

Seeing the Whole Person: Integrating community based health and dental services by comprehensive assessment and metrics-based referral

Paddy Asgari, MPH (WHI); Joe Gavin, MS (Serving Seniors); Melinda Forstey, MBA (Serving Seniors); Paul Downey, BA (Serving Seniors); Ian Pierce, MS (WHI); Zia Agha, MD, MS (WHI); Karen Becerra, DDS, MPH (GMWSDC); Tracy Finlayson, PhD (WHI/SDSU); Eliah Aronoff-Spencer, MD, PhD (WHI/UCSD)

BACKGROUND

- Older adults face complex health challenges
- Today's healthcare remains mostly fragmented, episodic and system-centric
- There is a need for innovative senior-centric care and payment models

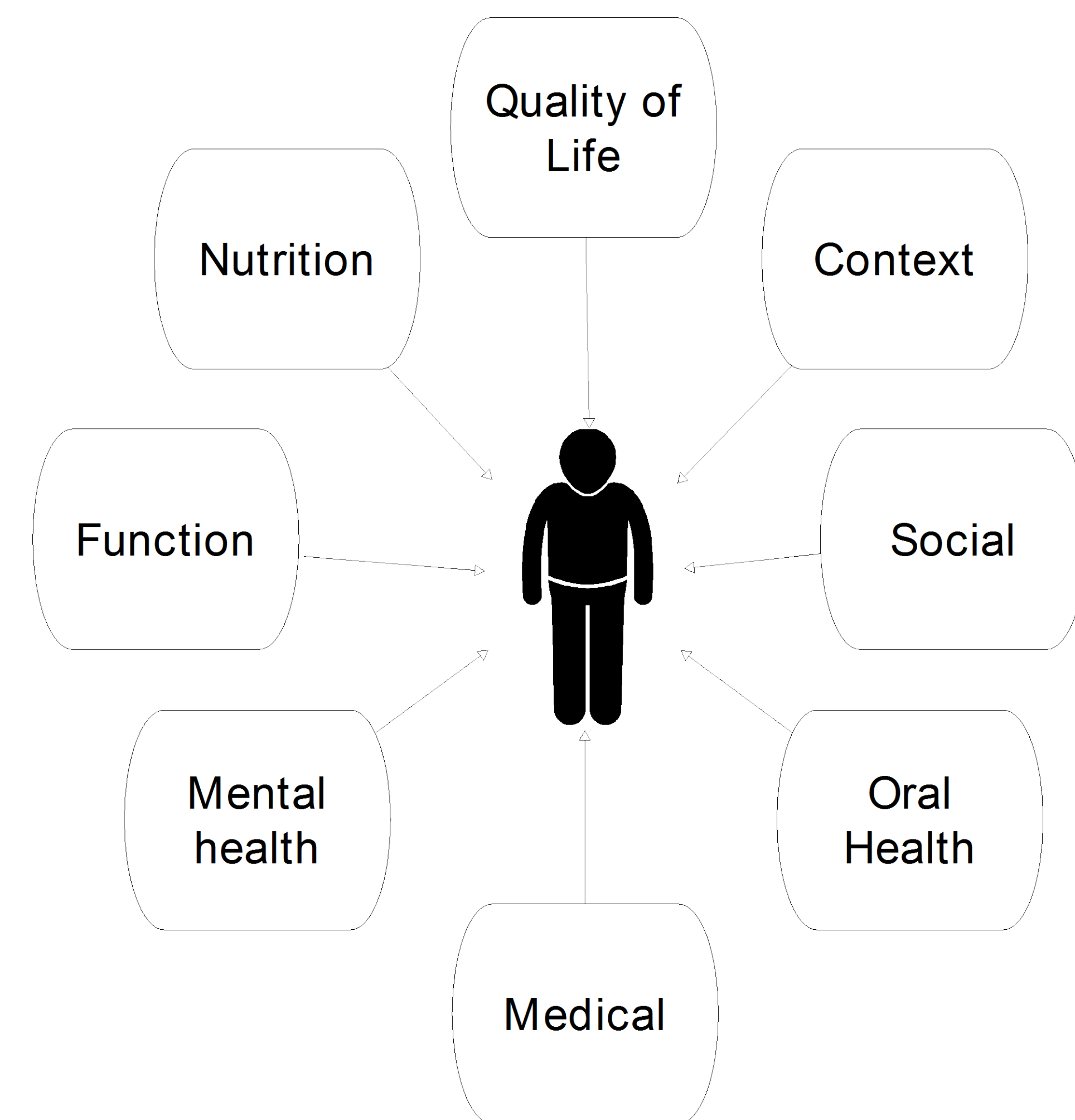
OBJECTIVES

1. **Develop** whole-person assessment tools & real-time metrics for referral
2. **Implement** service model integrated by comprehensive geriatric assessment (CGA)
3. **Discover** connections & opportunities to improve overall wellness, oral health and quality of life of seniors

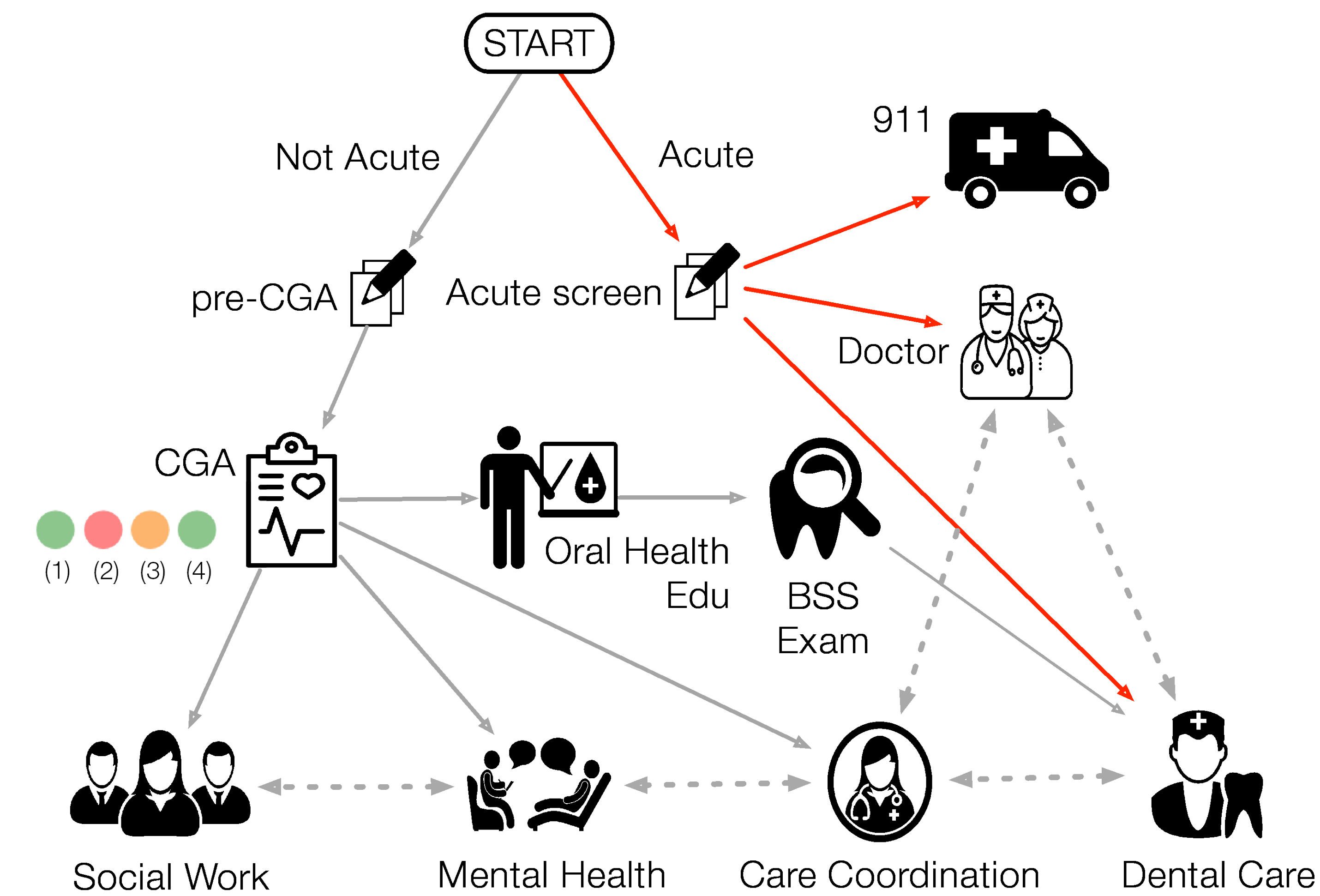
METHODS

- Human-centered community based co-design
- Implementation science and participatory research
- Continuous Quality Improvement
- Longitudinal cohort analysis

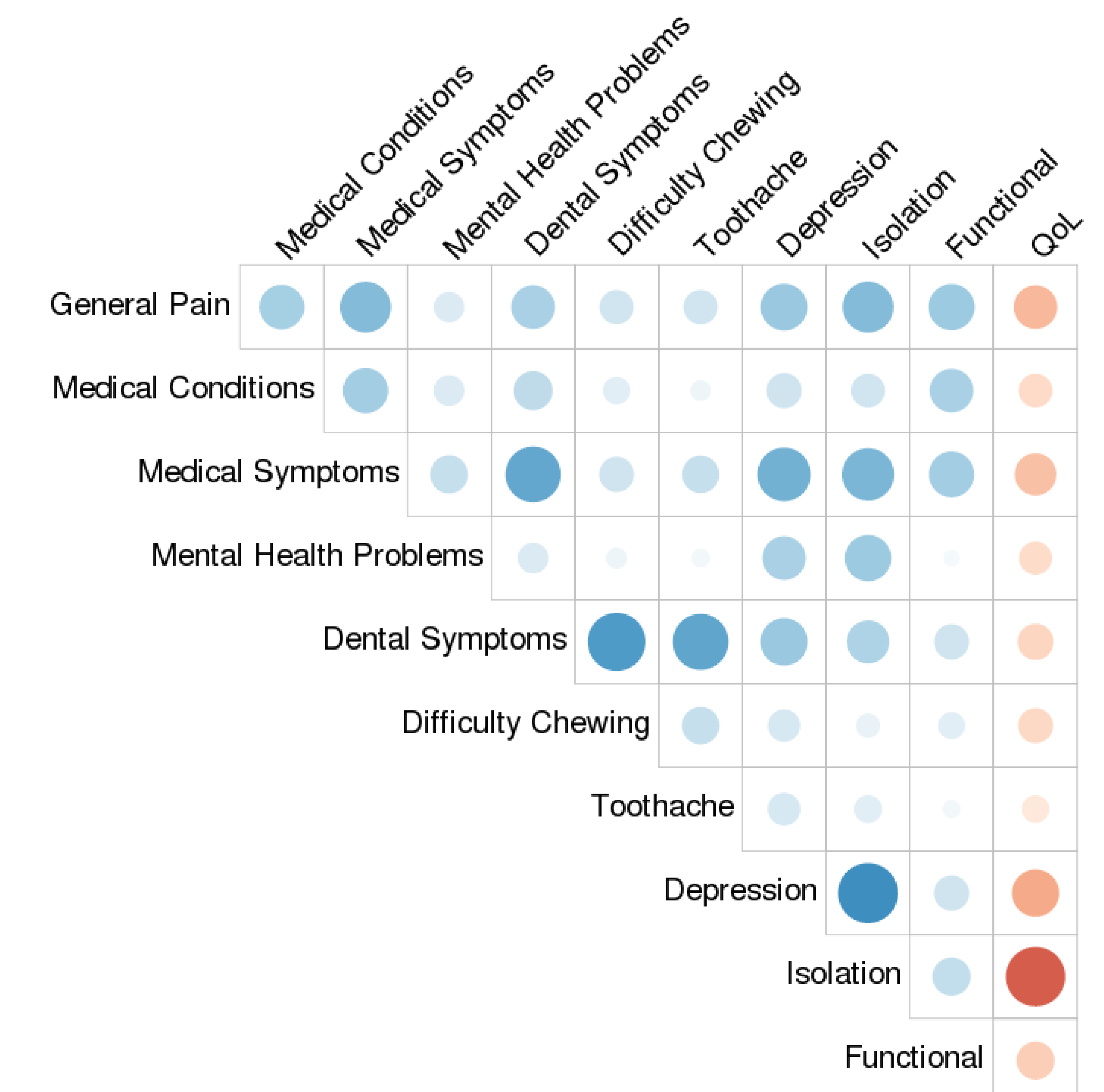
COMPREHENSIVE ASSESSMENT



COMMUNITY CARE INTEGRATION



WHOLE-PERSON SCIENCE



HUMAN-CENTERED HEALTH DESIGN

IDENTIFY GAPS

- Care is scarce and difficult to access
- Lack of integration and coordination
- Need for patient-centered & interoperable technologies

IDENTIFY CHALLENGES

- Payment models are hospital & payer-centric
- Healthcare is siloed and workflows remain oriented towards profession rather than patient
- Current health law and policies inhibit agile technology development and integration

IDENTIFY INNOVATIONS

- Lived expertise and community co-design promote more effective interventions
- Lead-user innovations are locally adapted and may scale better than top-down development
- Community-based care brings services to the senior and may be more appropriate and effective

Referral Outcomes from June 2016-March 2018 (n=1000)

Service	Need (%)	Referred (%)	Received [completed]	Referral Outcomes
Dental	949 (95%)	796 (84%)	700 (252)	Preventative 598 Periodontics 440 Restorative 249 Prosthetics/Dentures 217 Oral Surgery 202 Adjunctive 201 Endodontics 49
Care Coordination	690 (69%)	163 (24%)	106 (106)	Medical Complexity/Active Symptoms 59 Medical Home 49 Dental Lifeline 41 Eye Care 12 Med Reconciliation 6 Medical Equipment 5 Hearing Aids 4 Smoking Cessation 3
Case Management	230 (23%)	90 (39%)	58 (58)	Health Insurance 32 Housing 30 Income Assistance 9 Home Health 5 Transportation 5 Assistance with Utilities 3 Food Stamps 3 Employment 2
Mental Health	102 (10%)	32 (31%)	20 (20)	Linkage to Care 11 Counseling/Support Group 9 Behavioral issues 8

LESSONS LEARNED

- Senior wellness and quality of life are multifactorial, dependent on medical complexity, dental symptoms, and mental health and social context
- Integrating oral health with psychosocial and medical needs is necessary to provide holistic care for vulnerable seniors
- Comprehensive assessments and metrics-based triage facilitate the referral and care planning process and promote efficient and cost effective care
- Whole person assessments give insight into what matters to seniors, allows gap and barrier analysis
- Longitudinal cohort analysis (pre-post) allows long term evaluation of client and system needs to create a continuously learning health system