The Gary and Mary West Senior Dental Center:
An Integrated Model of Dental, Health, and Wellness Care for Older Adults

National Network for Oral Health Access
Monday, November 13, 2017
Thank you for joining us!

Our panelists today:

**Vyan Nguyen, M.D.**
Program Officer
Gary and Mary West Foundation

**Karen Becerra, DDS, MPH**
CEO and Dental Director
Gary and Mary West Senior Dental Center

**Eliah Aronoff- Spencer, M.D., Ph.D.**
Project Lead/Principal Investigator and Consultant
Gary and Mary West Foundation
It’s a critical time for successful aging in America

• About 10,000 baby boomers turning 65 a day

• By 2030, seniors are expected to be about 20% of U.S. population

• Today’s healthcare system is not scaled or structured for seniors

• New thinking and new senior-specific models of care are needed
Gary and Mary West are successful entrepreneurs and pioneering philanthropists who are passionate about seniors and successful aging.
West Health’s mission is to enable seniors to successfully age in place, with access to high-quality, affordable health and support services that preserve and protect their dignity, quality of life and independence.
Outcomes-based philanthropy

Applied medical research

Policy, research and advocacy
Our Shared Work

Advancing senior-appropriate acute and chronic care models, and long-term services and supports that foster independence for seniors

Acute Care Models
Chronic Care Models
Long-term Services and Supports
Approximately 13 million older adults – almost a third of seniors in the U.S. – are struggling to get by – living well below 2x the Federal Poverty Level.

Every day, these seniors face tough choices on what to prioritize – with food, housing and healthcare among many needs that must be addressed, often on a fixed income.

Source: http://www.westhealth.org/struggling-seniors/
Seniors in Poverty

In California, that means 30% or 1.1 million seniors are living below 2x FPL.

Source: http://www.westhealth.org/struggling-seniors/
Oral Healthcare: A Missing Piece

Philanthropists Gary and Mary West identified oral healthcare as a critical need for many of Serving Seniors’ clients at the Gary and Mary West Senior Wellness Center.

- Significant oral health problems (missing teeth, bleeding gums)
- Difficulty eating meals provided
- Many were self-conscious of the state of their mouths and teeth
A New Senior Dental Center

As a Foundation that invests in improving the lives of older adults, we believe that oral health has to be part of that equation.

- The Gary and Mary West Senior Dental Center opened in October 2016.
- Our role is to help support the dental center as a new model comprised of a living demonstration and research project designed to better coordinate and integrate care in a more holistic fashion that enables successful aging.

New clinic takes bite out of seniors' dental problems
A New Model of Care for Older Adults
Exploring the Issue

Lower income seniors are less likely to visit the dentist
Less than 20% of seniors with income under the Federal Poverty Level saw a dentist in 2013*

Percent of Persons over 65 with Dental Visit in 2013

The State of Senior Oral Healthcare Today

It's a PAINFUL REALITY FOR SENIORS

1 in 5 that have untreated cavities.

7 in 10 have Periodontal Disease

1 in 4 with no teeth

Over Age 65, National Center for Health Statistics, 2012
Barriers to Accessing Oral Healthcare

41% of seniors have to choose between food and rent.

- UCLA Center for Health Policy Research

7 in 10 have no dental insurance.

- Oral Health America, State of Decay, 2016
The Consequences of Poor Oral Health

Poor oral health is associated with:

POOR NUTRITION
DIABETES
HEART DISEASE
STROKE
RESPIRATORY DISEASE
DEPRESSION

- European Journal of Preventive Cardiology, 2015
- Social Science & Medicine, 2004
Poor Oral Health: A National Problem

Oral Health Should Not Take a Backseat to General Health, Particularly for Seniors in Need

Barriers to Oral Healthcare

Lack of Access to:
- Affordable Care
- Insurance
- Dentists
- Transportation
Our mission is to provide affordable, high-quality oral healthcare with comprehensive education, clinical and wellness services for seniors in need, enabling them to live healthy and productive lives.
A State-of-the-art Facility

Four operatories designed and outfitted with advanced, cutting-edge technology to deliver the best care to our patients.
Oral Health Education

We conduct ongoing oral health education classes in English, Mandarin and Spanish.

We partner with Oral Health America to offer a strong curriculum that improves outcomes and ensures patient compliance through education and prevention.
Patient Engagement

Our goal as an integrated dental home is to establish a great patient/provider relationship so that we may educate and empower our patients on their health journey.

- Our “no-show” rate is very low at 5%
- Patient engagement is high and the need for our services is obvious
A Unique and Holistic Model of Care

The Gary and Mary West Senior Dental Center is unique, taking a comprehensive and coordinated approach to addressing the dental needs of seniors.

Every patient receives a Comprehensive Geriatric Assessment (CGA) through a senior care navigator who coordinates the patient’s health, dental and social support needs. Each patient also participates in oral healthcare education to learn preventive care.
Most of our patients’ health issues extend far beyond the mouth; we collaborate with others to help address their pressing oral and overall health needs.
We are providing an immediate and positive impact on our patients

- Comprehensive Geriatric Assessments: 920
- Oral Health Education Attendees: 767
- Basic Screening Survey: 755
- Unduplicated Patients Seen: 609
- Dental Visits: 4,359
- Completed Treatment: 185
Learn More About Our Work

We rely on volunteers, external funding support and public donations to maintain our future operations.

Help us bring the smiles back to San Diego’s wonderful senior population! Visit seniordentalcenter.org for more information.
How do we provide effective holistic healthcare for vulnerable seniors?

1. Develop Science linking Oral Health to Overall Health, Quality of Life

2. Develop Targeted Delivery Models for Population Health

3. Develop Evidence Base to Inform Delivery and Policy
Human Centered Healthcare/ Living Laboratory
Science for Wicked Problems (it’s not about the teeth)

I. Implementation Science in context of Complex Sociotechnical System
II. Human-centered Design and Participatory Action Research Paradigm
III. Prospective Mixed Methods Cohort study
   1. Early: Standard Statistical +Quasi experimental/Hermeneutic Methods
   2. Late: Agent Based Modeling, Graph Theory, Predictive Analytics, CNN/ML
1. See the Whole-Person → 2. Get on the Same Page

Comprehensive Assessment

Nutrition
Medical
Mood
Dental
Social
Function
QoL

Shared Health Record

Nursing
Geriatrics MD
Social Worker
Mental Health Provider
Care Navigator
Transport
Nursing
Specialist MD

Shared Mental Model

Data driven interprofessional care

Metrics
- LOW Overall Health
- LOW Pain Status
- LOW Medical Complexity
- LOW Case Management
- LOW Functional Status
- LOW DROQOL
- HIGH Cancer Risk
- LOW Dementia Risk
- LOW Fall Risk
- LOW Nutrition
- HIGH Oral Health Status
- HIGH Oral Health Acuity
- HIGH Gum/Periodontal Risk
- HIGH Tooth Loss & Decay
- MED Oral Cancer Risk
- LOW Substance Abuse Risk
- HIGH Tobacco Risk
- MED Depression Risk
3. Implement a Community Based Care Model (Flip the Clinic)

1. Integrated Wellness Model
2. Comprehensive Geriatric Assessment
3. Metrics Based Triage

<table>
<thead>
<tr>
<th>CM</th>
<th>MC</th>
<th>DC</th>
<th>MH</th>
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<tbody>
<tr>
<td><img src="image_url" alt="Diagram" /></td>
<td>*immediate medical assessment</td>
<td></td>
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<tr>
<td>**immediate mental health assessment</td>
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<td>***immediate dental assessment</td>
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<tr>
<td>Dental cat 1, care coordination</td>
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<td>Care coordination, Dental cat 3</td>
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<td>Dental cat 2, case management</td>
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<tr>
<td>Dental cat 3</td>
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<tr>
<td>Needs intake</td>
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<tr>
<td>ATTRIBUTE</td>
<td>% (n)</td>
<td>Mean</td>
<td>SD</td>
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<td>---------------------------------</td>
<td>-------------</td>
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</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>71</td>
<td>7.33</td>
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<tr>
<td>Female</td>
<td>49 (245)</td>
<td></td>
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<tr>
<td>Income (Monthly)</td>
<td>-</td>
<td>$1036</td>
<td>$481.48</td>
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<tr>
<td>Household Size</td>
<td>-</td>
<td>1.48</td>
<td>0.95</td>
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<tr>
<td>Have PCP</td>
<td>93 (467)</td>
<td></td>
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<tr>
<td>No dental visit in last year</td>
<td>59 (297)</td>
<td></td>
<td></td>
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<tr>
<td>&gt; HS Education</td>
<td>70 (350)</td>
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<tr>
<td>Health</td>
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<tr>
<td>General pain</td>
<td>77 (388)</td>
<td></td>
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<tr>
<td>Dental pain (Toothache)</td>
<td>39 (196)</td>
<td></td>
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<tr>
<td># Med conditions</td>
<td>-</td>
<td>1.63</td>
<td>1.43</td>
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<tr>
<td># Medications</td>
<td>-</td>
<td>4.62</td>
<td>3.24</td>
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<tr>
<td># Dental symptoms</td>
<td>-</td>
<td>3.12</td>
<td>1.94</td>
</tr>
<tr>
<td>Mental Illness</td>
<td>25 (125)</td>
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<tr>
<td>Mental treatment</td>
<td>59 (74)</td>
<td></td>
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<tr>
<td>Falls (last year)</td>
<td>32 (159)</td>
<td></td>
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<tr>
<td>Hospitalization (last year)a</td>
<td>25 (112)</td>
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<tr>
<td>ED visit (last year)b</td>
<td>30 (36)</td>
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<tr>
<td>Food worry</td>
<td>30 (151)</td>
<td></td>
<td></td>
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<tr>
<td>Difficulty chewing</td>
<td>50 (252)</td>
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Metrics Based Triage → Team Based Care Plan

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- Dental cat 3
- Needs intake

**Order matters**
Making Connections: Appreciate Complexity

* N = 504

* All p values < 0.05
Summary

- Oral Health cannot be excluded from human health considerations

- Oral Health often correlated with critical outcomes of “General health”, Mood and Quality of Life

- Evidence lacking for integrated care, system policy

- Health is a complex sociotechnical problem
- Reductive Methods usually simple, and wrong
- Integrative methods usually hard, and right
Thank you to:

- NNOHA
- Gary & Mary West Foundation
- Academy of Dentistry International
- Dental Trade Alliance Foundation
- San Diego Dental Health Foundation
- Our Seniors and Staff at Serving Seniors