

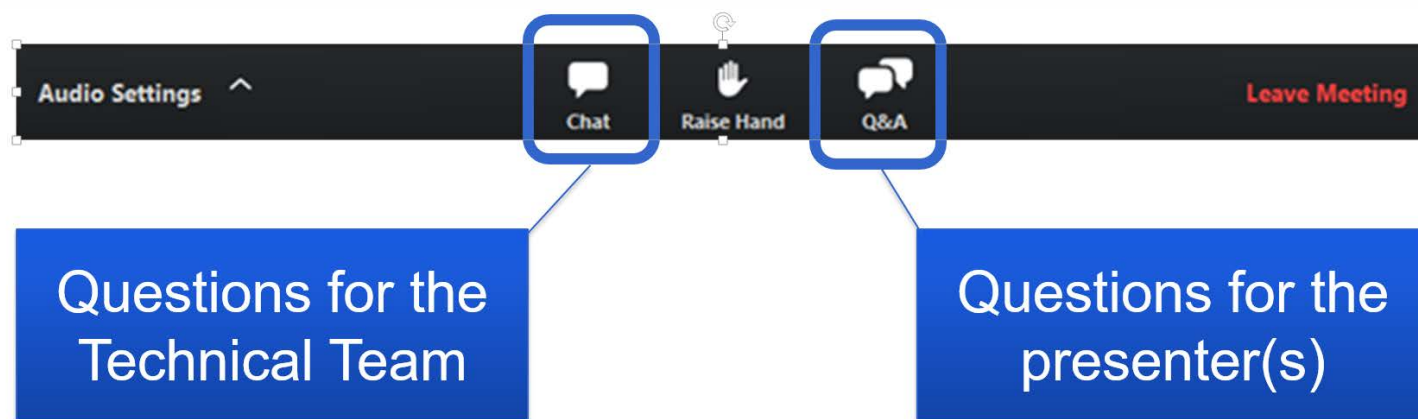
Quality Measurement 104

Measurement in Action

Data Driven Quality Improvement Strategies

Before We Begin...

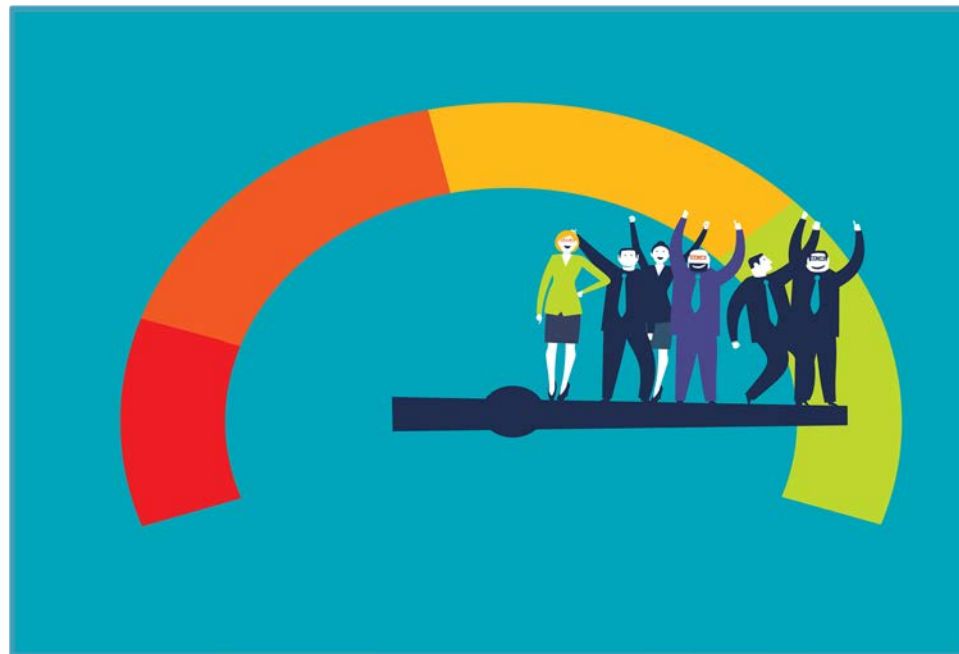
- ***This Webinar does not have a LIVE Q&A session.***
However, throughout this webinar, questions can be asked via the Q&A icon on the toolbar. All questions will be compiled and responded to via email.





DENTAL QUALITY ALLIANCE®

Improving Oral Health Through Measurement



MEASURE and IMPROVE

The Golden Rules of Measurement for Improvement



Learning Objectives

By the end of this webinar, participants will be able to:

- Learn about data driven strategies that have demonstrated improved outcomes
- Discover the key components of providing Personalized Care with the Implementation of Caries Risk Assessment
- Understand the improvement goals and implementation strategy of the Marshfield Clinic Health System – Dental Quality Improvement Initiative

Speakers



Jesley C. Ruff DDS, MPH is on the Board of Directors of the Wisconsin Collaborative for Healthcare Quality, Chair of the Improvement Committee and with ForwardDental, a medically orientated integrated oral health partnership model located in the State of Wisconsin.



Amit Acharya BDS, MS, PhD, FAMIA currently serves as the System Vice President for Research at Advocate Aurora Research Institute and the Chief Research Officer of Advocate Aurora Health.



Improving Oral Health Through Measurement

Disclosures

- **Dr. Jesley Ruff** has received grant funding/support from ForwardDental and American Dental Partners & Foundation.
- **Dr. Amit Acharya** has received grant funding/support from Delta Dental of Wisconsin, Health Resources and Services Administration, Family Health Center of Marshfield and Marshfield Clinic Health System for the work being presented here today.

Carries Risk Assessment Patient Registry

Personalized Care: Caries Risk Assessment Patient Registry

"The best interest of the patient is the only interest to be considered,
and in order that the sick may have the benefit of advancing
knowledge,
union of forces is necessary."

W. J. Mayo

Quality Improvement:



“Systems awareness and systems design are important for health professionals, but are not enough. They are enabling mechanisms only. It is the ethical dimension of individuals that is essential to a system’s success. Ultimately, the secret of quality is love.”

“Evaluating the Quality of Medical Care”. Donabedian D

Presentation Agenda:

Part One- Elements of Quality Improvement

- **Introduction-Structure-Process-Outcome**
- **Aim/Purpose, Measurement, Population**
- **Accomplishments-Overview**

Part Two-Essentials of Quality Improvement

- **Challenges-Lessons learned**
- **Critical Strategies**
- **Key Take-aways**
- **Summation-Final Thoughts**

Oral Health Partnership Model

- Accreditation Association for Ambulatory Health Care Accredited (AAAHC)
- Medically oriented, integrated, 50-years old
- A singular focus on clinical team therapeutic relationships and the needs, preferences and values of the patient.
- Patients are; family, friends and neighbors from the communities where the clinical teams reside.
- The group's mission is resonant with an obligation to serve.

Problem, Aim, Measurement, Population

Problem Identification

Caries Risk Assessment: evidence-based guidelines/
Research/ personalized care / documentation

Aim/Purpose

Plan, develop, test, implement, evaluate, integrate
disseminate caries risk assessment/ personalized.

Measurement

Instrument, specification, numerator/denominator

Population/Cohort

Children, team specification, numerator/denominator

Accomplishments-Overview

Patient and Team-member

Engagement and activation

Communication, Training, Education

Training, point of service education

Aim and Integration

Pilot Test, champions, scale and spread

Technology

Registry, decision support, dashboard, Instrument

Transparency and Public Reporting

Feasible, valid, reliable- relevant measures

What were the main challenges that needed to be overcome?

Culture and Practice

- **Culture**
 - new responsibilities,
 - accountabilities,
 - processes,
 - rewards.
- **Normative practice**
 - modification,
 - addition,
 - subtraction.

Re-defined roles, re-aligned incentives may spark fear, powerlessness, loss of control or autonomy

What were the main challenges that needed to be overcome?

Communication

- Legacy systems, thinking, acquisition, adjustment to re-engineered technology and new methodologies.
- Calibration constancy, consistency education , understanding and interpretation.

The key strategies included:

Mission, Communication, Alignment and Leadership

- **Mission serves as the foundation**
 - For all communication, messages and meetings.
 - Meetings begin with a recitation of the mission; all discussion aligns to the purpose.
 - Leadership champions quality functions that vets strategy and protocols to monitor processes.

The key strategies included:

Team

- **Training**
 - To know and understand the what, why, when, where, and how.
 - Understand project role and team responsibilities
- **Cross-functional**
 - Mission-aligned
 - Purposefully diverse.
- **Inclusive**
 - Every idea valued,
 - Respectful debate is encouraged,
 - Every voice is dignified and counts.

Personalized Care: Caries
Risk Assessment Patient Registry

Key Take-Aways

Voice
Mission
Team

Personalized Care: Caries Risk Assessment
Patient Registry
Every Voice Counts

- **Build an inclusive culture**
- **Cross-functional, mission-aligned, diverse teams**

“There are no inferior jobs in any organization. No matter what the assigned task , if it is done well and with dignity, it contributes to the function of everything around it and should be valued accordingly by all”.

C H. Mayo

Personalized Care: Caries Risk Assessment Registry

Mission Rewards Incentives

- **Collective engagement**
- **Collaboration**
- **Core values**

"I'm often quoted as saying, 'No money, no mission. 'That's true but remember the rest of it: 'No mission, no need for money.'"

Sister

Generose Gervais



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Personalized Care: Caries Risk Assessment Patient Registry

Team

- **Communication**
- **Clarity**
- **Accountability**



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Improving Oral Health Through Measurement

“ If you want to go fast, go alone.
If you want to go far, go together.”

African Proverb

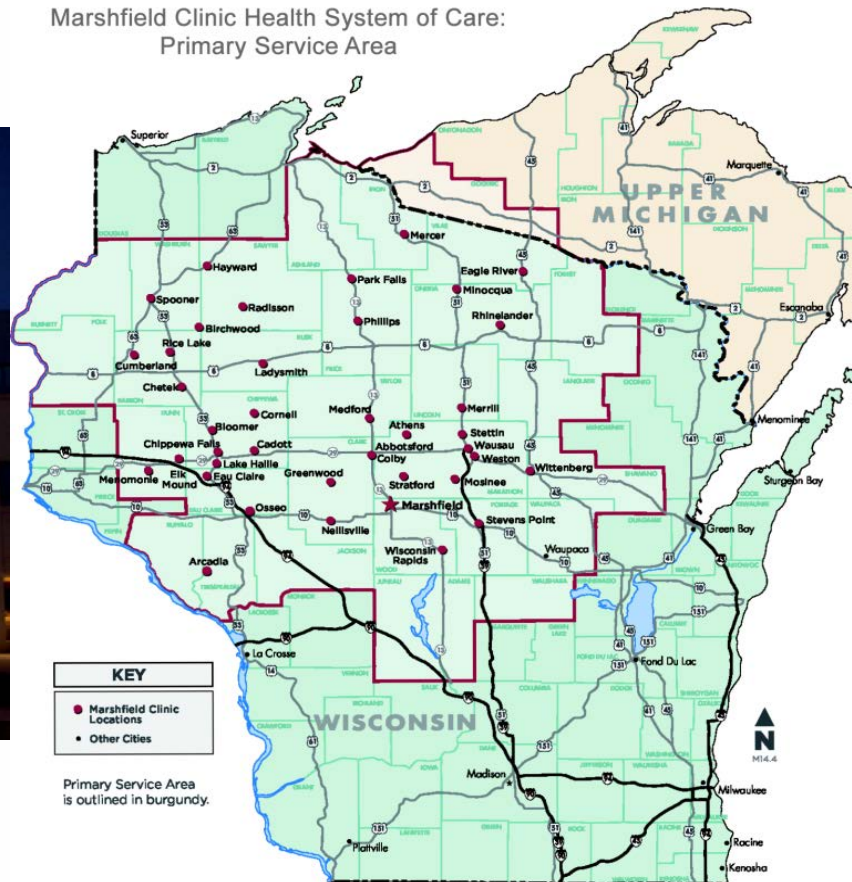
jesley.ruff@gmail.com

**Establishment of a Quality
Improvement Culture at a
Large FQHC Dental Practice
in Rural Wisconsin**

Marshfield Clinic Health System



Marshfield Clinic Health System of Care:
Primary Service Area



Oral Quality Improvement Initiative Summary

- **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;

Key Elements

- **Essential Partners**
 - Family Health Center of Marshfield, Inc.
 - Marshfield Clinic
 - Marshfield Clinic Research Institute
 - Delta Dental of Wisconsin
- **Measurement Data Source**
 - Electronic Health Record
 - Dental Practice Data
 - Enterprise Data Warehouse
- **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
 - No Shows

2002: Operationalizing the Surgeon Generals' Pronouncement

"Oral Health is Essential to General Health and Well-being"



Mr. Greg Nycz
Executive Director
Family Health Center of Marshfield, Inc.
Marshfield Clinic Health System

Our Destination: 100% access to high quality services and Zero health disparities

Our Strategy: Develop a plan capable of delivering us to our final destination

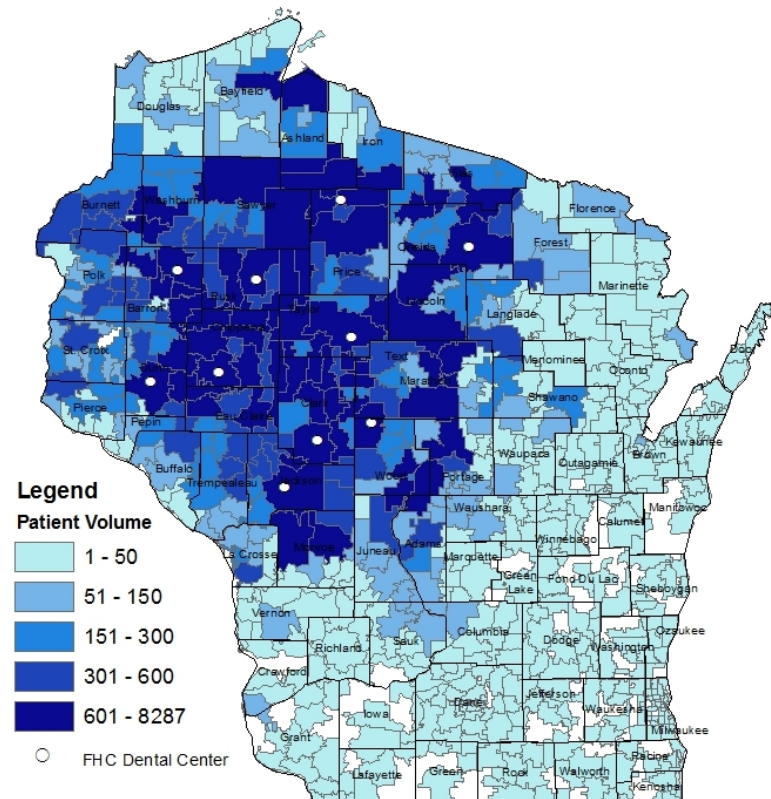
Planning Horizon: 10 to 20 years



164,642 Patients Treated by Family Health Center Dental Operations

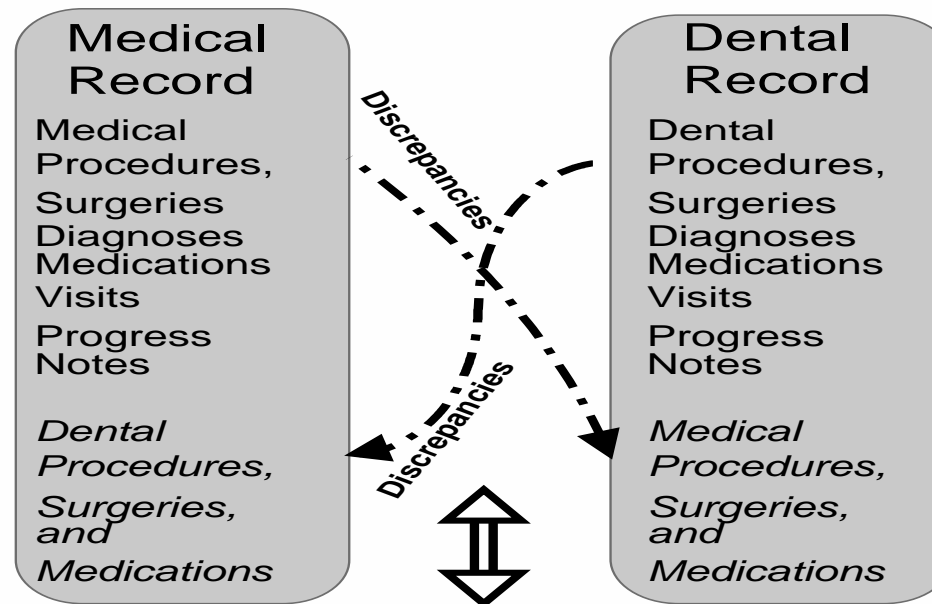
November 2002 - June 30, 2018

Fiscal Year	# of Unique Patients
2007	12,504
2008	19,192
2009	24,138
2010	30,680
2011	40,114
2012	46,346
2013	44,233
2014	49,389
2015	51,485
2016	54,896
2017	58,894
2018	58,932



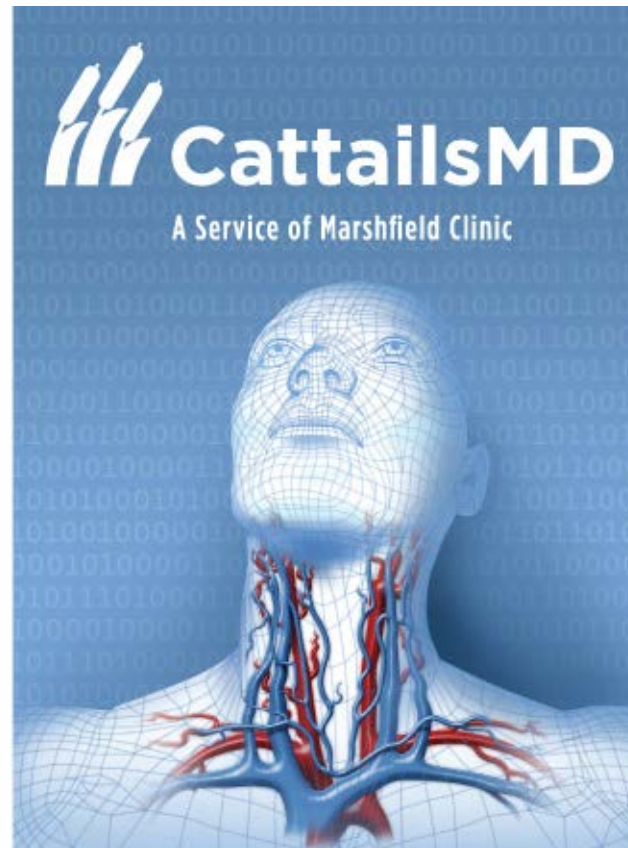
Integrated Care Models & Electronic Medical-Dental Health Records

*Health Records in Silos
Can Compromise Quality and Safety
through Inconsistencies/Discrepancies*



Reports relayed (informally) by patients
*Databases (patient records, paper
or EHRs) not synchronized*

Integrated Medical-Dental EHR Environment at MCHS



Integrated Medical-Dental Enterprise Data Warehouse

- Comprehensive data warehouse, supporting business and research queries
- Contains about 10 million patient years of data



Quality Improvement Initiative in Medicine

- Marshfield Clinic was 1 of 10 large Physician Group Practice invited by CMS → prove that providing high quality coordinated health care could also save \$
- In the last year of the PGP Demo, Marshfield Clinic last year exceeded 98 percent of the quality measures;
- Saved > \$118 million over the 5 performance years reported to Medicare program;

Quality of Care Dashboard

[Help](#)

Summary/Trending
Comparative
Monthly Control Charts

Condition: Diabetes Mellitus

Reporting Level: Hypertension

- Diabetes Mellitus
- Mfld Congestive Heart Failure
- Mfld Coronary Artery Disease
- Mfld Chronic Kidney Disease
- Mfld Chronic Obstructive Pulmonary Disease
- Mfld Preop & Health Screening
- Stratford Center
 - Krueger, Heather NP
 - Krueger, Kori MD**
 - Shulman, Karen MD

Diabetes Mellitus Metrics

Number of Patients	44
Average Risk Score	1.15
Blood Pressure Tested	100.0%
Blood Pressure at Goal	77.3%
Hemoglobin A1C Tested	100.0%
Hemoglobin A1C at Goal	63.6%
Two Hemoglobin A1Cs Tested	84.1%
Fasting Lipid Profile (LDL) Tested	93.2%
Fasting Lipid Profile (LDL) at Goal	75.0%
Microalbumin / Evidence of Nephropathy	81.8%
Influenza Vaccination	72.7%
Pneumococcal Vaccination	100.0%
Tobacco Asked	100.0%
Tobacco Free	81.8%
Foot Exams	72.7%

Diabetes Mellitus Quality Measures

Krueger, Kori MD
Percent of Patients Meeting Criteria

Krueger, Kori MD

Krueger, Kori MD
Number of Patients

Single Trend Graph
 Multiple Trend Graphs

Key Drivers

- Physician Group Practice demonstration;
- Accountable Care Organization (ACO);
- Integration of oral health with the overall health + improving quality of oral health provided; and
- Oral health quality improvement culture.

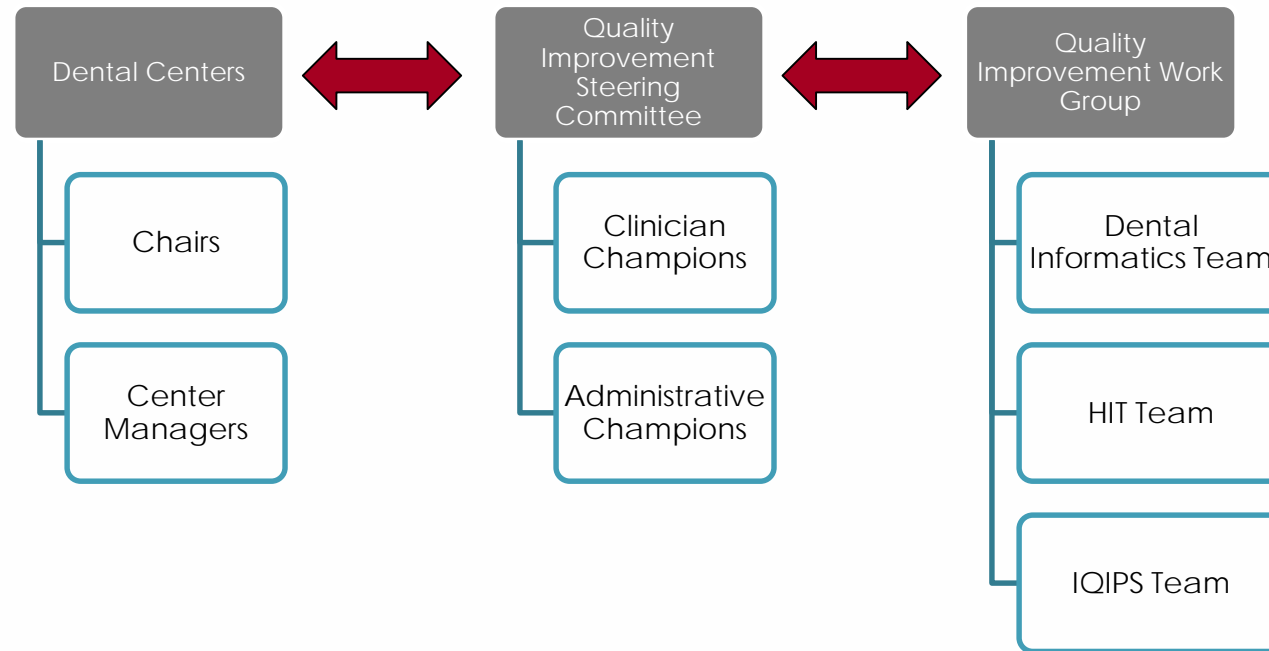
Key Strategies - 1

- QI Steering Committee



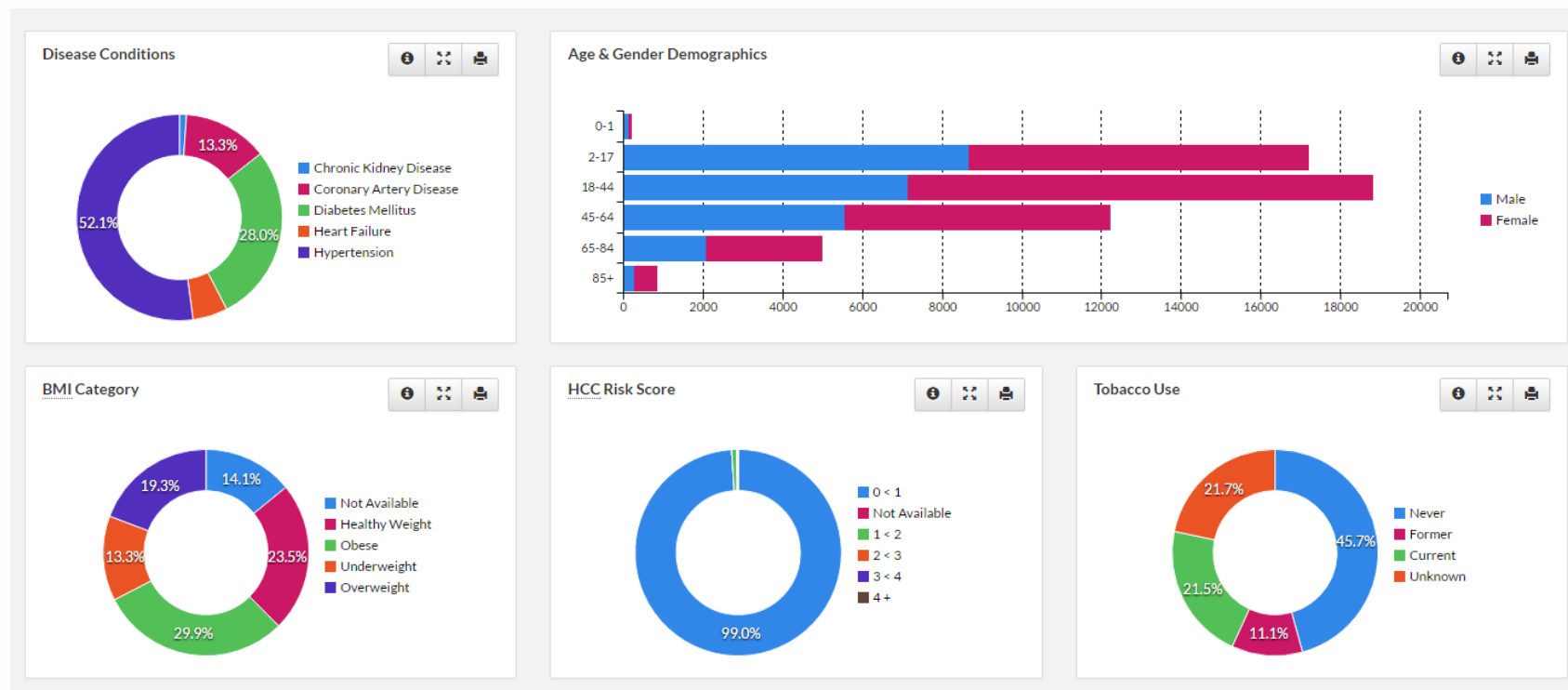
Key Strategies - 2

- Representation across System



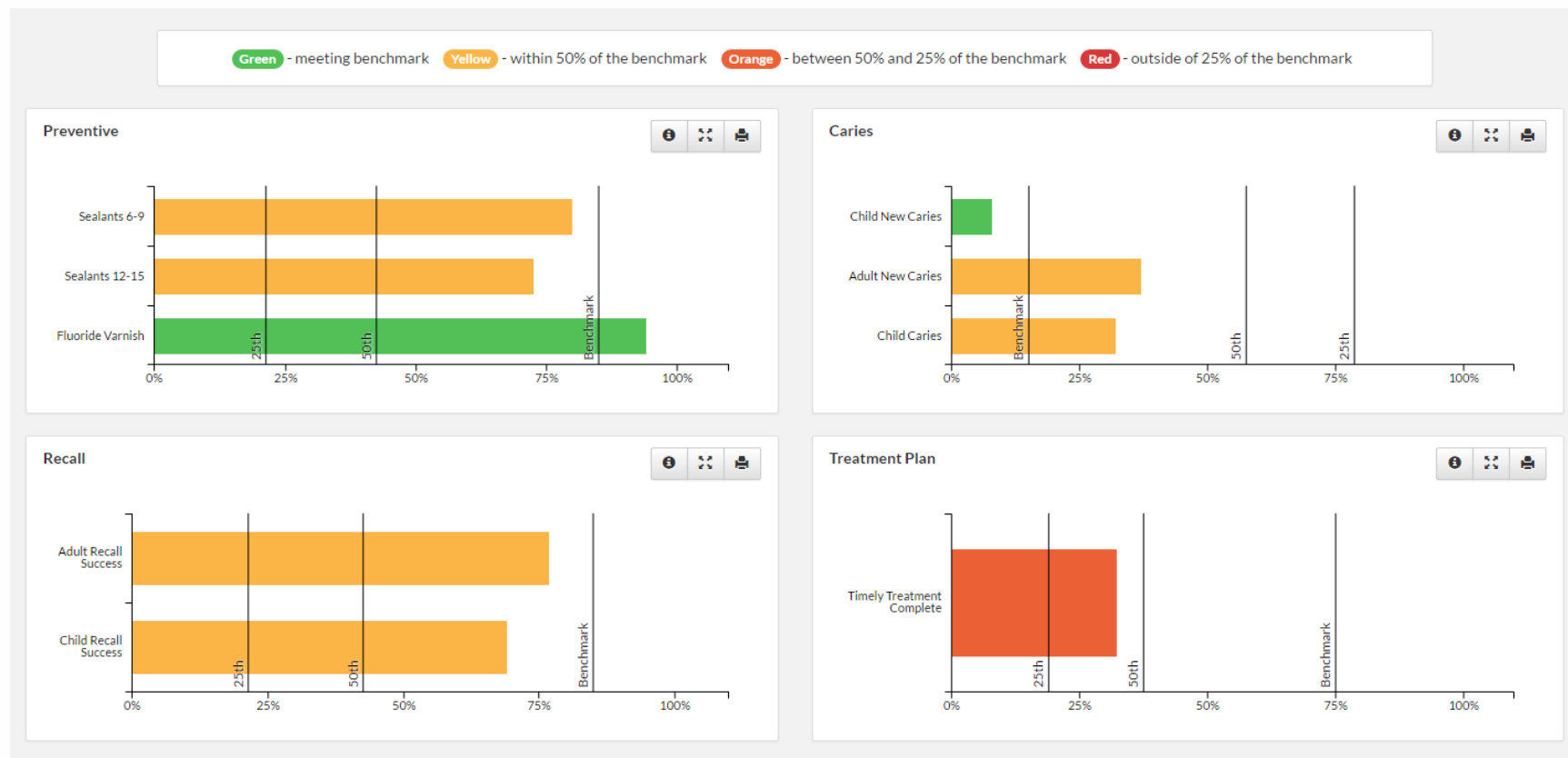
Key Strategies - 3

- Dental quality analytics dashboard tool to monitor + interact with practice level data;



Key Strategies - 4

- Financial Renumeration



Key Strategies - 5

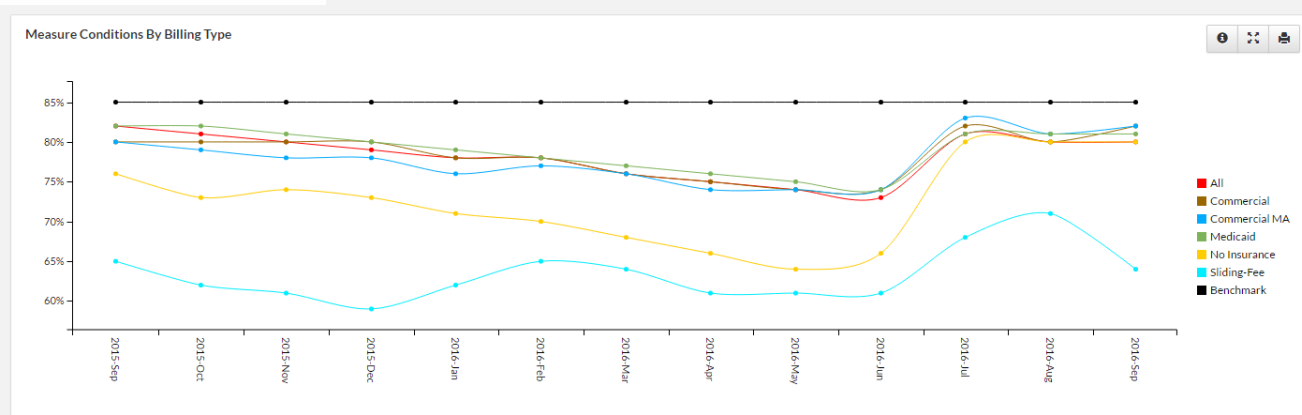
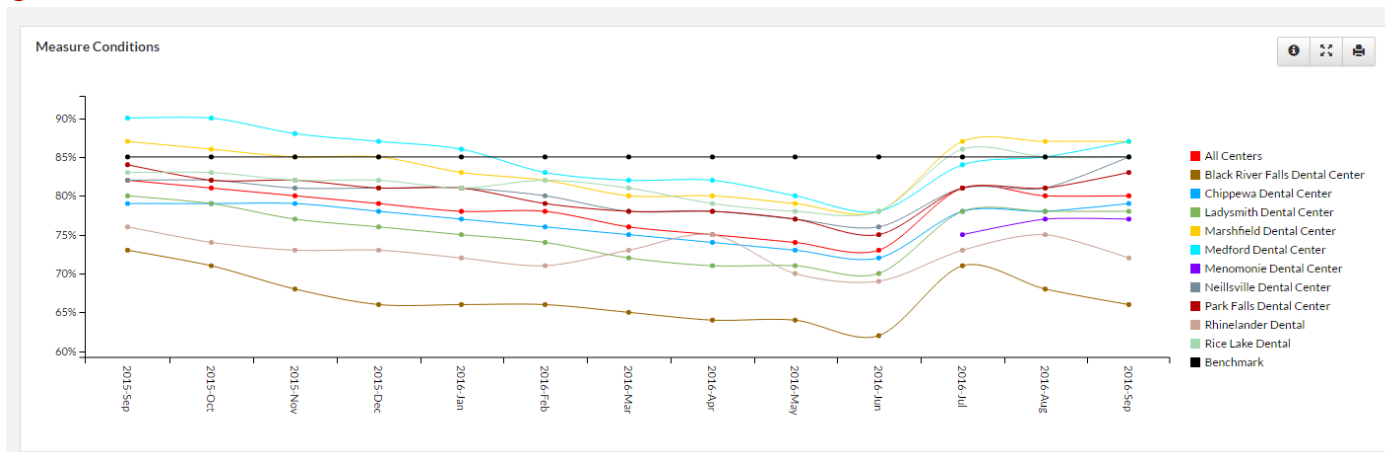
- Practice Transparency



Source: <http://sciencenewsjournal.com/increase-teams-success-financial-incentive-friendly-competition/>

Key Strategies - 6

- Identify and Share Best Practices and Trends



Challenges

- 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.

Overall Impact

- 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;

Acknowledgements





To measure
is to know.
If you can not
measure it,
you can not
improve it.

- Lord Kelvin

Quality Improvement:



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“Evaluating the Quality of Medical Care”. Donabedian D

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On behalf of the
DQA, thank you!