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

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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 for seniors

METHODS

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

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

COMPREHENSIVE ASSESSMENT

COMMUNITY CARE INTEGRATION

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

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

<table>
<thead>
<tr>
<th>Service</th>
<th>Need (%)</th>
<th>Referred (%)</th>
<th>Received [completed]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental</td>
<td>949 (95%)</td>
<td>796 (84%)</td>
<td>700 (252)</td>
</tr>
<tr>
<td>Care Coordination</td>
<td>690 (69%)</td>
<td>163 (24%)</td>
<td>106 (106)</td>
</tr>
<tr>
<td>Case Management</td>
<td>230 (23%)</td>
<td>90 (39%)</td>
<td>58 (58)</td>
</tr>
<tr>
<td>Mental Health</td>
<td>102 (32%)</td>
<td>32 (31%)</td>
<td>20 (20)</td>
</tr>
</tbody>
</table>

Referral Outcomes

Preventative 586
Periodontics 440
Restorative 249
Prosthetics/Dentures 227
Oral Surgery 202
Adjunctive 201
Endodontics 49
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

Health Insurance 32
Housing 30
Income Assistance 9
Home Health 5
Transportation 5
Assistance with Utilities 3
Food Stamps 3
Employment 2

Linkage to Care 11
Counseling
Support Group 9
Behavioral issues 8