Lutheran Medical Center
DENTAL MEDICINE
Real-World Experience. Real-World Advantage.

# Medical/Dental Integration and Interprofessional Education and Practice

Martin Lieberman, D.D.S.
Susan L. Dietrich, D.M.D., M.A.

October 20, 2014

CHCANYS DEFINING NEW DIRECTIONS
COMMUNITY HEALTH CARE ASSOCIATION OF NEW YORK STATE

# Dr. Susan Dietrich

- DMD from University of Florida
- MA in Education, University of the Pacific Bernerd School of Education
- Private Practice 12 years in Ocala FL
- Graduate Dental Education 17 years
- Lutheran Medical Center, Vice President and Director of Graduate Dental Education and Distance Learning. (2001 – present)
- Graduate Dental Education and Accreditation Leadership

# Lutheran HealthCare


BRONX

MANHATTAN

QUEENS

BROOKLYN

STATEN ISLAND

- Lutheran Medical Center
- Lutheran Augustana Center for Extended Care and Rehabilitation
- Lutheran Family Health Centers
- School-based Dental Clinics
- School-based Health Centers
- Health Plus Offices
- Lutheran HealthCare Medical Arts Pavilion
- 58th Street Administrative Offices
- Senior Housing

Indicates new, renovated or expanded site

# Lutheran HealthCare

- Lutheran Medical Center was founded in 1883 by Sister Elisabeth Fredde
- Lutheran Medical Center is a 476 + bed teaching hospital and Level 1 Trauma Center
- Lutheran Family Health Center Network is largest hospital-based Federally Qualified Health Center in the country (estab. 1968 as Sunset Park in SW Brooklyn)

# Lutheran HealthCare

- LMC Residency Training Programs
  - 135 Medical residents, including Family Medicine, Internal Medicine, OB-GYN, Surgery and Podiatry
  - A. T. Still medical students
  - 372 Dental Residents, including AEGD, GPR, Orofacial Pain, Dental Anesthesiology, Pediatric Dentistry, Endodontics, Periodontics, Dental Public Health and Orthodontics*

*Pending CODA approval

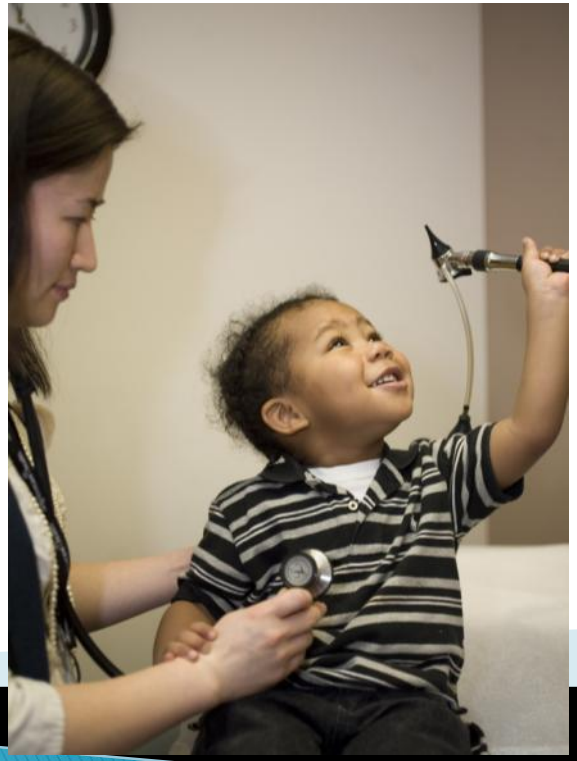
# Who's here today?

- President/CEO
- Health Center Administrators
- Oral Health Care Providers
  - Physicians
  - Dentists
  - Nurses
- Collaboration Experiences/Activities
  - Medical/Dental Integration
  - IPE (Interprofessional Education and Practice)

# Dr. Martin Lieberman

- DDS from University of Minnesota
- AGD Residency
- Private Practice 20 years in Chicago
- Dental Director Neighborcare Health 2002-2014
- Lutheran Medical Center, Graduate Dental Education
- National Network for Oral Health Access Board of Directors.  Chair Practice Management Committee
- Quality Improvement Faculty
- Technical Assistance

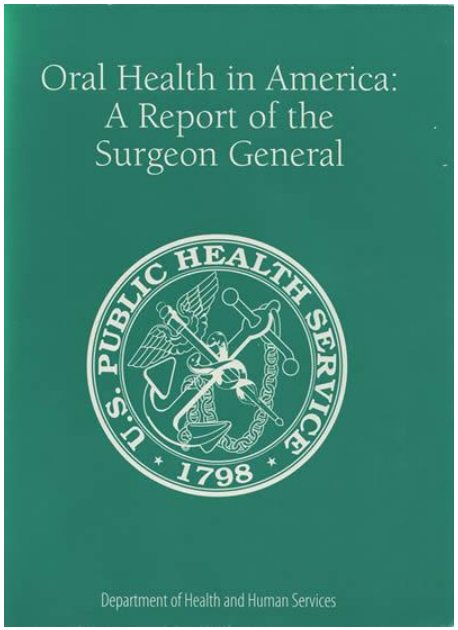
# A Quality Improvement Approach to Medical and Dental Integration

"You are not healthy without good oral health…"
-David Satcher, MD,16th Surgeon General

## Surgeon General's Report on Oral Health

- Dental care is the most common unmet health need
- Oral disease can severely affect systemic health
- Most oral disease is preventable
- Profound disparities in oral health and access to care exist for all ages
- Healthcare providers should be engaged to improve oral health.



INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES

- Linkages between oral health and respiratory disease[2], cardiovascular disease[3], and diabetes[4].
- Because oral health is linked to overall health, the effects of poor oral health are felt far beyond the mouth.

# Consequences for Patients' Health

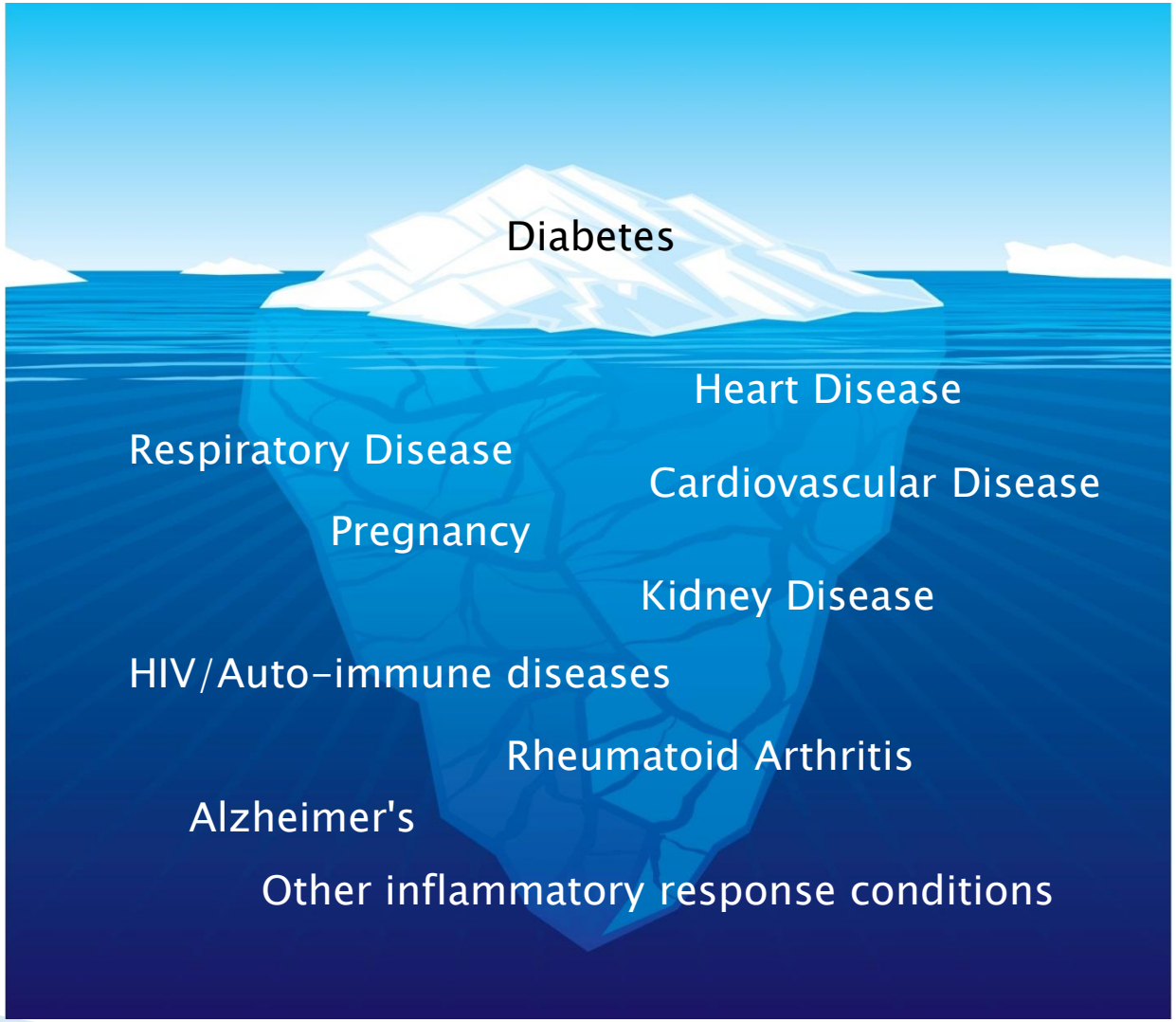
Oral disease is largely preventable but untreated oral disease can lead to:

- Pain that makes it difficult to work, pay attention in school, sleep, eat
- Poor eating habits and nutrition
- Reduced self-confidence and/or problems obtaining employment because of decayed or missing teeth
- Infections that must be controlled with antibiotics or require anesthesia and surgery
- Complications of chronic diseases like diabetes.

# Oral Disease ⟺ Systemic Diseases

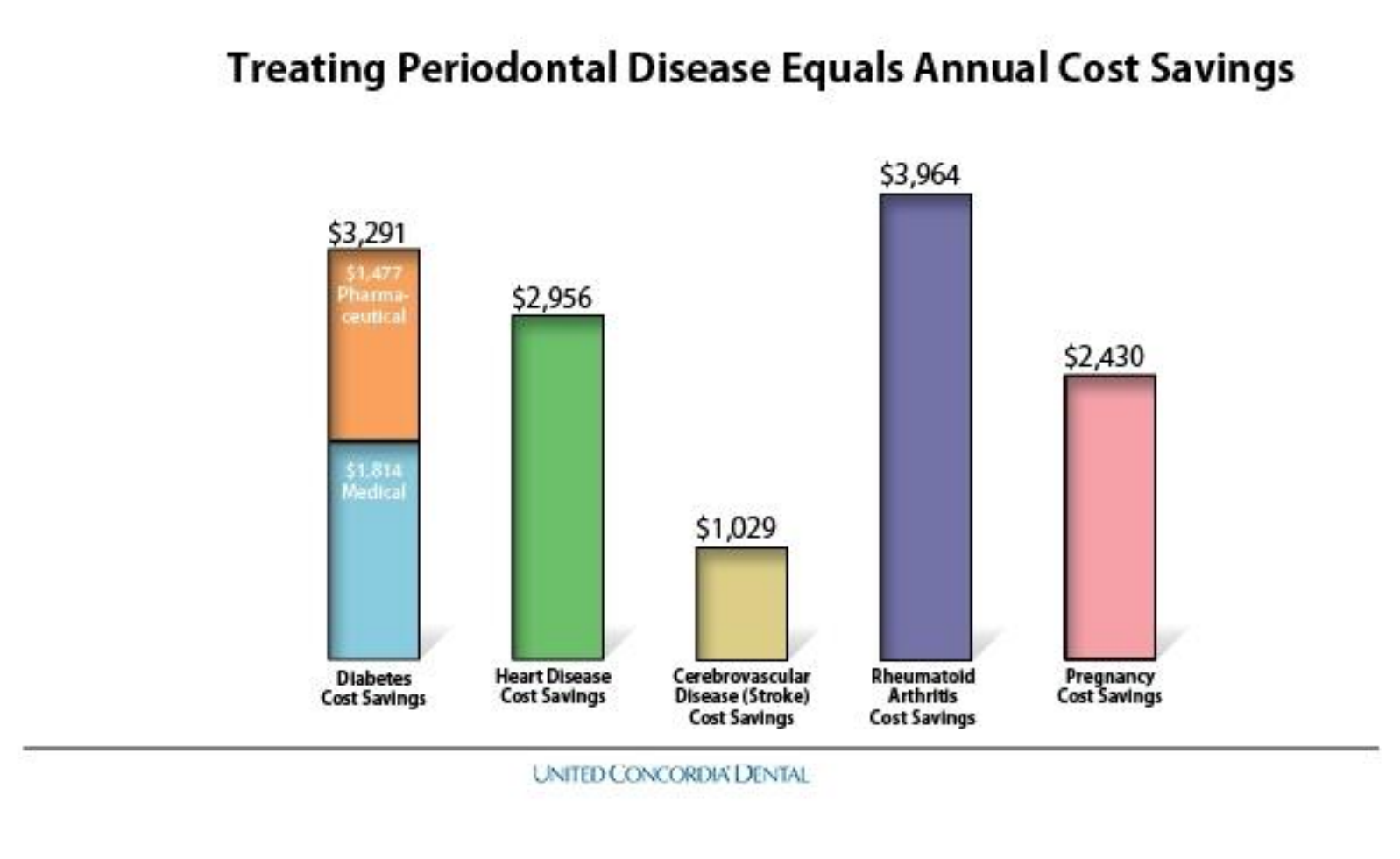
- Periodontal disease—correlated with a variety of conditions with systemic implications
  - Cardiovascular disease, heart disease, respiratory infections, diabetes, HIV, adverse pregnancy outcomes
- Systemic diseases can have an impact on oral health
  - Dementia
  - Chronic disease medications that cause xerostomia

# The Tip of the Iceberg

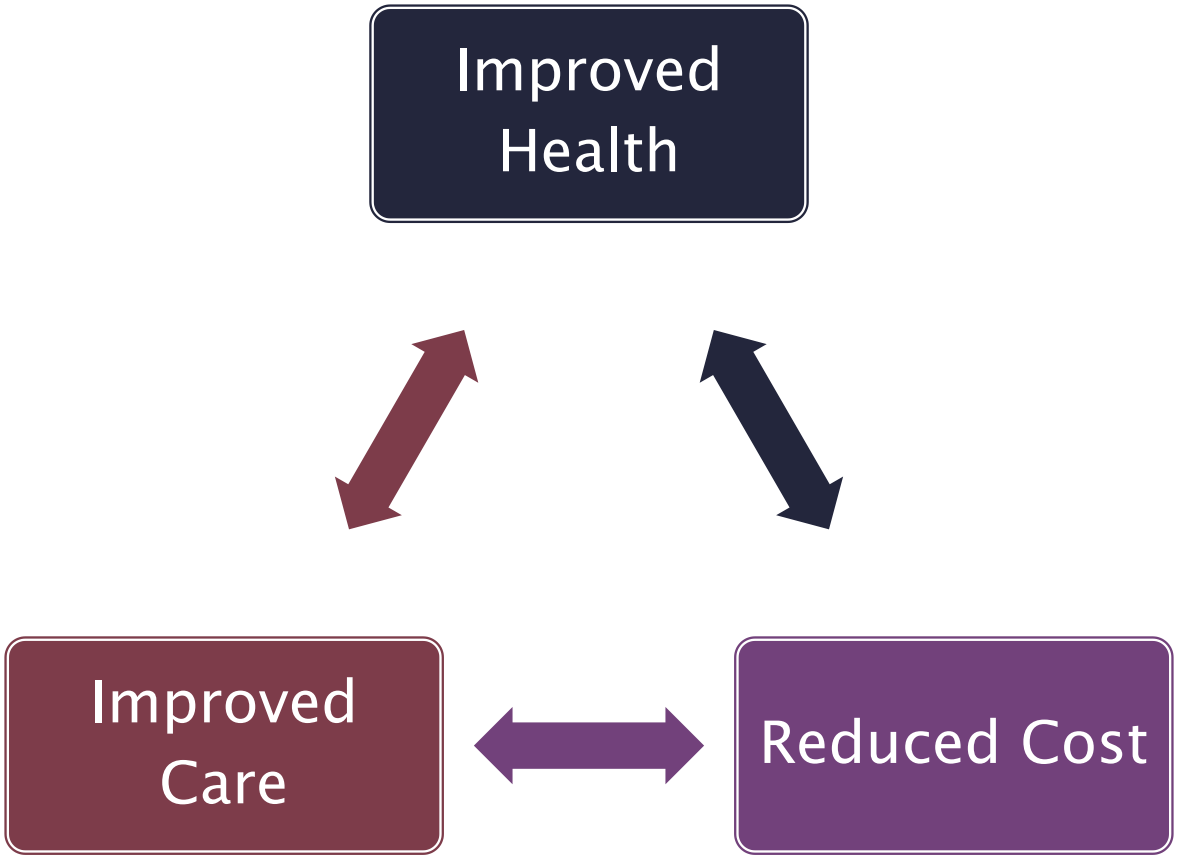


# Oral-systemic Connection

Periodontal treatment reduces medical costs for people with multiple chronic conditions



# Overall Desired Outcome
# The "Triple Aim"



# What is Medical Dental Integration?

# Dental/Medical Integration

Improved oral health can lead to better overall health.
Smart Business Chicago | January 2007

While offering medical coverage to prospective and current employees is an important attraction and retention tool for employers, it is far from the only health-related benefit that employees are looking for. After medical coverage, dental coverage is always cited as one of the most sought-after employee benefits.

For employers looking to offer both of these benefits to employees, but are also looking to manage the costs, there is an innovative new approach that can both provide improved benefits for employees — keeping them healthier and more productive — and also cut medical costs for the employer.

Bill Berenson, vice president of sales and service for Small & Middle Market Business in the North Central Region.

CASE MANAGEMENT • CHRONIC CARE • COMPARATIVE EFFECTIVENESS • DISEASE MANAGEMENT

ENGAGED CONSUMERS • EVIDENCED BASED • HEALTH INFORMATION EXCHANGE

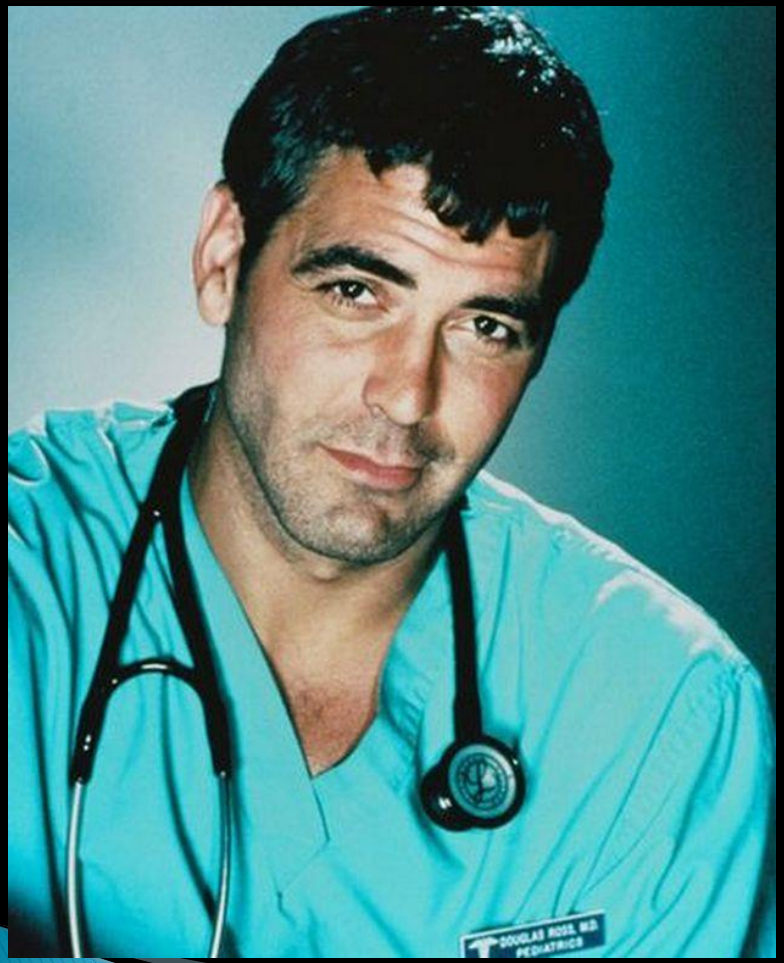

HEALTH INFORMATION TECHNOLOGY • INCENTIVES • MEDICAID • MEDICARE

PATIENT ADVOCACY • PAYMENT REFORM • PHYSICIAN DIRECTED • PREVENTIVE CARE • WHOLE PERSON APPROACH

# Seven Key Characteristics

1. Leadership Vision & Support
2. Dental Integrated into Health Center Executive Team
3. Co-location
4. Organizational Culture of Quality Improvement
5. Dental Staff Buy-in: Understanding the "Why"
6. Facilitating Patient Services
7. Medical and Dental Director Leadership

Dr. Marcus Rempel, MD

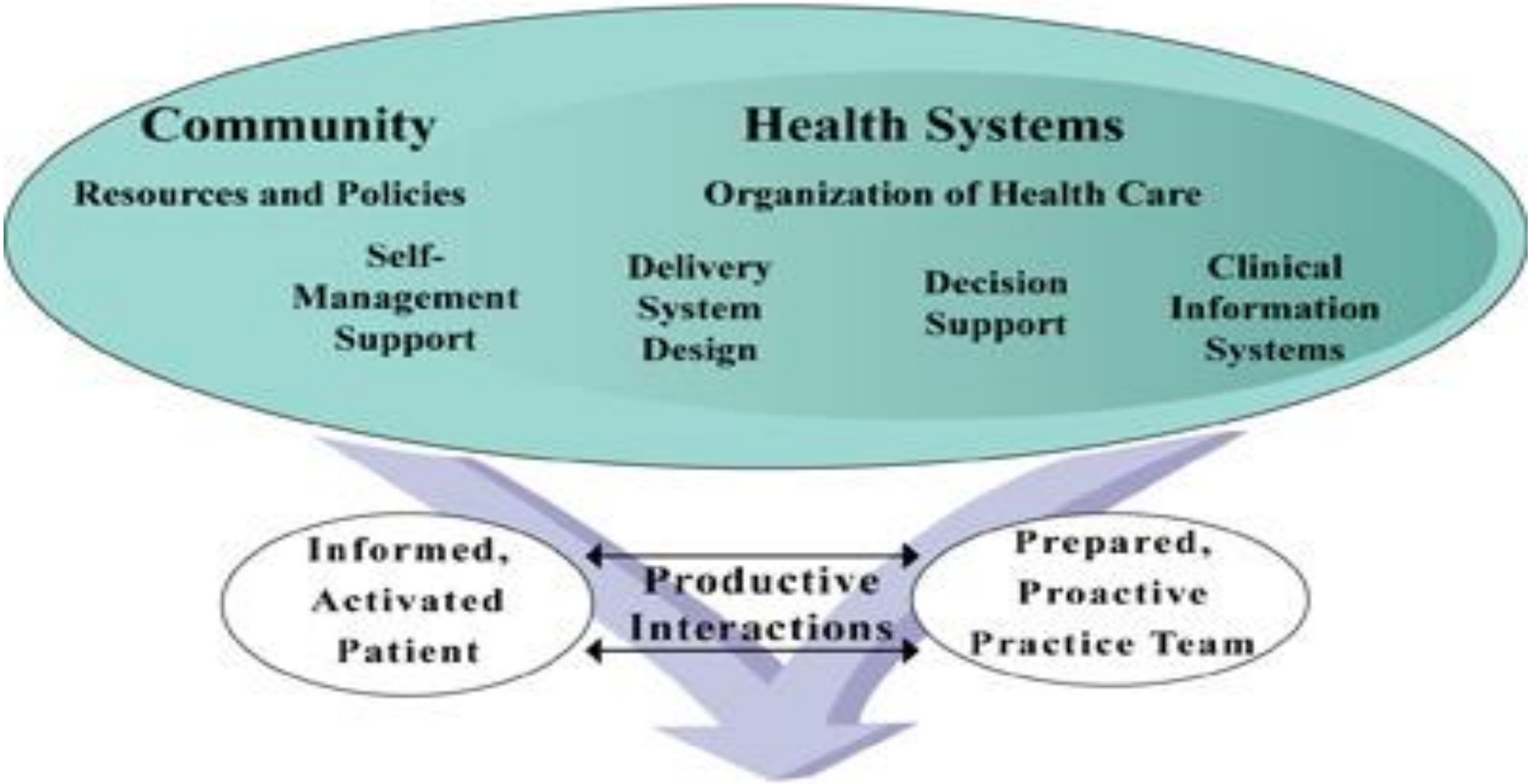



Dr. Martin Lieberman, DDS

Dr. Marcus Rempel, MD

Dr. Martin Lieberman, DDS

# The Chronic Care Model

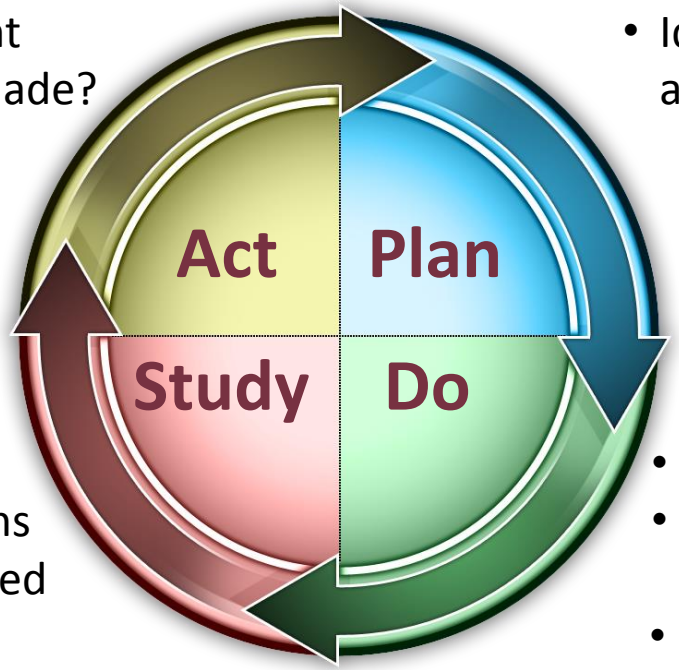



## Improved Outcomes

# Plan-Do-Study-Act Cycle

Ideas → Action → Learning → Improvement

- Demonstrate improvement
- What changes are to be made?
- What is the next cycle?

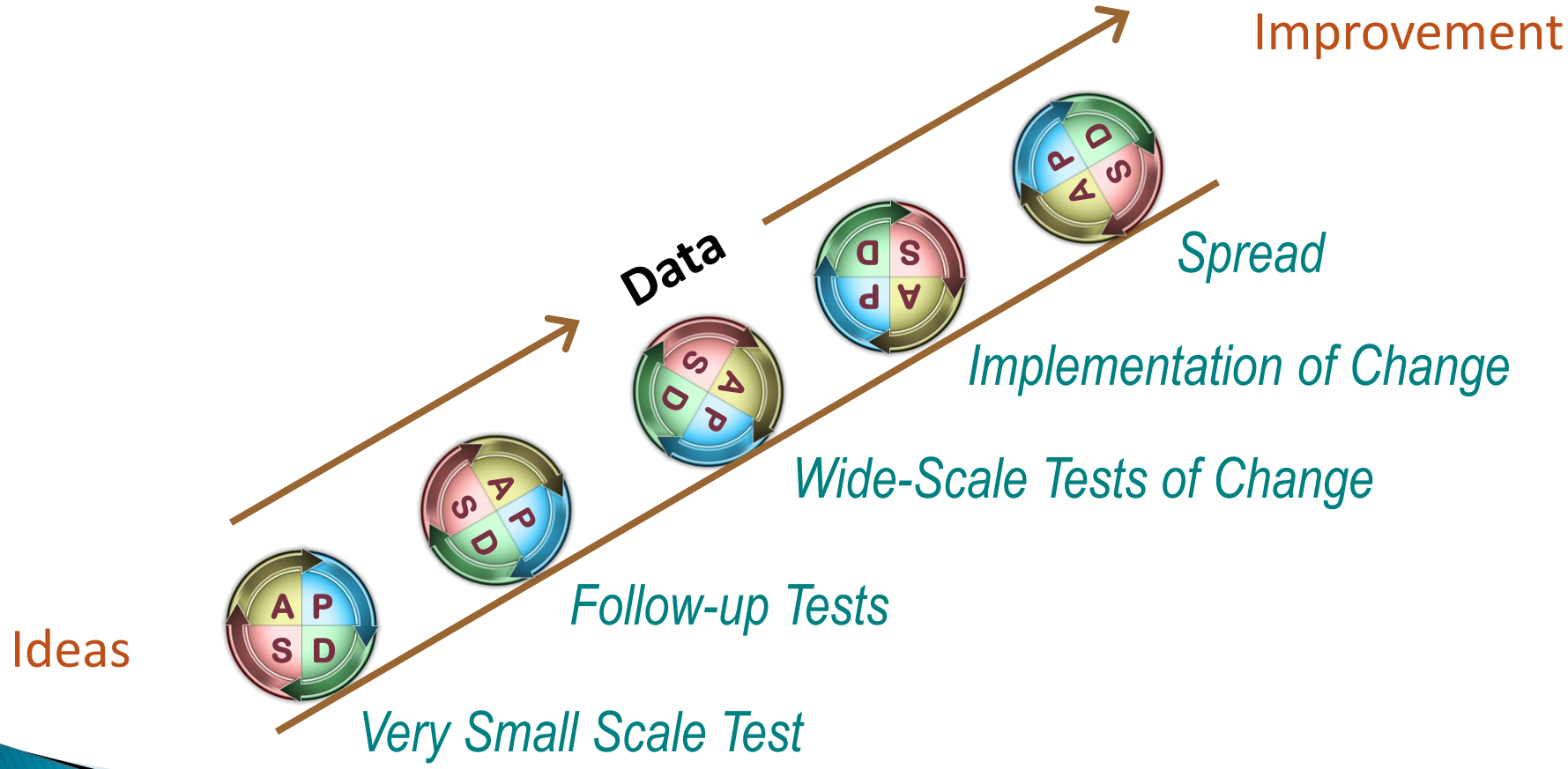



- Identify problems and create a plan

- Complete the data analysis
- Compare data to predictions
- Summarize what was learned

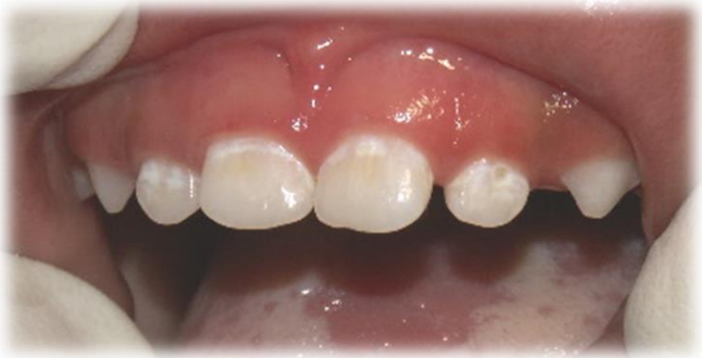
- Implement the plan
- Monitor and document results
- Begin analysis of the data

# Using the Cycle to Improve

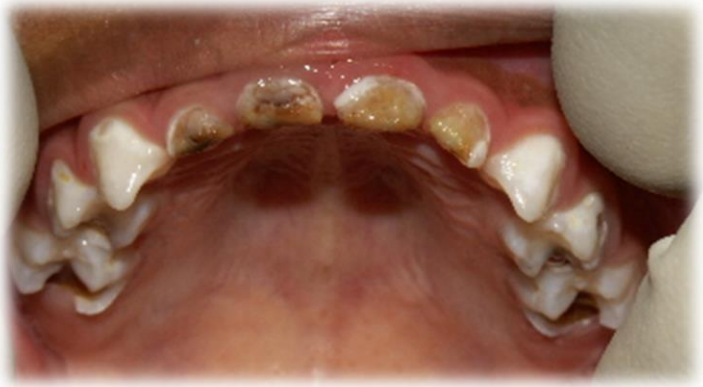


# Children

- Tooth decay is the most common chronic disease of childhood
  - 5 times more common than asthma

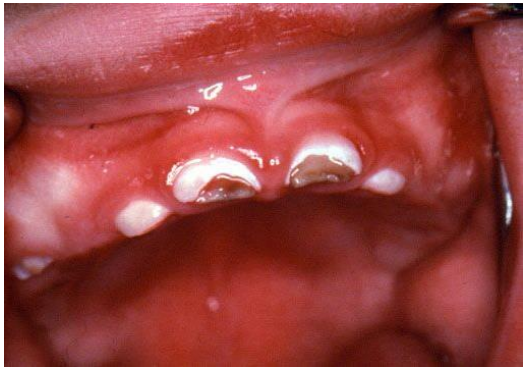


- **Consequences of untreated tooth decay:**
  - Poor school performance & missed school
  - Speech and language development problems
  - Difficulty eating
  - Hospitalization for extractions



# Childhood Caries Statistics

- Dental decay rates are on the rise
- ECC prevalence has increased significantly in children ages 2-5 years[1]
- ECC disproportionally affects minorities and lower SES groups[1]
- ECC is a predictor for future decay[1]
- Costly chronic disease
  - $95.3 billion in 2007 and this is expected to increase in the next decade.
  - Medicaid > private sector



# Recommended Age for a Child's First Oral Examination

AAP, AAFP, AAPD

Recommend children be screened by their first birthday (doctor or dentist)

How do we care for infants?

# Pediatrics

- Improvement teams. Members medical, dental, process improvement.
- Senior Leadership support
- Time set aside to do the work
- PDSAs, PDSAs, PDSAs.

# Pediatrics

- Emphasis on early screening and education
- Medical provider awareness of risk factors and what early caries look like
- Use periodic well child exams as an opportunity to ask about last dental checkup
- Streamline appointments when able- both medical and dental on the same day
- CAMBRA Tool, self management goal setting
- Immunizations

# Children: Risk Assessment

| Factors putting child at higher risk for tooth decay | |
|---|---|
| Sibling(s) | • Ever had decay, cavities, fillings |
| Mother/primary caregiver | • Had decay, cavities, fillings in past year |
| Child | • White spots or current/previous caries<br>• Frequent sugar/carbohydrate snacks and/or bottle/sippy cup with liquids other than water<br>• Does not brush 2 times a day with fluoridated toothpaste<br>• Does not drink fluoridated water regularly<br>• Special healthcare needs |

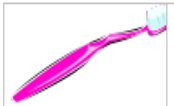
# Self Management Goal Setting

Patient Name: _____ DOV: _____

You have been assessed to have the following risk for caries (cavities):

☐ High ☐ Moderate ☐ Low

**The pictures checked are the areas you should focus on between today and your next visit.**

| | | | |
|---|---|---|---|
|  ☐ Brush twice a day with toothpaste |  ☐ Use fluoride toothpaste; do not rinse mouth after brushing |  ☐ Daily flossing |  ☐Drink tap water |
|  ☐ 5 or less "meal moments" a day |   ☐Less or no soda or energy drinks |  ☐Healthy Snacks; 1-2 snacks per day |   ☐ Less or no candy and junk food |
|  ☐ Wean off bottle (no bottles with milk for sleeping) |  ☐ Only water in sippy cup | | **IMPORTANT:** The last thing that touches your child's teeth before bed-time is the tooth-brush with fluoride toothpaste. |

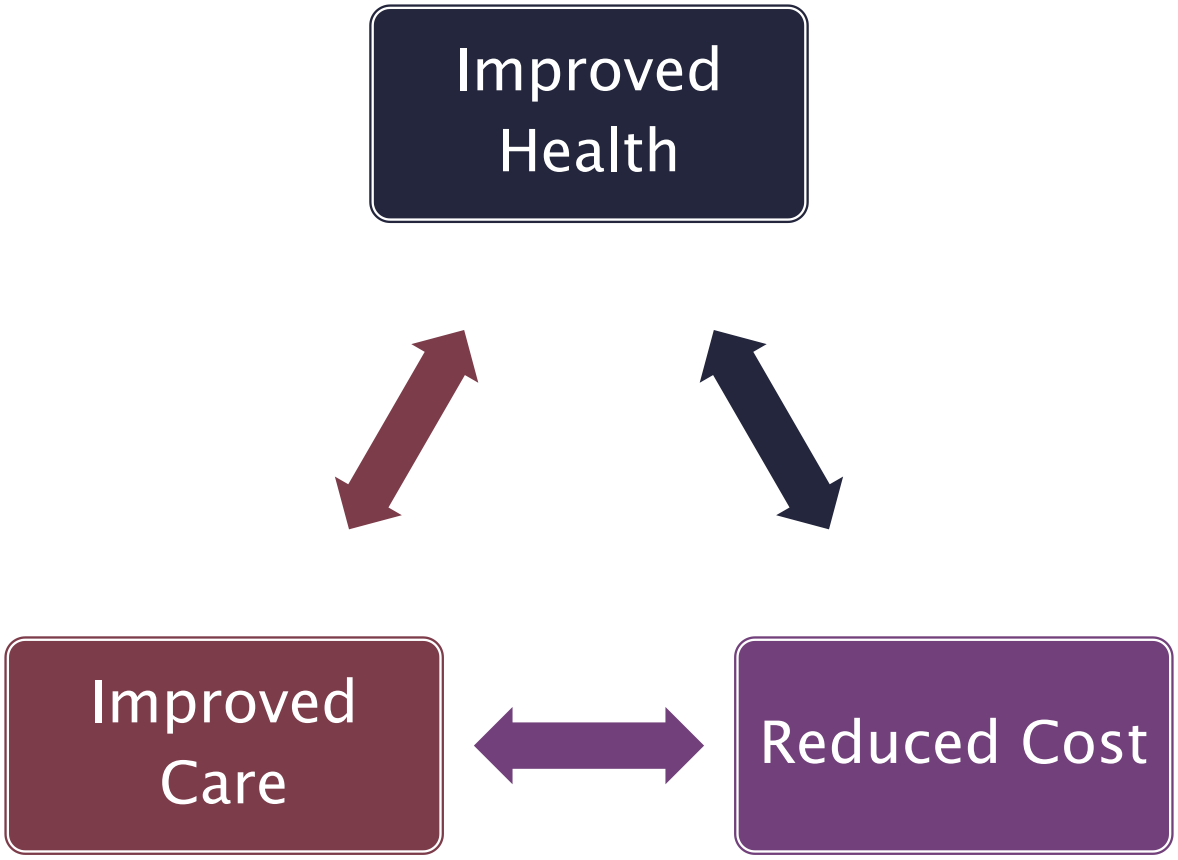
**How likely is it that you think you can meet these goals?**
**Scale: 0 1 2 3 4 5 6 7 8 9 10**

**Recall Due: Jan Feb March April May June July Aug Sept Oct Nov Dec 20___**

# ECC Collaboratives

- Four health centers from Western New York are actively participating in DentaQuest Institute's Phase III ECC Learning Collaborative.
- The New York State Department of Health Bureau of Dental Health is currently working with stakeholders from across the state to develop a similar Collaborative specifically for New York State
- This new statewide Collaborative is slated to start in September 2015 with potential teams being recruited over the summer
- Specific details are still being finalized; however, the Collaborative will most likely be open to residency programs in addition to community health centers.

# Overall Desired Outcome
# The "Triple Aim"



# The Maternal-Child Linkage

Mothers/primary caregivers are the primary source of the bacteria responsible for causing caries

**How are the bacteria transmitted?**

- Via saliva contact such as tasting food, licking spoons or binky
- The more active the disease in mother's mouth, the more likely the child is to acquire the bacteria early.
- If colonization is delayed until after two years of age, then children have less dental decay.

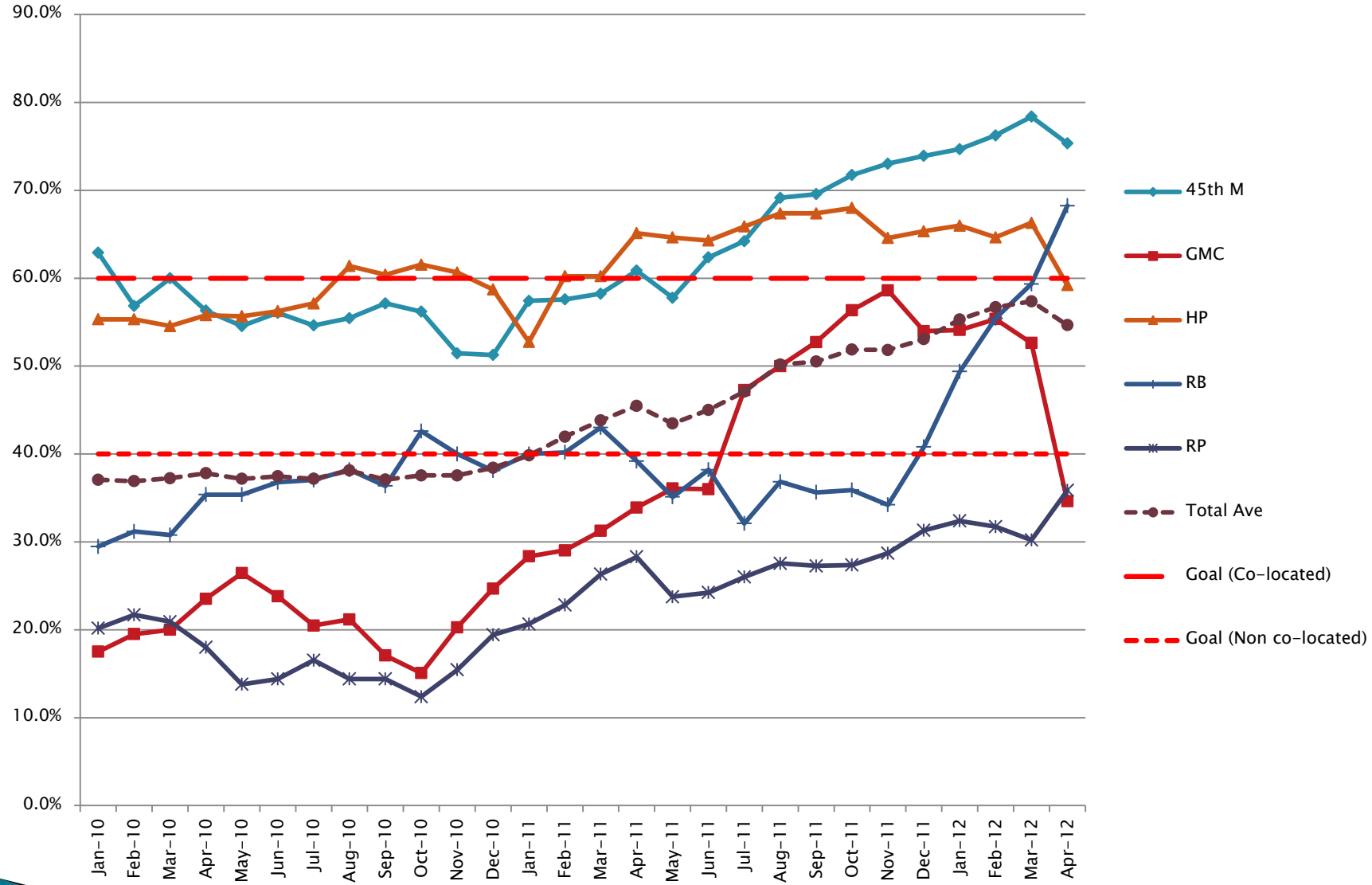
# Pregnant Patients

- Why is oral health care important?
  - Tooth decay is the most common chronic disease of childhood
  - Reduce disease in mom's mouth before birth to reduce transmission of cariogenic bacteria —via saliva—from mother to infant after birth
  - Improve oral health care for infant by knowing how to care for baby's mouth
  - Women are receptive to oral health messages
    - Control woman's oral disease
    - Promote mother's positive role-modeling of oral health behaviors

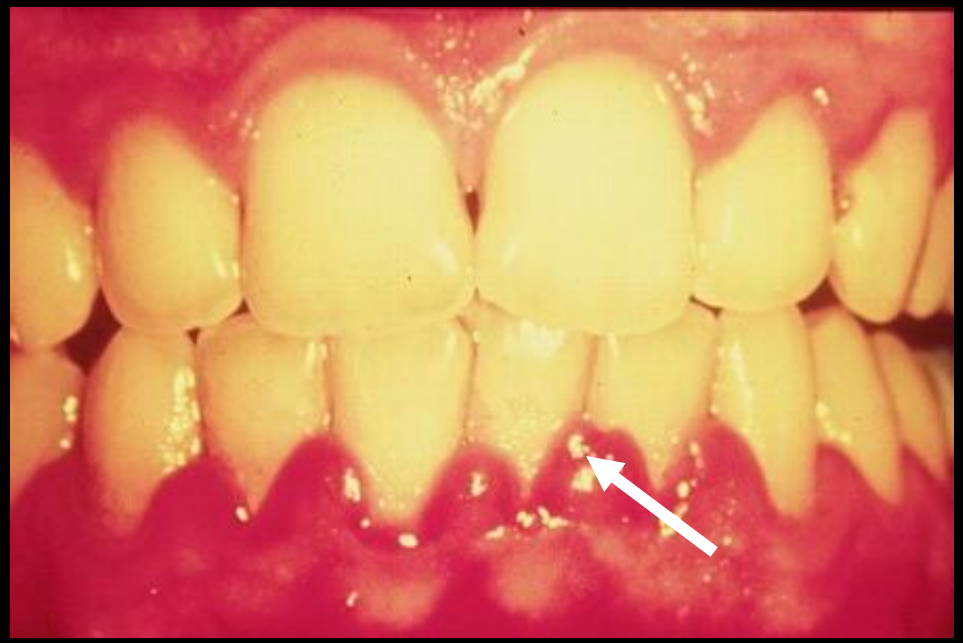
# OB Patients-Model For Improvement

- Emphasis on screening and treating decay and periodontal disease
- For our population, an opportunity for adults to get dental coverage during pregnancy
- Transmission of S. Mutans
- Education on infant oral health

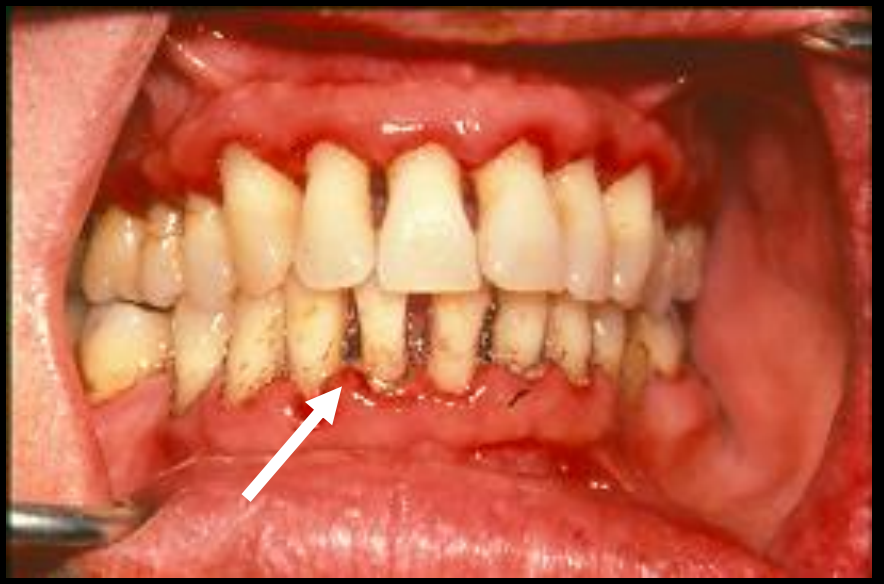
# OB Dental Report vist dates x 1 yr, EDD dates x 9 mos



# Gum Problems



Gingivitis



Periodontal Disease

# Periodontal Disease

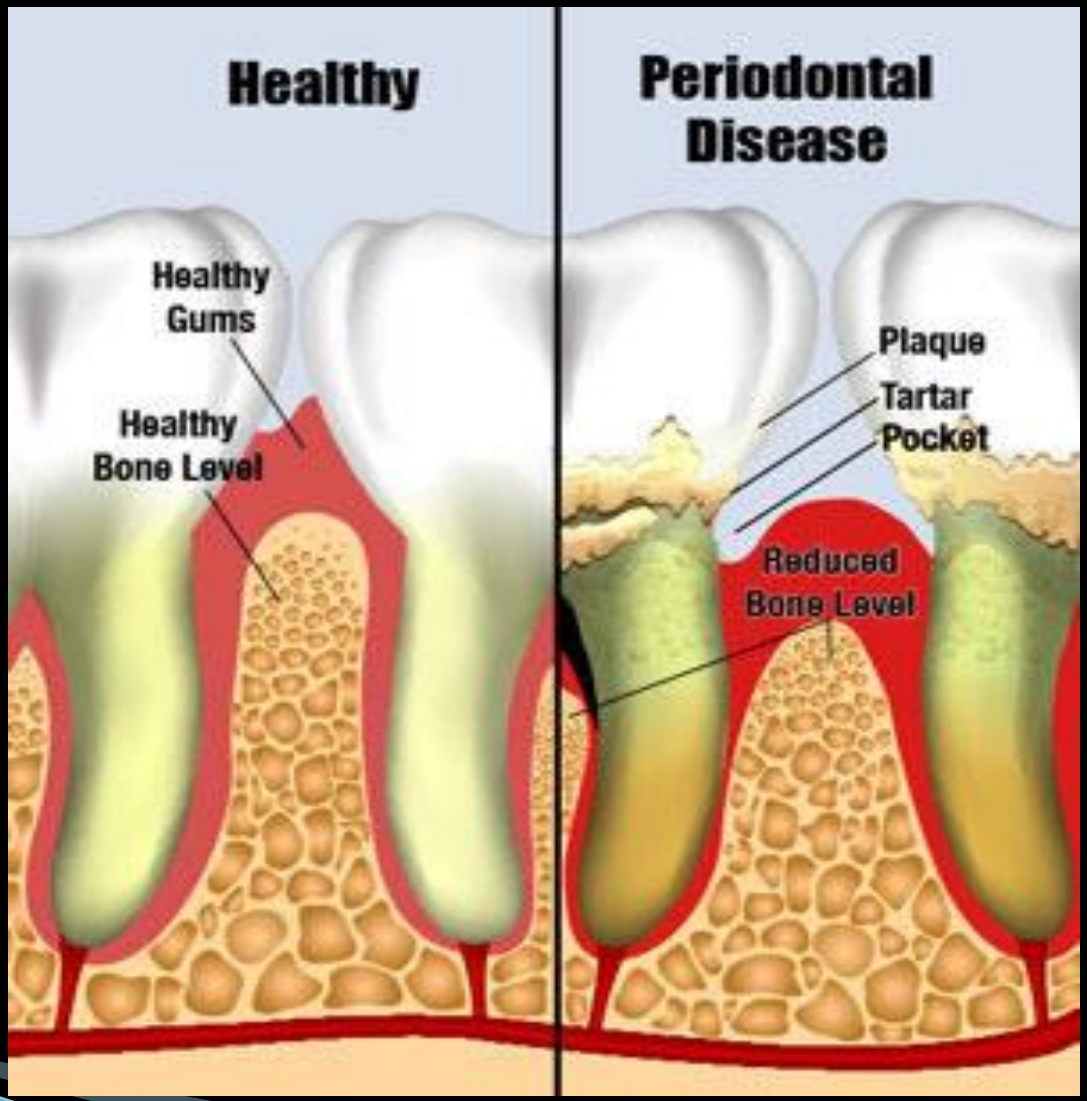
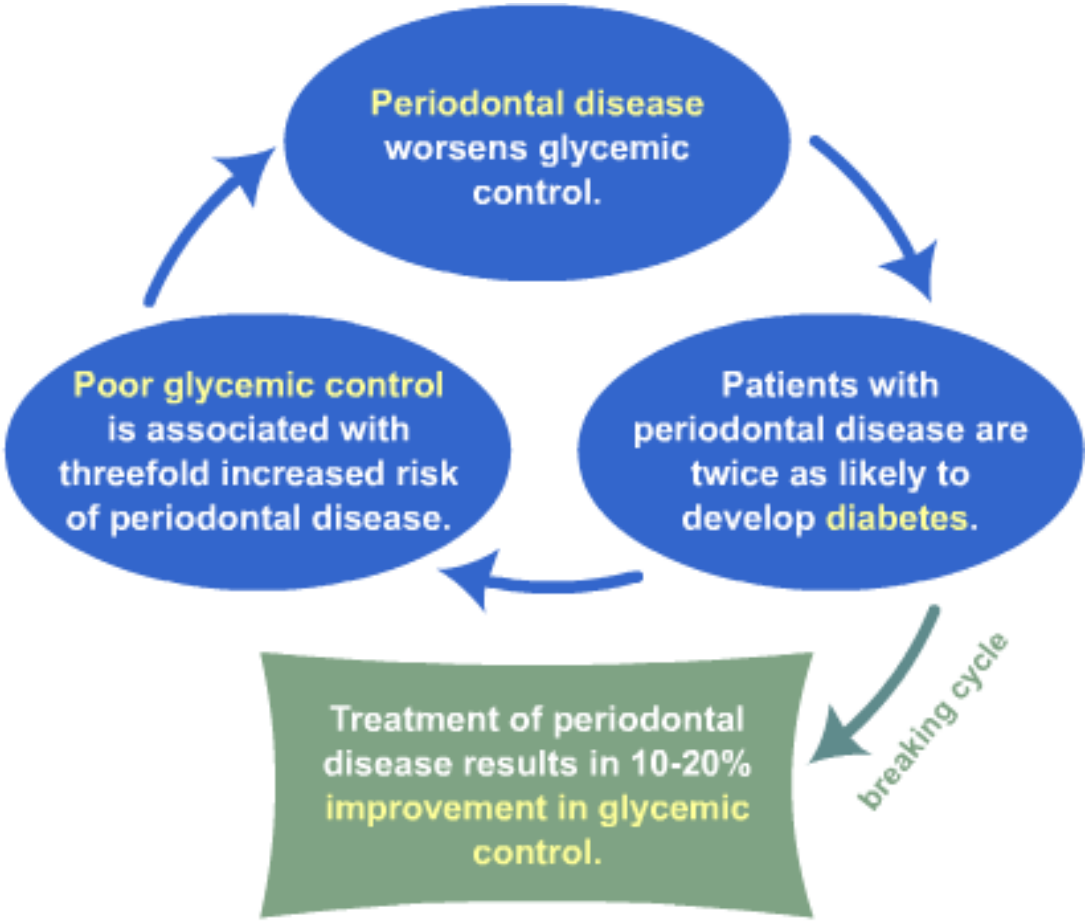



Image from www.periotherapy.com

# Periodontal Disease & Diabetes

A vicious cycle:

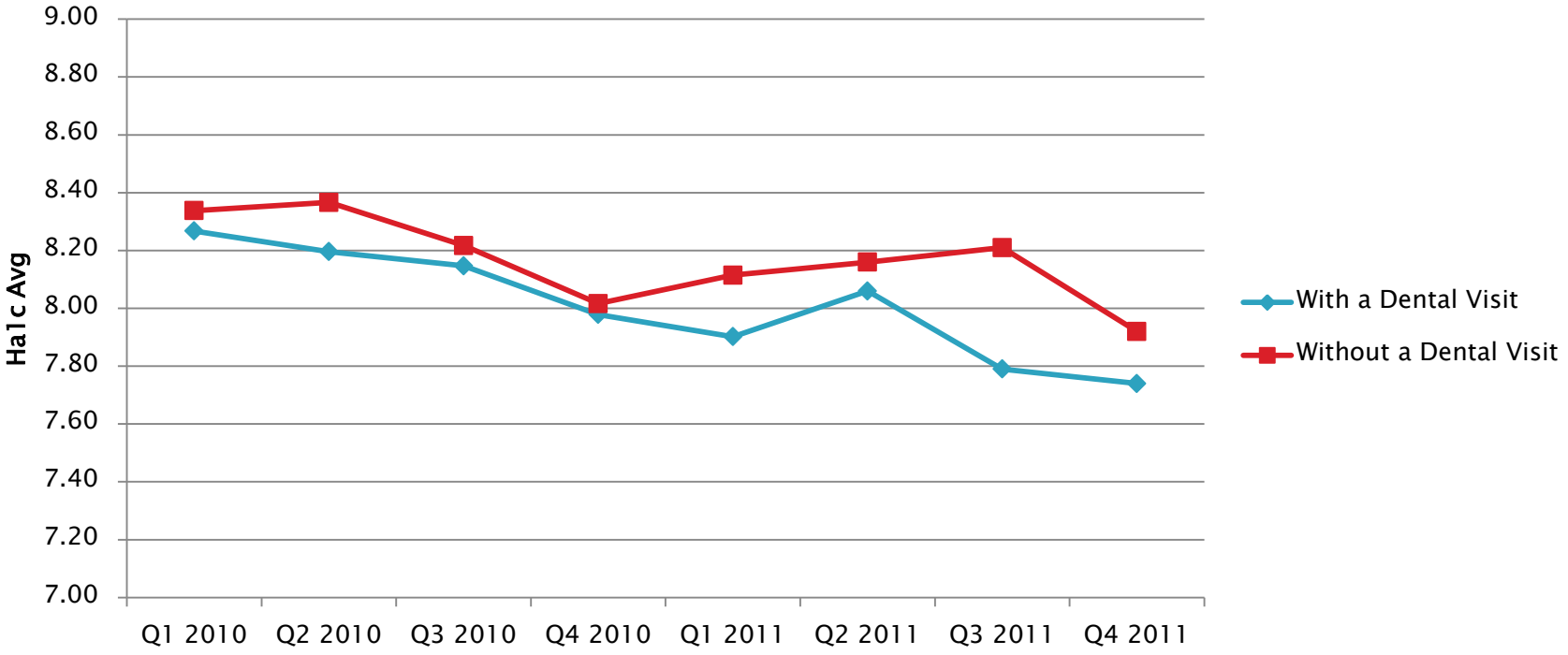



- Periodontal disease increases the risk of Type 2 diabetes and the risk of diabetic complications.

# Diabetics

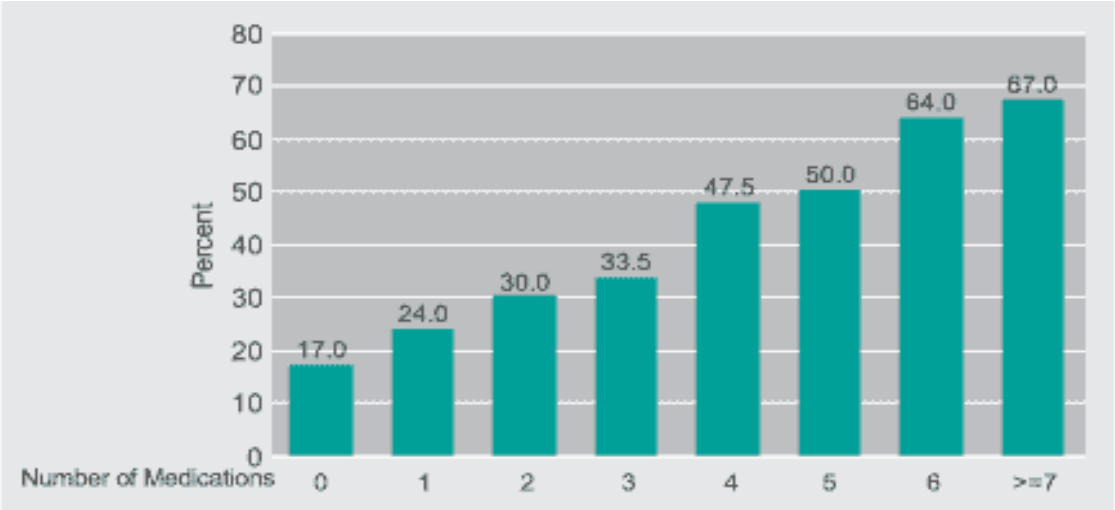
- Initially targeted patients with A1Cs >8
- Expanded to all diabetic patients
- Barriers: finances, access, patient understanding

# 2010-2011 HA1c Averages by Quarter



# Patients Using Multiple Medications

- 7 out of the 10 most commonly used medications can cause xerostomia (Dry Mouth).




- Common culprits: antihistamines, cholesterol lowering medications, antidepressants
- People of all ages can have dry mouth
  - 1 in 3 older adults has dry mouth

# Tooth Brushing/Prevention

- Study in Scotland.  Tooth brushing and cardiovascular disease
- Tooth brushing pilot at our Pike Market Clinic.
- Improving the oral health of our medical population when we cannot provide access in a dental setting

# EHR/EDR Meaningful Use

- Most systems don't "talk" to each other
- No diagnostic codes in dental
- "Dummy Codes"
- Self Management Goals
- Patient Safety.  Medications, RXs, allergies, medical histories.
- Immunizations, HBP, Smoking Cessation
- Population of focus management

# Looking Forward

- Access issue
- Referral Process?
- IPE

Lutheran Medical Center
DENTAL MEDICINE
Real-World Experience. Real-World Advantage.

# Interprofessional Education and Collaboration – IPEC

Susan L. Dietrich, D.M.D., M.A.
Vice President, Graduate Dental Education
October 20, 2014

CHCANYS DEFINING NEW DIRECTIONS
COMMUNITY HEALTH CARE ASSOCIATION OF NEW YORK STATE

# What is IPE? – Definitions

- **Interprofessional Education**: "When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010)
- **Interprofessional collaborative practice**: "When multiple health workers from different professional backgrounds work together with patients, families, carers [sic], and communities to deliver the highest quality of care" (WHO, 2010)

# What is IPE? – Definitions

- **Interprofessional teamwork**: The levels of cooperation, coordination and collaboration characterizing the relationships between professions in delivering patient-centered care

- **Interprofessional team-based care**: Care delivered by intentionally created, usually relatively small work groups in health care, who are recognized by others as well as by themselves as having a collective identity and shared responsibility for a patient or group of patients, e.g., rapid response team, palliative care team, primary care team, operating room team

# History of IPE

- For more than 50 years, health care leaders and educators have been interested in how collaborative teams can help improve health outcomes, but enthusiasm for putting the concept into practice has varied over the decades. After an influential 1972 report from the Institute of Medicine on "Educating for the Health Team," for example, interest surged in team-based care across a variety of settings, but we lacked evidence about how that care might lead to better health.

# Why change the way we educate health care professionals?

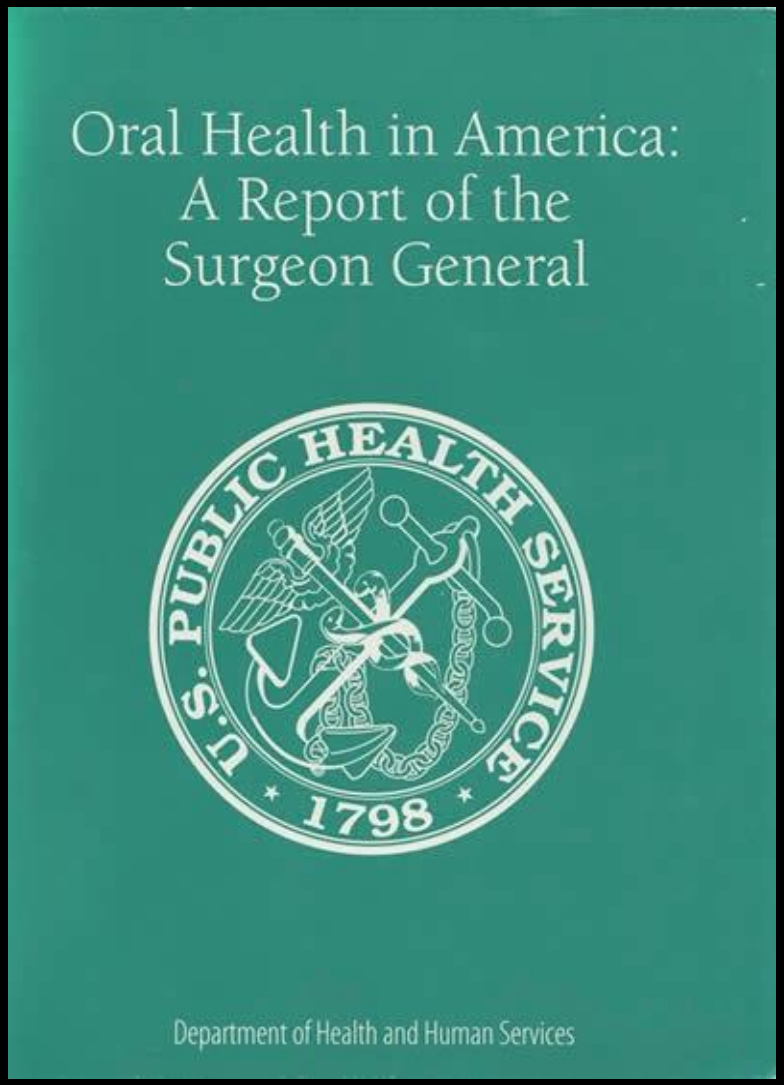
- Health care is rapidly changing
- Technology is evolving
- Global shortage of health workers
- Aging population, requiring more care and becoming more diverse
- Health is not “one size fits all”
- Health care spending in the U.S. has been rising for many years, yet we are no healthier than those countries that spend far less

# Health Care is changing…

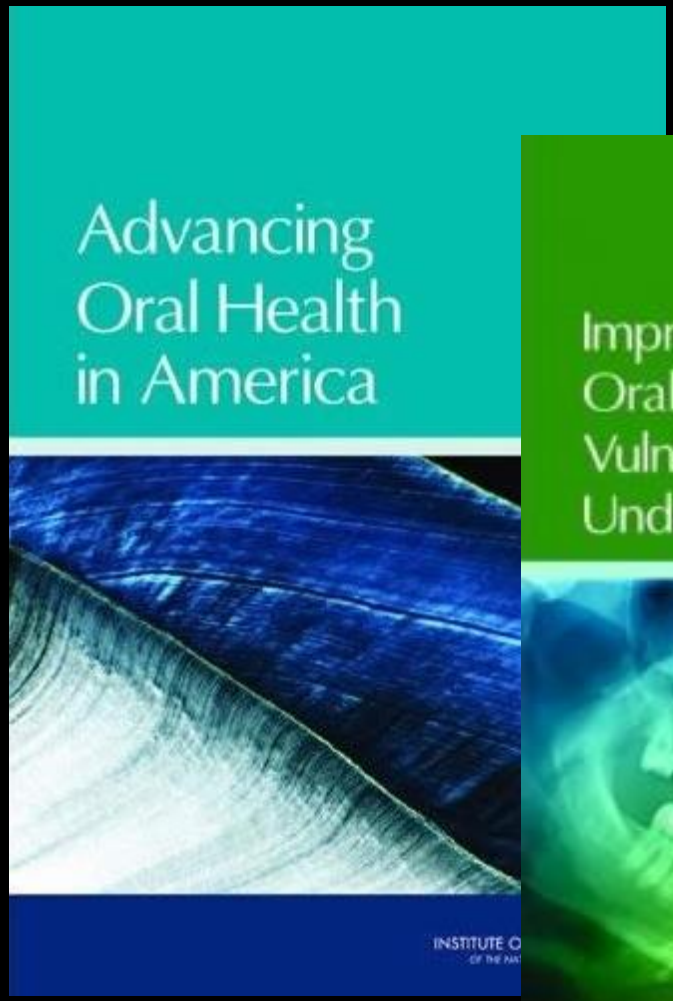
- Our health care system is advancing to meet these challenges.
- Many organizations use the imperative of the Institute for Healthcare Improvement (IHI) Triple Aim to describe the new goals of the system:
  - Improving the patient experience of care
  - Improving the health of populations
  - Reducing the per capita cost of health care
- Response: we need to change the way we educate health professionals and how we care for patients, their families and communities.

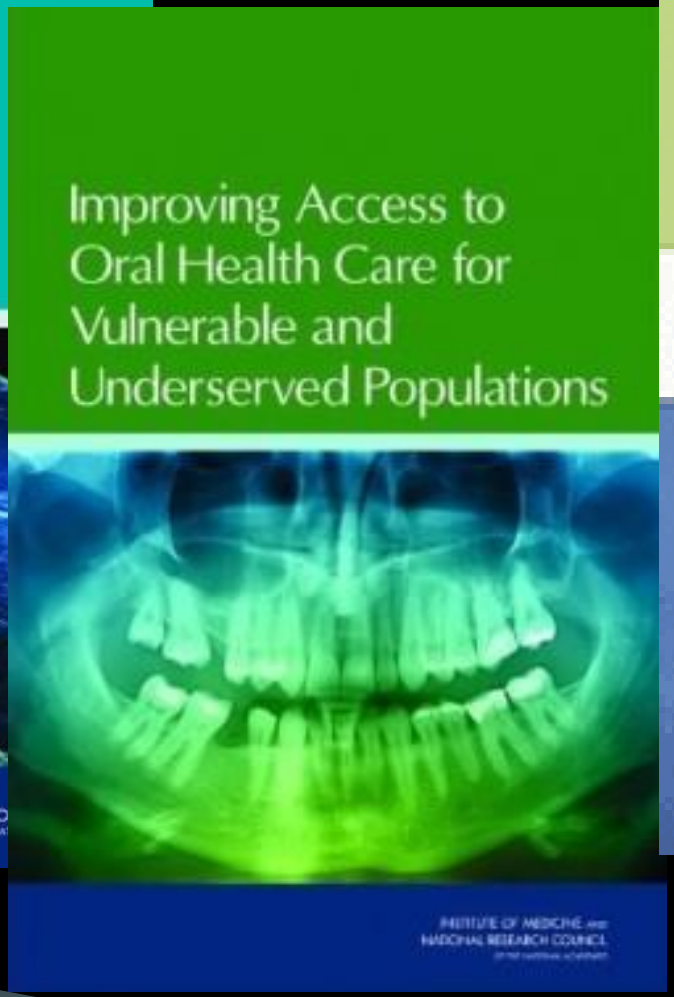
# Oral Health in America: A Report of the Surgeon General (2000)

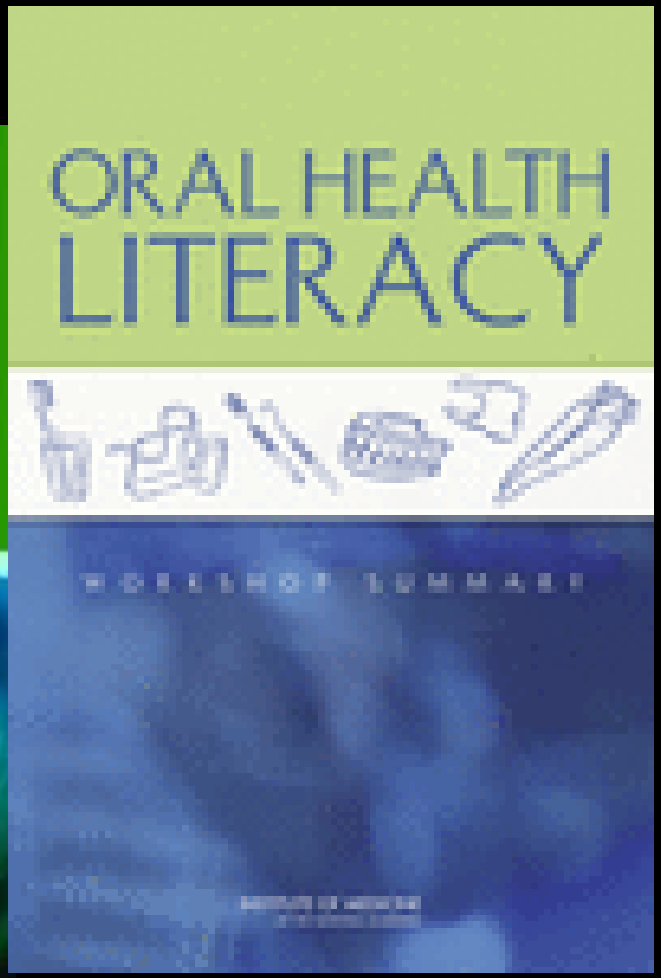
Highlighted disparities in oral health status & access to oral health care



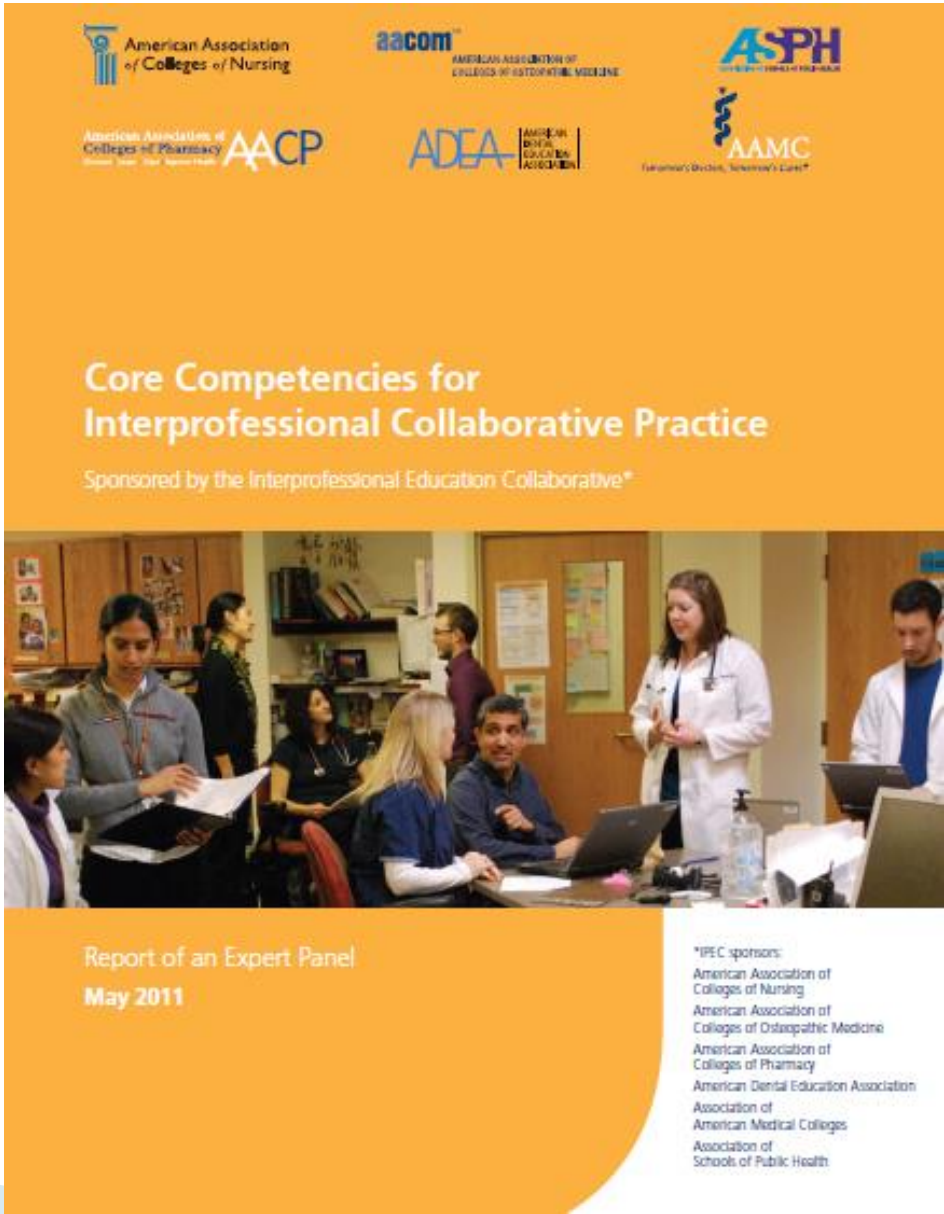
# IOM Reports (2011-2013)



# CORE COMPETENCIES FOR INTERPROFESSIONAL COLLABORATIVE PRACTICE (2011)



# Interprofessional Education Collaborative Sponsors

- American Association of Colleges of Nursing
- American Association of Colleges of Osteopathic Medicine
- American Association of Colleges of Pharmacy
- American Dental Education Association
- Association of American Medical Colleges
- Association of Schools of Public Health

# CORE COMPETENCIES

- Competency Domain 1: Values/Ethics for Interprofessional Practice
  - Patient centered care with a community/population orientation, shared purpose to support the common good in health care, and reflect a shared commitment to creating safer, more efficient, and more effective systems of care.
- Competency Domain 2: Roles/Responsibilities
  - understanding of how professional roles and responsibilities complement each other in patient-centered and community/population oriented care
- Competency Domain 3: IP Communication
  - Competencies in communication prepare professionals for collaborative practice. Willingness to work together toward improved health outcomes
- Competency Domain 4: Teams and Teamwork
  - Learning to be a good team player; cooperation in the patient-centered delivery of care; Development of mutual respect across professions

# IPEC Summary

- Six participating professional educational organizations defined interprofessional competencies for their professions.
- Hope that other professional education organizations will define IP competencies
- Other stakeholders will see the value in the quality of health education competencies

# HRSA Report: Integration of Oral Health and Primary Care Practice (2014)

**Develop Oral health core competencies for primary care clinicians**

**HEENT to HEENOT**

Health History

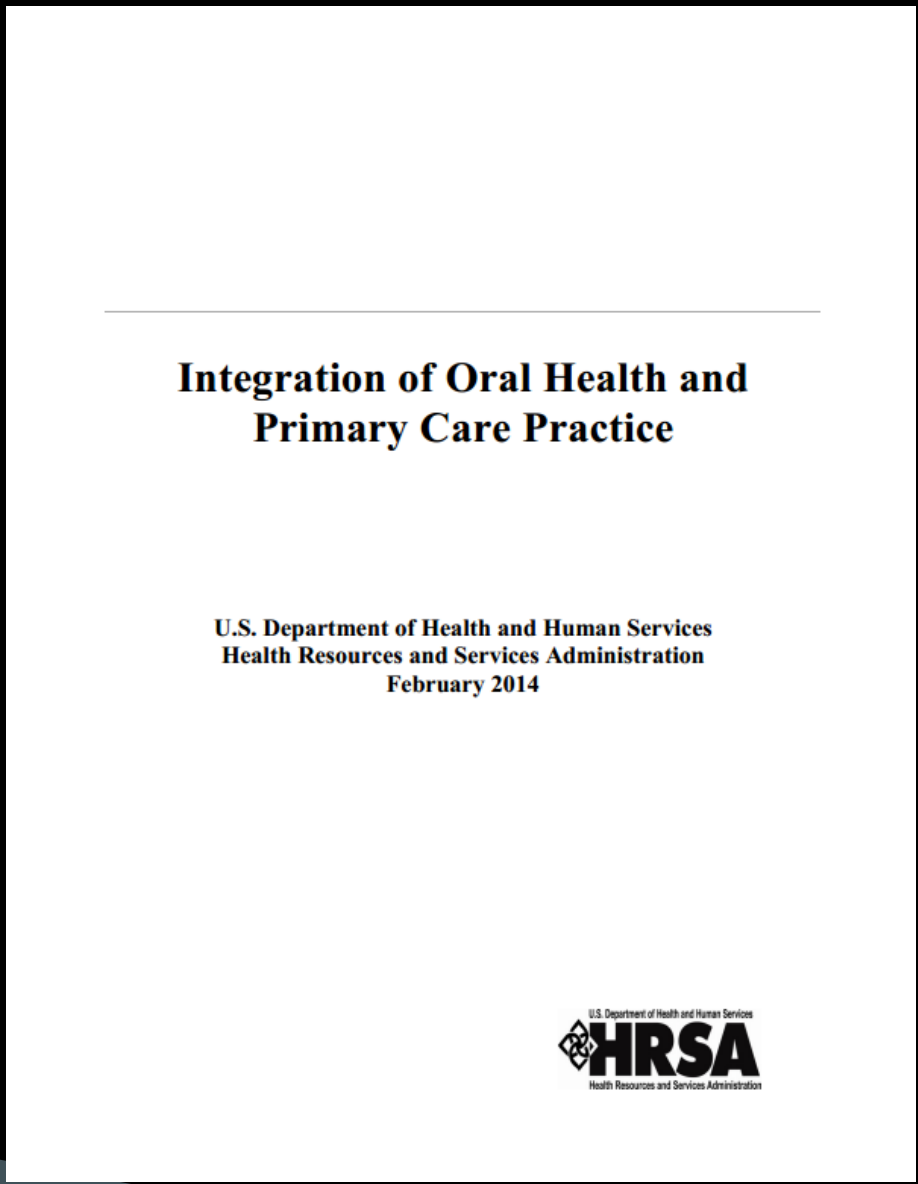
Physical Health Exam

Oral-Systemic Risk Assessment

Action Plan (preventive interventions, management within scope of practice)

Collaboration

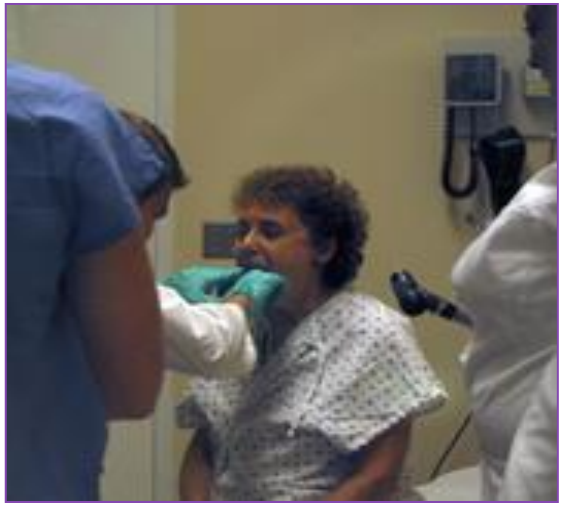
Referral



# TOSH Interprofessional Oral-Systemic Education Experience at NYSIM

Oral-Systemic Case Studies

- Standardized Patients
- Case Discussion



Total:  330 MD, NP, DDS Students, 59 Faculty

# IPOHCCC Project – NNOHA

- Interprofessional Oral Health Core Clinical Competencies
- Goal: Implementation of Oral Health Core Clinical Competencies using a sustainable systems approach that results in integrating oral health and primary care through interprofessional collaborative practice.

# IPOHCCC Pilot Project – NNOHA

Objectives

- Increase oral health screening and preventive services
- Increase oral health integration and primary care practice
- Increase interprofessional collaborative practice
- Increase care coordination between medical and dental
- Identify sustainable approach to practice changes

# IPOHCCC Pilot Project – NNOHA

Three health centers participated in the study

- Health Partners Western Ohio, Lima, OH
- Family HealthCare, Fargo, ND
- Bronx Community Health Center, Bronx, NY

# IPOHCCC Pilot Project – NNOHA

Characteristics of Success:

- Leadership Vision and Support – insure the same message
- Integrated health center executive team
- Co-location with bi-directional referrals, same day assessments
- Organizational culture of quality improvement

# IPOHCCC Pilot Project – NNOHA

Characteristics of Success:

- Staff Buy-in
- Patient Enabling Services
- Champions

# Next steps for the CHC network

- Support IPEC efforts with national organizations to train the next generation of health care professionals
- Identify Oral health champions
- Offer the “Smiles for Life: A National Oral Health Curriculum” for health care professionals
- Train current health professionals to include Oral Health assessment in the physical exam
- Future workforce: consider professionals who have been trained within a collaborative health care environment.

# Smiles for Life
A national oral health curriculum

http://www.smilesforlifeoralhealth.org

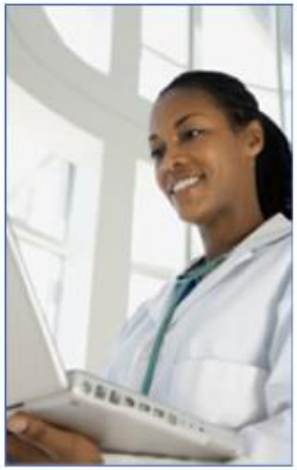
Home | Online Courses | Downloadable Modules | State Prevention Programs | Resources | Links | Contact Us

Welcome | Steering Committee | Endorsers | Funders | History | Citation | Sharing Our Websites | FAQs

## Smiles for Life: A National Oral Health Curriculum 3rd edition

Smiles for Life is the nation's only comprehensive oral health curriculum. Developed by the Society of Teachers of Family Medicine Group on Oral Health and now in its third edition, this curriculum is designed to enhance the role of primary care clinicians in the promotion of oral health for all age groups through the development and dissemination of high-quality educational resources.

### For Individual Clinicians



We've made it easy for individual physicians, physician assistants, nurse practitioners, students, and other clinicians to access the curriculum and learn on their own time and at their own pace. Each of the courses is available online. Free CME credit is available.

### For Educators

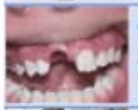
The curriculum is available in a presentation format easily implemented in an academic setting. Included is a comprehensive set of educational objectives based on the Accreditation Council for Graduate Medical Education (ACGME) competencies, test questions, resources for further learning, oral health web links, an implementation guide, and detailed outlines of the modules.

### Course Quick Links


Course 1: The Relationship of Oral to Systemic Health

Course 2: Child Oral Health

Course 3: Adult Oral Health



Course 4: Acute Dental Problems

Course 5: Oral Health & the Pregnant Patient

Course 6: Caries Risk Assessment, Fluoride Varnish & Counseling

Course 7: The Oral Examination

Course 8: Geriatric Oral Health

A Product of: STFM Society of Teachers of Family Medicine

Endorsed by: National Interprofessional Initiative on Oral Health (engaging clinicians, eradicating dental disease); American Academy of Physician Assistants (Connecting PAs, Transforming Care); PAEA Physician Assistant Education Association

# Questions

Thank You

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