

National Oral Health Conference, April 17, 2018

Integrating Community-based Dental, Health and Wellness Services for Older Adults through Use of a Comprehensive Geriatric Assessment and Metrics-driven Referral



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Serving Seniors' Gary and Mary West Senior Wellness Center also houses the Senior Dental Center in Downtown San Diego



GARY & MARY WEST
SENIOR DENTAL CENTER



SERVING
SENIORS



Project Goals



Create a collaborative platform to provide whole-person care



Use assessment to provide timely services in the appropriate order



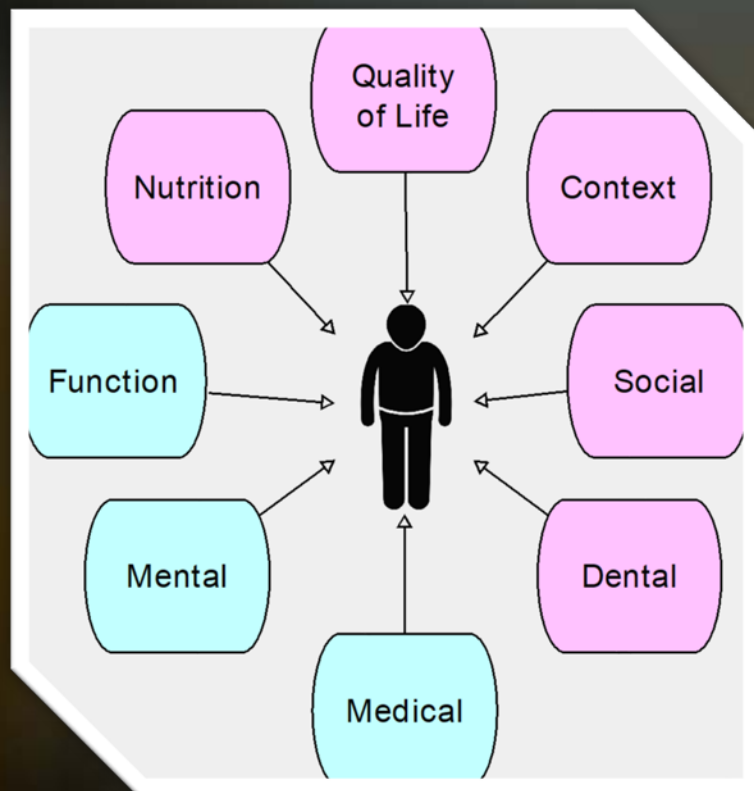
Generate data to better inform the operations and share best practices

Improve Health Outcomes for Low-income Seniors



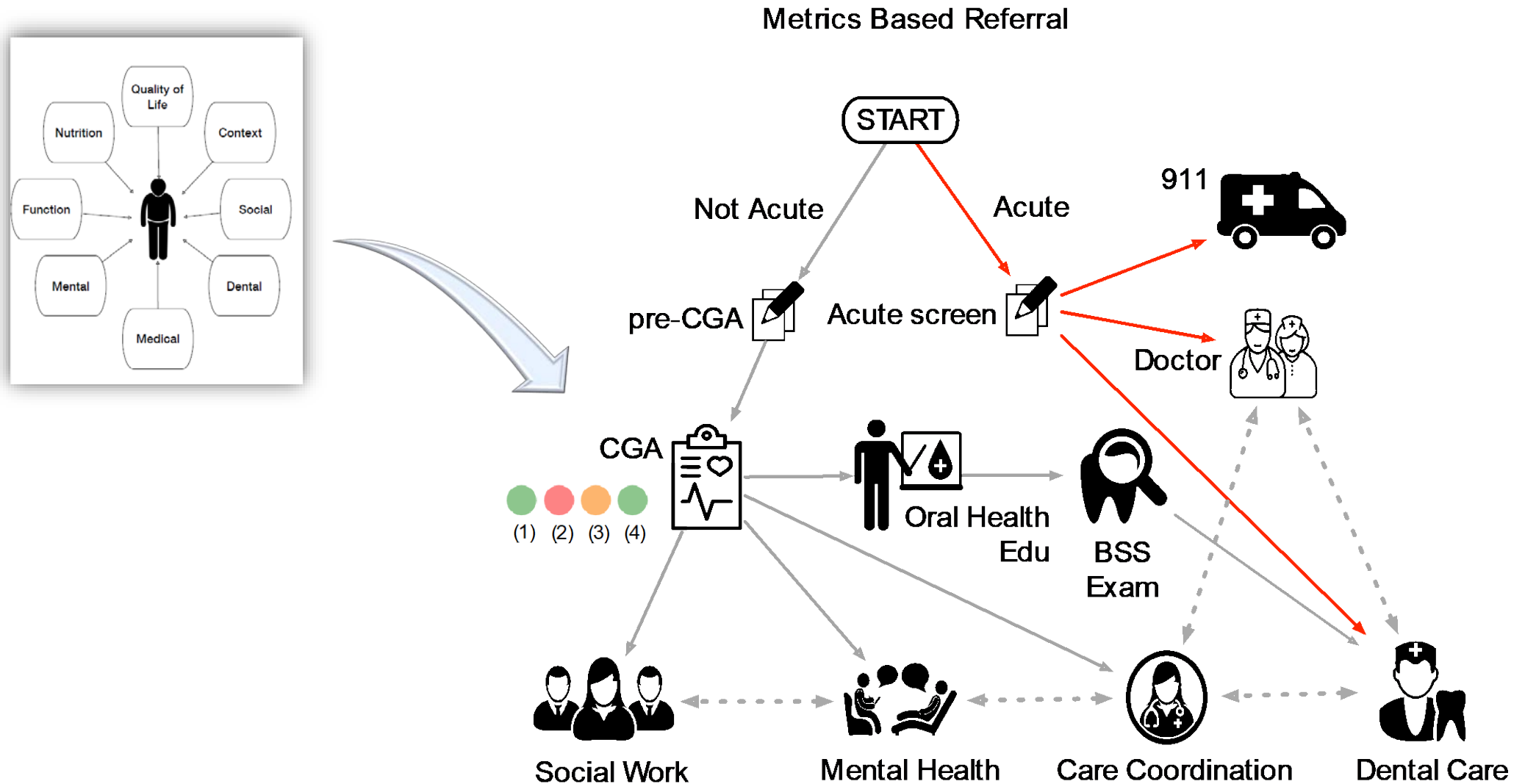
Building a better Comprehensive Assessment

See the whole person



New model of care integrating oral health, wellness, and social services by digital Comprehensive Geriatric Assessment (CGA)

From Whole-Person Assessment to Whole-Person Care



From Person to Population

General

- HIGH Cancer Risk
- LOW Case Management (1)
- HIGH Fall Risk
- LOW Functional Status
- HIGH Medical Complexity (2)
- HIGH Nutrition
- HIGH OPQOL
- LOW Overall Health
- HIGH Pain Status
- LOW Substance Abuse Risk
- LOW Tobacco Risk

Mental

- HIGH Dementia Risk
- MED. Depression Risk (4)
- LOW PHQ-2
- LOW Suicidality

Dental

- HIGH Gum/Periodontal Risk
- LOW Oral Cancer Risk
- LOW Oral Health Acuity
- MED. Oral Health Status (3)
- MED. Tooth Loss & Decay



Population Dashboard

Case Management

Medical Complexity

Oral Health Status

Suicidality

Patients Teams Staff Admin

Sort By: **PRIORITY** ENCOUNTER

| Name | Demographics | Status | Actions |
|------|-------------------------|--------|---------|
| | 73 y/o, White, Female | ●●●● | 👤 ↶ ⚡ |
| | 65 y/o, White, Female | ●●●● | 👤 ↶ ⚡ |
| | 61 y/o, White, Male | ●●●● | 👤 ↶ ⚡ |
| | 78 y/o, Chinese, Female | ●●●● | 👤 ↶ ⚡ |
| | 79 y/o, Chinese, Female | ●●●● | 👤 ↶ ⚡ |
| | 63 y/o, White, Male | ●●●● | 👤 ↶ ⚡ |
| | 77 y/o, Chinese, Female | ●●●● | 👤 ↶ ⚡ |
| | 85 y/o, White, Male | ●●●● | 👤 ↶ ⚡ |
| | 74 y/o, White, Female | ●●●● | 👤 ↶ ⚡ |

Individual Snapshot

Composition of Referral Metrics

4 metrics used as first pass:

Case Management (→ Social Work)

- Homeless, Uninsured, No PCP, and \leq 199% Federal Poverty Level

Depression Risk (→ Mental Health)

- Patient Health Questionnaire-9 (PHQ-9) Score with Additional Weight on Suicidality (Item 9)

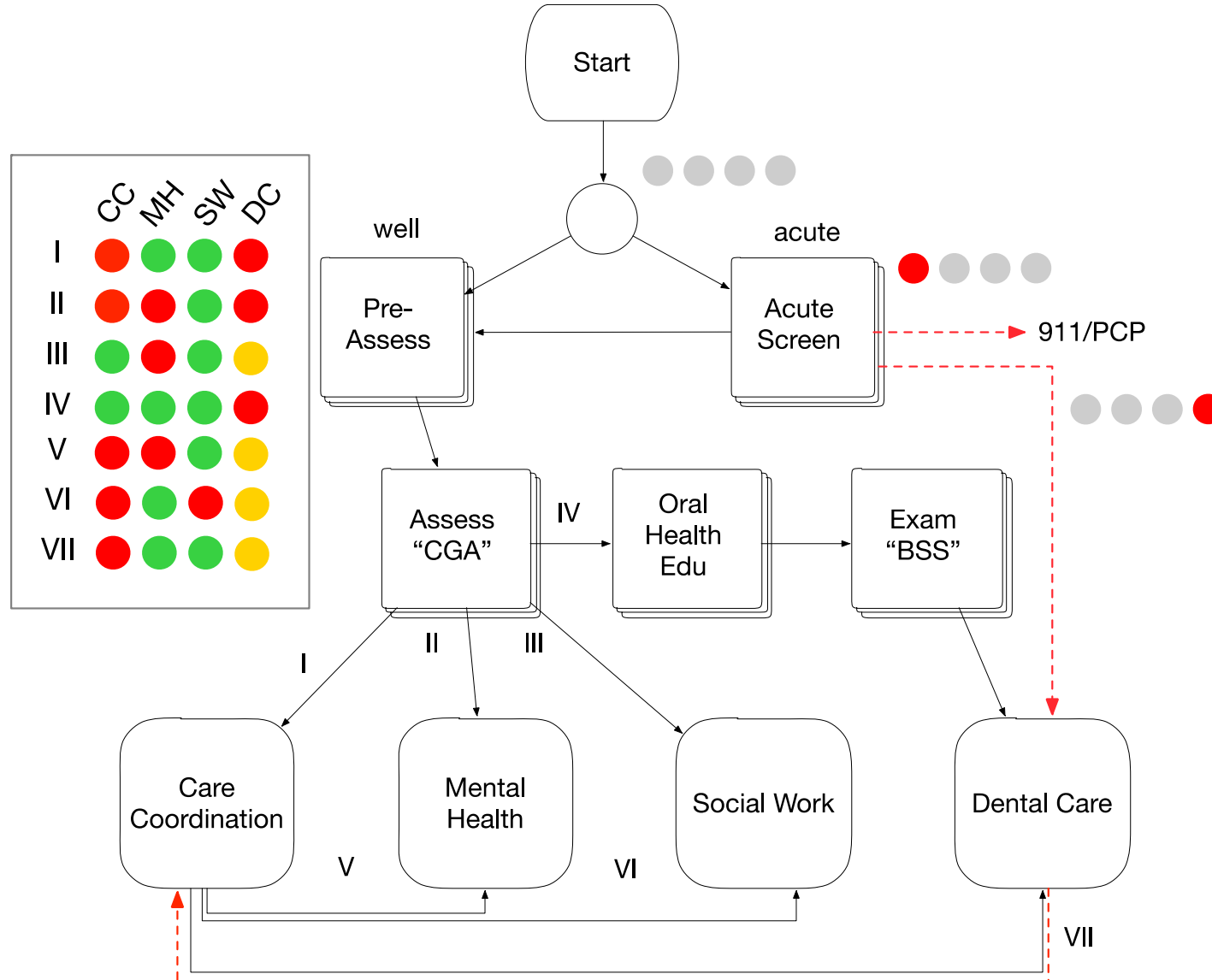
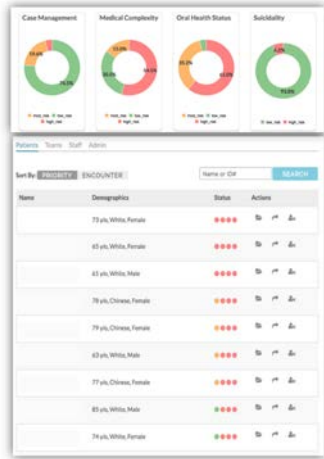
Medical Complexity (→ Care Coordination)

- # of Medical Conditions and # of Medications

Oral Health Status (→ Dental Care)

- Self-rated Oral Health Status, Missing Teeth, and Recent Symptoms

Digital Assessment Allows Metrics-Driven Triage and Referral



Referral Outcomes and Patient Characteristics

First Referrals

| Programs | Clients |
|------------------------------------|---------|
| Comprehensive Geriatric Assessment | 1000 |
| Oral Health Education | 841 |
| Basic Screen Survey | 828 |
| Dental Care Referrals | 796 |
| Care Coordination Referrals | 148 |
| Case Management Referrals | 78 |
| Mental Health Referrals | 27 |
| Post Assessments | 150 |

Demographics

| CGA Elements (n=1000) | Percent |
|-----------------------------------|----------|
| Average age | 72 ± 7.6 |
| Below poverty | 55% |
| Live alone | 67% |
| Have medical conditions | 75% |
| Have mental health diagnoses | 25% |
| No dental visit in the past year | 53% |
| Limit food due to dental problems | 59% |
| Difficulty chewing | 49% |
| Dental pain | 43% |

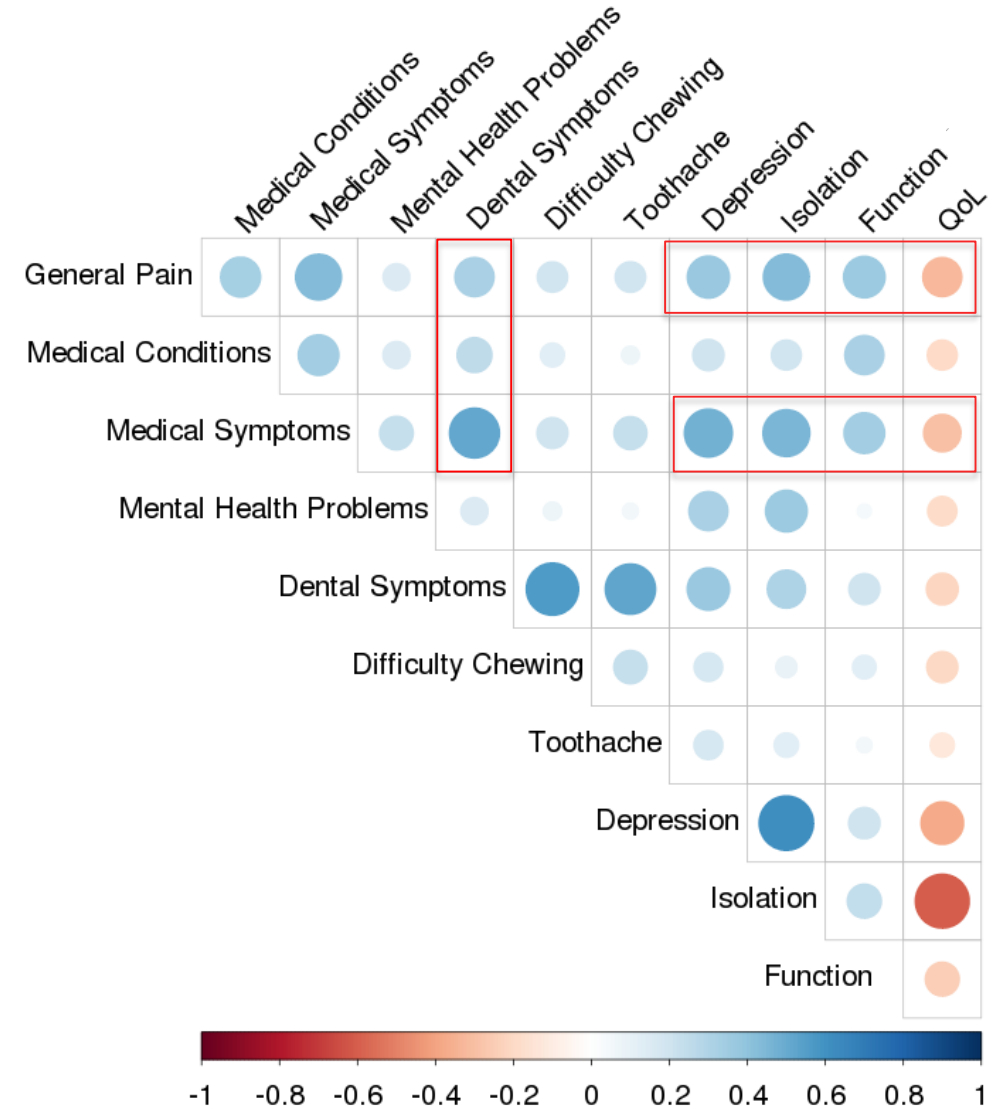
CGA inter-item correlations (n=1000)

Medical problems positively correlated with:

- dental symptoms

Pain and health problems tightly coupled to:

- functional limitation
- depression
- lower quality of life

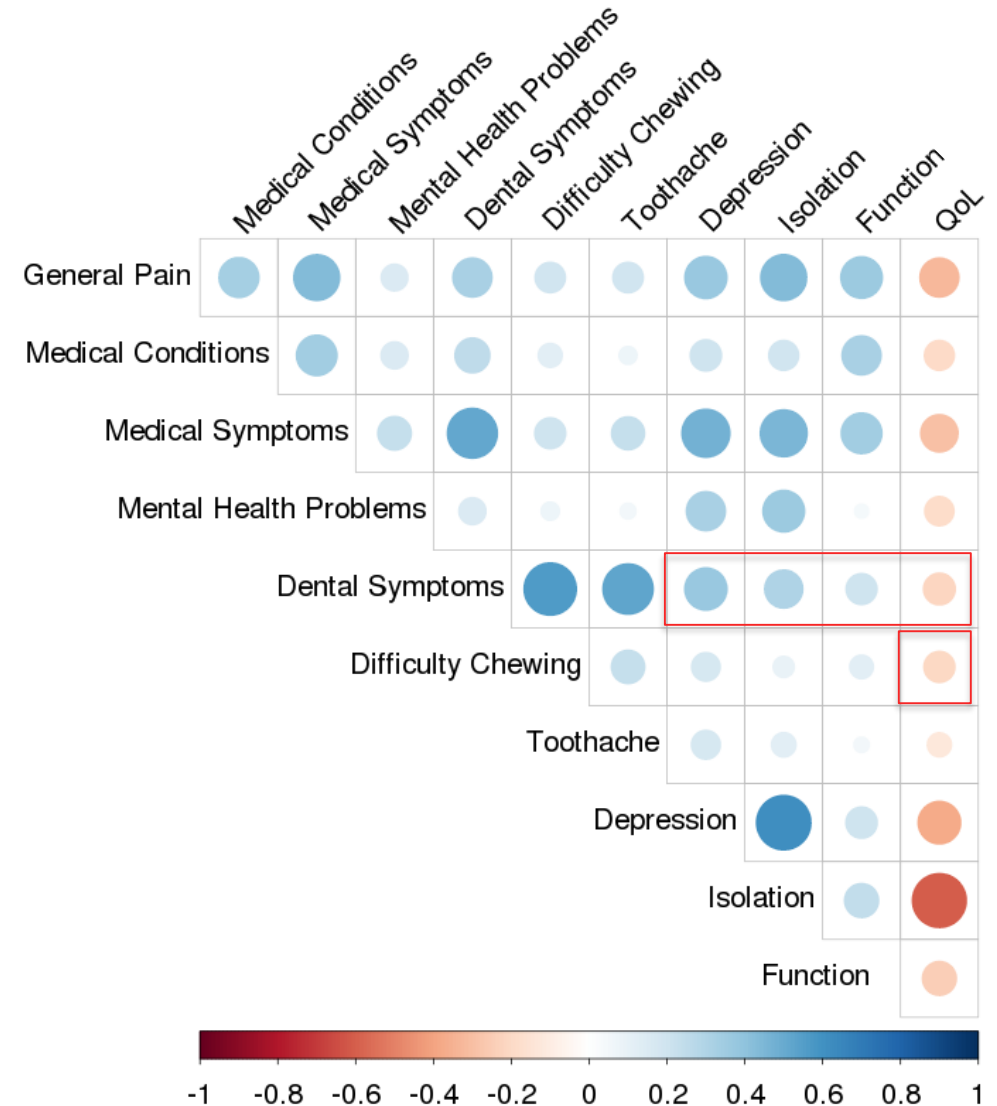


* $p < 0.05$

CGA inter-item correlations (n=1000)

Dental symptoms highly correlated with:

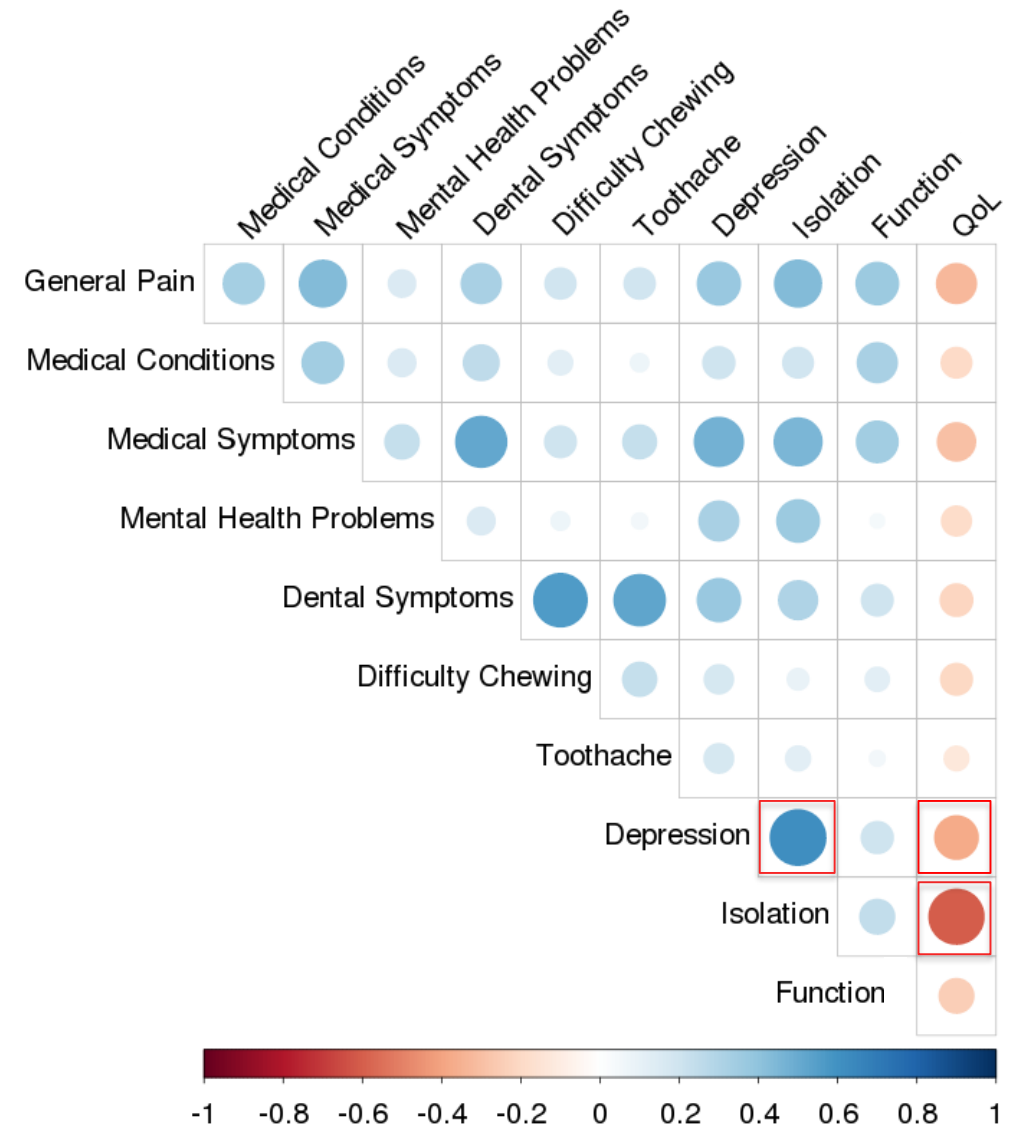
- depression
- isolation
- quality of life



CGA inter-item correlations (n=1000)

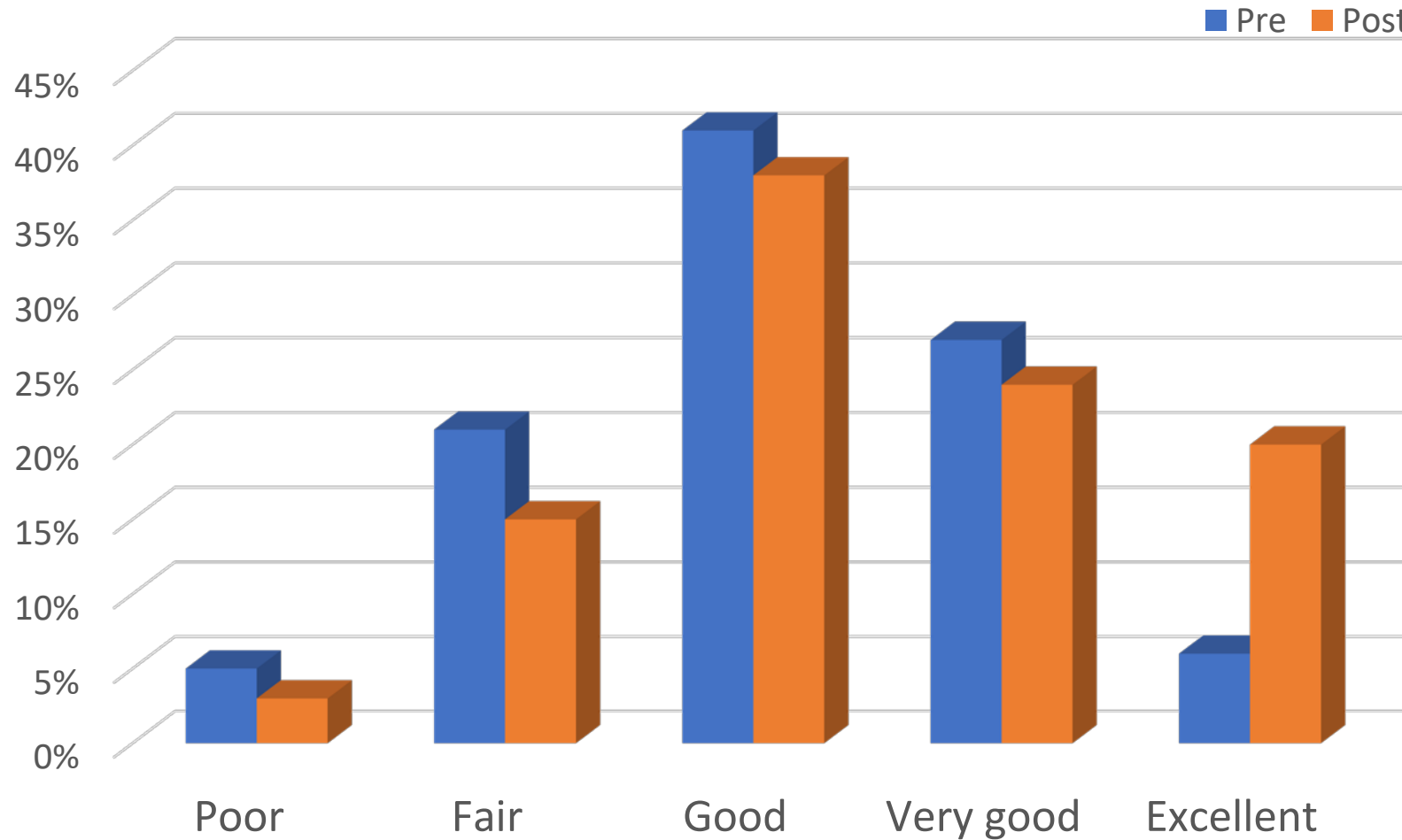
Mental health problems highly correlated with:

- isolation
- quality of life



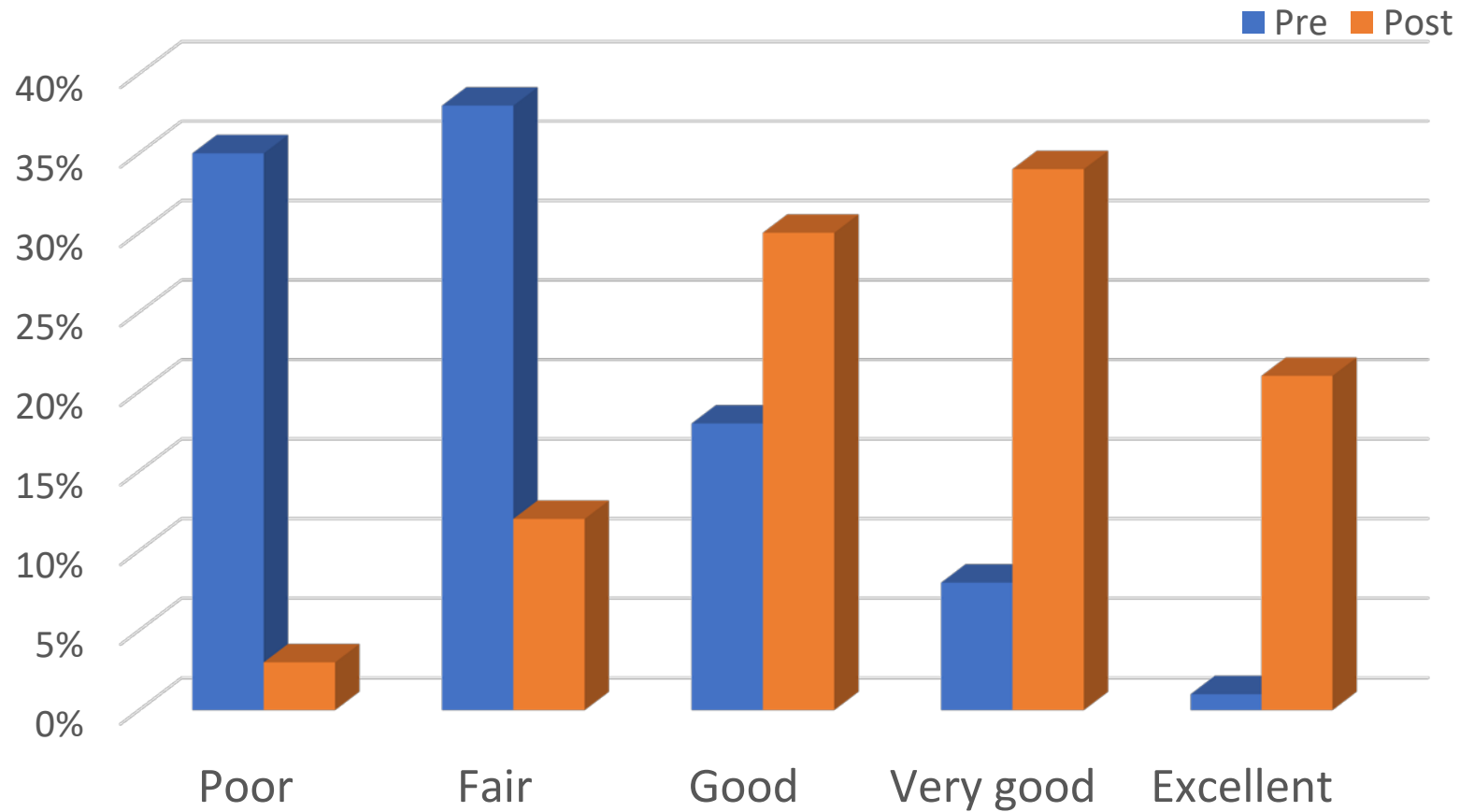
Preliminary Pre-Post Results (N=150)

How would you rate your general health?



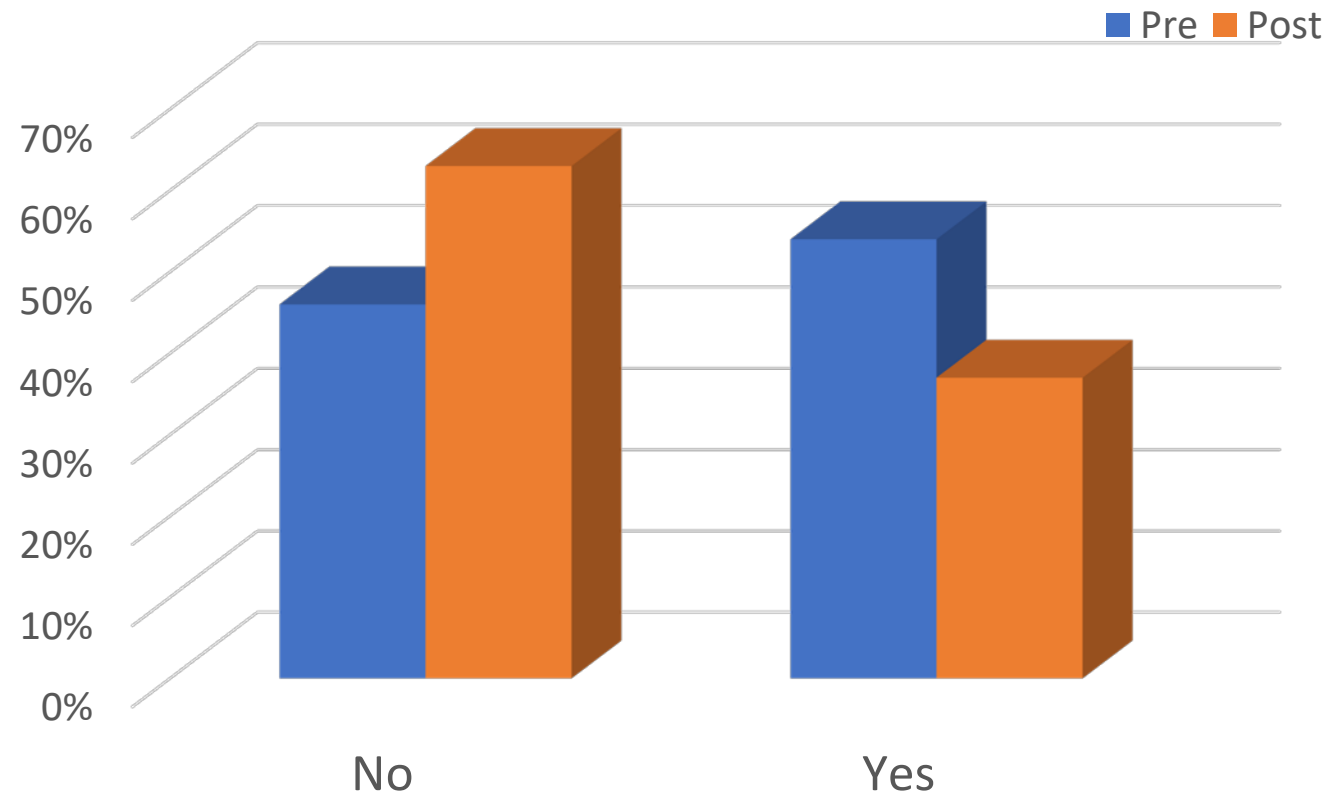
Preliminary Pre-Post Results (N=150)

How would you describe the overall condition of your mouth?



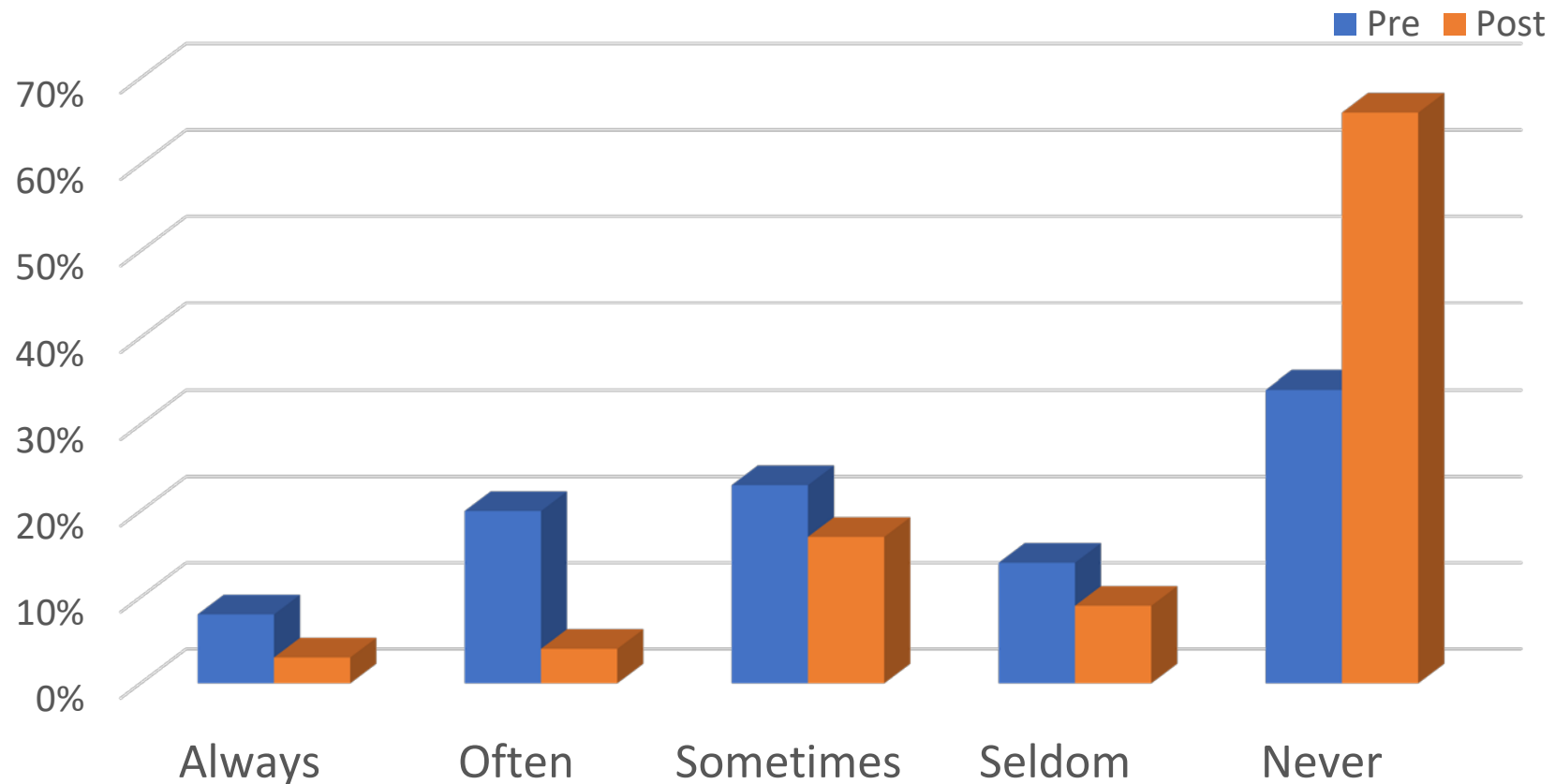
Preliminary Pre-Post Results (N=150)

Do you have any problems biting or chewing?



Preliminary Pre-Post Results (N=150)

How often do you limit the kinds or amounts of food you eat because of problems with your teeth, mouth, denture?



Conclusion

- Senior wellness and quality of life are multifactorial, dependent on general health, medical complexity, dental symptoms, and mental health
- Integrating dental care with psychosocial context and medical needs is necessary to provide holistic care for vulnerable seniors
- Digital Comprehensive Geriatric Assessments and metrics-based triage facilitate the referral and care planning process
- Identifying type of care and order of services early on can lead to more efficient and cost effective care

Thank You

PI: Eliah Aronoff-Spencer, MD PhD

Co-PIs: Karen Becerra, DDS MPH; Zia Agha, MD MS; William Scanlon, PhD; Paul Downey, CEO, Serving Seniors

Wellness and Dental Centers: Joseph Gavin, MS; Melinda Forstey, MBA; Marissa Mackiewicz, RN; Vicki Petropoulos, DMD; Lizbett Chavez; Ayrielle Franco, MPH

West Team: Paddy Asgari, MPH; Ian Pierce, MS; Tracy Finlayson, PhD; Adrian Kwong, MS; Michael Scherer, BS; Jose Unpingco, PhD; Tyler Kent, BA; Wesley Vetter, BS; Rishi Graham, PhD; Didi Hoffman, PhD

Special Thanks to Gary and Mary West; Dr. Vyan Nguyen, Program Officer, Gary and Mary West Foundation; and Shelley Lyford, President and CEO, West Health



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