute
- -- Delta Dental of Wisconsin

Key Measures

- -- Sealants for 6 9 year olds
- -- Sealants for 12 15 year olds
- -- Fluoride Varnish for 0 20 year olds
- -- Adult/Child Recall Success
- -- New Caries
- -- Treatment Plan Completion
- -- Productivity/Charges
- -- Visits/Procedures

Measurement Data Source

- -- Electronic Health Record
- -- Dental Practice Data
- -- Enterprise Data Warehouse

DQA Quality Innovators Spotlight: The Inside Story

How did this project start?

Background: Marshfield Clinic Health System (MCHS) was one of the ten organizations invited by Center for Medicare and Medicaid Services (CMS) to participate in a Physician Group Practice (PGP) demonstration project (2005 to 2010). PGP was the first legislatively mandated pay for performance initiative, which offered participating organizations the opportunity to earn incentives for improving the quality and cost efficiency of healthcare. MCHS was able to demonstrate that it is possible to improve quality, while at the same time reducing cost by saving > \$118 million over the 5 performance years reported to CMS. Discussion around the importance of oral health and better understanding the quality of oral healthcare delivered for well over 156k unique patients across the ten federally qualified dental centers became one of the key priorities for MCHS.

Key drivers that led to project initiation:

- Success with the PGP demonstration project;
- Being selected as one of the 106 new Accountable Care Organization (ACO) beginning in 2013 for the fee-for-service Medicare population;
- Need for better integration of oral health with the overall health as well as improving quality of oral health provided; and
- Need to establish an oral health quality improvement culture throughout the MCHS.

Quality improvement initiative: MCHS/FHC's Dental Quality Improvement Initiative began in 2016 to address key elements of the triple aim geared towards oral health and to promote a culture of quality health improvement among dental providers and staff. Maintaining high quality patient and process data that is collected, stored and retrieved from dental practices became paramount for operations, reporting, providing quality oral healthcare, enabling research and educational opportunities at MCHS/FHC. A steering committee comprised of dental providers, operational leaders, researchers and health IT leaders came together to identify the key clinical and operational quality measures that were deemed important for dental practice and to develop and implement a dental quality analytics dashboard (DQAD) to support the initiative. The committee reviewed certain oral health quality measures previously defined by the National Network for Oral Health Access (NNOHA) and Health Resources and Services Administration (HRSA) and selected for implementation within DQAD.

Dental Quality Analytics Dashboard (DQAD): DQAD was designed and developed as a web-based tool for use by dental providers and administrators at the MCHS Dental Centers. DQAD provides a near real-time visual, analytical platform where users can monitor, compare and trend key clinical, operational and provider performance/productivity data documented in the electronic health records to set goals and inform improvements across MCHS dental practices. The application also provides a summary view of the practice cohort for the user defined timeframe which includes information on medical conditions, age and gender split, tobacco use, and body mass index. With the availability of integrated medical and dental patient data for well over 130k unique patients, MCHS is also looking to further develop key oral-systemic health measures and data summaries within DQAD.



Marshfield Clinic Health System - Dental Quality Improvement Initiative

More Information

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What were the key strategies to achieve the improvement goal?

The key strategies used include:

- Establishment of a quality improvement mission and culture among MCHS dental practices similar to the MCHS physician practices;
- Representation of clinical and operational leaders from each of the ten dental practices across MCHS on the steering committee;
- Development of a dental quality analytics dashboard tool to monitor and interact with the dental provider practice level data;
- Tying financial incentives for dental providers who continuously met or exceeded benchmarks for the specific dental quality measures;
- Allowing providers to view not only their own practice data but also their colleagues' practice data as a point of comparison to gauge their own performance; and
- Providing center administrators the capacity to monitor the performance of their providers to identify key areas of quality improvement opportunities and share best practices.

What improvements were achieved?

- Provider awareness of the individual, center-level and system-level clinical and operational performance data for the implemented quality measures.
- Increased interaction among the providers and leadership group regarding oral health quality improvement practice.

What were the main challenges that needed to be overcome?

- Initial lack of engagement among the provider group to engage in the initiative.
- Addressing practice level situations (e.g., parents or guardians refusing sealant application for their children) thereby negatively impacting the providers' performance measures.
- Displaying accurate financial data which capture dynamic changes associated with charge reversals and other adjustments.
- Identifying and prioritizing the informatics and IT resources required for the initiative among the several initiatives across the health system.

What was the overall impact of the program?

- ✤ All ten FHC dental centers across MCHS have embraced the initiative.
- More than 80 dental providers (40+ dentists and 40+ dental hygienist) and 20 administrators have become more aware of the clinical and operational performance data that are reported within DQAD.
- Visualizing the DQAD data has become a routine and effective practice to discuss key practice level concerns or targeted improvements in monthly center and system-wide meetings.
- Historic dental practice data are now available for most of the dental measures implemented going back to 2010.
- The next phase of the initiative will target key improvement on all the quality measures implemented across the system.

OPINION: How can we can spread this change?

The Marshfield Clinic Health System Dental Quality Improvement initiative was designed to drive a cultural shift towards quality improvement in oral health. To accomplish this, the organization developed a strategy that allowed them to progressively increase the engagement of dental providers and administrators, while consistently measuring elements that were important to the success of the dental practice.

Organizations with similar structures and a commitment to driving change within their oral health programs can adopt many of the tools and strategies used by the Marshfield team including, the selection of measures that are important to the practice, engaging providers and administrators in the process, and implementing he use of a dental quality analytics dashboard.

The opinions expressed in this section are those of the DQA's Implementation and Evaluation Committee based on their individual expertise and experiences.



Improving Oral Health Through Measurement

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