Opportunities to Champion Dementia Healthcare

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Overview

• The “Why”
  – The burden and unmet needs
• Successful dementia management strategies
• Being a champion
  – Selling the program
  – Thinking broadly: a population approach
Alzheimer’s Disease: A Two-Phase Strategy

Now

Have Dementia
5.2 million

Detection
Treatment
Support

Health Care System

Community

2030

Will Develop Dementia
7.7 million

Risk factor identification
Monitoring
Prevention
Detection
Treatment
Support

Health Care System

Community
The Burden in 2018

• 5.7 million with Alzheimer’s disease
• Costs $277 billion, $186 billion to Medicare and Medicaid
• Family caregivers provide 18.4 billion hours of care valued at $232 billion
Caregivers

- Depression & strain
  - 14% mod/sev depressive sx
  - 36% high stress
- Low self-efficacy
  - 21% knew how to access services
  - 36% confident handling dementia problems
  - 26% have healthcare professional who helps work through dementia issues
Quality of care: 4 Cohorts of Vulnerable Elders

![Bar chart showing quality of care (%)](chart.png)

- Falls
- Incontinence
- Dementia
- End of Life

Years:
- 1998-9
- 2002-3
- 2006-7
- 2007-8
Management

• Manage the disease
  – Cholinesterase inhibitors
  – Memantine

• Manage the patient
  – This is a lifelong disease
  – Play the ball where it lies
    • If disease is early, include patient
    • If late, rely on family and caregiver
  – Aim for the highest level of independence that works for everyone
Manage the Patient

- Manage hot-button issues (e.g., driving)
- Manage symptoms
  - Behavioral therapies
    - https://www.uclahealth.org/dementia/caregiver-education-videos
  - Drug management of complications
- Advanced care planning
- Manage co-morbidities
- Caregiver support
Caregiver Support

- Caregivers are the most important resource a demented patient has
- Over 50% develop depression
- The more knowledgeable and more empowered the caregiver is, the better care the patient will receive
- Caregiver resources are available
  - Local Alzheimer’s organizations and other community resources
  - Specific programs (e.g., REACH, NYU CI, Savvy Caregiver, Partnering With Your Doctor)
Evidence Behind Caregiver Support

• 200 interventions tested in RCTs
  – Behavioral management
  – Skills training
  – Counseling/psychotherapy

• Various interventions improve (small-med):
  – Knowledge
  – Well being
  – Confidence/self-efficacy
  – Time to institutionalization
  – Behavioral symptoms
Caregiver Support

• Barriers and limitations
  – Focus only on the caregiver
  – Tested using traditional research not pragmatic designs
  – Cost ($2.50-$5/day for 6 months) and reimbursement
  – Poor integration with health care systems
New Models of Comprehensive Care for Dementia

• Focus on patient and caregiver
• Community-based
  – BRI Care Consultation
  – MIND at Home
• Health System-based
  – Indiana University Healthy Aging Brain Center (HABC)
  – The UCLA Alzheimer’s and Dementia Care Program (UCLA ADC)
Community-based

- Implemented at CBOs by SWs, RNs, MFTs
  - Systematic assessment
  - Care planning
  - Delivery or referral care, services, and support
  - May or may not have in-person visits, home visits

- Reduced caregiver burden/strain/depression

- Better guideline care, QoL, behaviors

- Reduced NH placement

- No effect on health care use or costs
Health-system Based

• Implemented in health systems by nurse practitioner or physician-led staff
  – Face-to-face annual visits
  – Coordination within health system and EHR
  – Order writing
  – May or may not have home visits

• Better quality of care
• Reduced caregiver burden/strain/depression
• Reduced NH placement
• Lower health care costs
Championing Dementia Care

• Frame the problem
Framing the Problem

• UCLA Top 3 diagnoses with higher than expected utilization
  – Chronic Kidney Disease
  – Dementia
  – Cancer

• Why is this important?
  – Increasingly payment is value based (MA, ACO’s, MSSP, bundled payments)
Championing Dementia Care

• Frame the problem
• Identify solutions
The UCLA Alzheimer’s and Dementia Care Program

- Approaches the patient and caregiver as a dyad; both need support
- Recognizes that this care is a long journey
- Provides comprehensive care based in the health system that reaches into the community
- Uses a co-management model with Nurse Practitioner Dementia Care Manager (DCM) who does not assume primary care of patient
The UCLA Alzheimer’s and Dementia Care Program

- Works with physicians to care for patients by
  - Conducting in-person needs assessments
  - Developing and implementing individualized dementia care plans
  - Monitoring response and revising as needed
  - Providing access 24 hours/day, 365 days a year

- Partners with Community-based organizations to provide direct services (e.g., adult day care) and caregiver training
Championing Dementia Care

- Frame the problem
- Identify solutions
- Provide data
Data that Make the Case for Dementia Care Programs

• Quality
• Cost
• ROI
Overall Dementia Quality of Care (ACOVE-3 and PCPI QIs)*

- Community-based physicians  38%
- Community-based physicians & NP  60%
- UCLA Alzheimer’s and Dementia Care  92%

* Based on medical record abstraction of first 797 patients

## Examples of Quality

<table>
<thead>
<tr>
<th>Service</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual assessment of cognition</td>
<td>94%</td>
</tr>
<tr>
<td>Staging of dementia</td>
<td>92%</td>
</tr>
<tr>
<td>Annual assessment of function</td>
<td>97%</td>
</tr>
<tr>
<td>Depression screening</td>
<td>99%</td>
</tr>
<tr>
<td>Annual screen for behavioral symptoms</td>
<td>99%</td>
</tr>
<tr>
<td>Annual medication review</td>
<td>99%</td>
</tr>
<tr>
<td>Caregiver counseling</td>
<td>99%</td>
</tr>
<tr>
<td>Counseling about advanced care/palliative care</td>
<td>98%</td>
</tr>
<tr>
<td>Counseling about driving</td>
<td>93%</td>
</tr>
<tr>
<td>Treatment with behavioral interventions first or concurrently</td>
<td>68%</td>
</tr>
</tbody>
</table>
Cost: ADC Participation Linked to Lower Health Care Spend

$500 per month spend reduction between ADC Participation & No ADC Participation

Time Frame: May 2015-May 2017
Source: ACO Claims
ADC Participation Linked to Lower Inpatient & Post-Acute Spend

Inpatient Monthly Spend/Patient  SNF Monthly Spend/Patient

Time Frame: May 2015-May 2017
Source: ACO Claims
## Comparison of Dementia Patients by ADC Participation

<table>
<thead>
<tr>
<th>Measure</th>
<th>Not Managed Currently by ADC</th>
<th>Managed by ADC Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCLA dementia patients</td>
<td>2,994</td>
<td>1,358</td>
</tr>
<tr>
<td>Avg. unplanned admissions per patient</td>
<td>0.96</td>
<td>0.91</td>
</tr>
<tr>
<td>30-day all-cause readmission</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>Average length of stay</td>
<td>6.6 days</td>
<td>5.9 days</td>
</tr>
<tr>
<td>Any ICU days</td>
<td>67%</td>
<td>27%</td>
</tr>
<tr>
<td>Bed Days per 1000 patient years</td>
<td>3,558</td>
<td>2,501</td>
</tr>
</tbody>
</table>

*September 2015 - September 2017*
Costs of Program (per 1250 participants)

- 5 FTE Nurse Practitioner DCMs
- 2 FTE DCM Assistants
- 0.5 FTE Medical Director
- 1 FTE Program Administrator
- 0.15 FTE Psychologist Support Group Leader
- Software maintenance and supplies
- Vouchers for community-based organizations
Comparative Costs of Program

- UCLA ADC $1460/y $4.00/d
- Rivastigmine (generic) $1261/y $3.45/d
- Rivastigmine transdermal $4474/y $12.30/d
- Memantine/donepezil $4630/y $12.68/d
Potential Revenue: Fee for Service

– Medicare billing
  • Cognition and Functional Assessment (99483)
    – $190-$260/per assessment
  • Chronic Care Management (CCM) Codes
    – $34-$104/month
  • E & M Codes
• Enough? Depends upon local labor costs
  – Nurse practitioners receive 85% payment rate
  – Annual FFS revenue assuming: non-hospital setting, 1 G0505, 1/3 Complex and 2/3 standard CCM, 1 F/U E & M code=$906/year
ROI

• Net Revenue “Savings”
• Total Incremental Operating Costs
• Contribution Margins (investment)
• Payback Periods
• Investment Return Ratios
• UCLA ADC program doesn’t completely cover its costs but saves the system a lot
• Depending upon local labor costs, the model may be cost saving
Thinking Broadly: Population-based Dementia Care

- Defined population (e.g., MA, ACO, MSSP)
- Analytics to characterize the population
- Tailored interventions to different strata
- Providing appropriate resources efficiently
- Monitoring for transitions in strata and changes in needs
A Model for Dementia Risk Stratification

Risk Stratification

1\textsuperscript{st} Tier (1\%) 45 pts
- Severe behavioral problems, functional impairment, few resources, comorbidities
- Frequent ED and hospital admissions

2\textsuperscript{nd} Tier (2-5\%) 180 pts
- Frequent behavioral problems, functional impairment, few resources, comorbidities
- Multiple ED and hospital admissions

3\textsuperscript{rd} Tier (6-20\%) 673 pts
- May have behavioral problems and/or severe functional impairment, comorbidities

4\textsuperscript{th} Tier (21-60\%) 1796 pts
- Mild dementia
- Getting routine health care

5\textsuperscript{th} Tier (61-100\%) 1796 pts
- Mild dementia
- Getting no health care

Dementia population as of Jan 2018
Utilization: Feb 2017-Jan 2018
A Model for Dementia Risk Stratification

<table>
<thead>
<tr>
<th>Risk Stratification</th>
<th>Total # &amp; Yearly Avg. Utilization By Risk Tier</th>
</tr>
</thead>
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| 1<sup>st</sup> Tier (1%) <i>45 pts</i> | • Many behavioral problems, severe functional impairment, minimal resources, comorbidities  
• Frequent ED and hospital admissions |
| 2<sup>nd</sup> Tier (2-5%) <i>180 pts</i> | • Frequent behavioral problems, functional impairment, minimal resources, comorbidities  
• Multiple ED and hospital admissions |
| 3<sup>rd</sup> Tier (6-20%) <i>673 pts</i> | • May have behavioral problems and/or severe functional impairment, comorbidities |
| 4<sup>th</sup> Tier (21-60%) <i>1796 pts</i> | • Mild dementia  
• Getting routine health care |
| 5<sup>th</sup> Tier (61-100%) <i>1796 pts</i> | • Mild dementia  
• Getting no health care |

Dementia population as of Jan 2018  
Utilization: Feb 2017-Jan 2018
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4th Tier (21-60%) 1796 pts
- Mild dementia
- Getting routine health care

5th Tier (61-100%) 1796 pts
- Mild dementia
- Getting no health care

Dementia Plan of Care

1st Tier (1%) 45 pts
- Intensive individualized care, small-panel primary care, Advanced Care Planning (ACP), Palliative Care, Psychiatry

2nd & 3rd Tier (2-20%) 853 pts
- Dementia Care program and increased social services (e.g. daycare programs), ACP, Neurology, Psychiatry

4th & 5th Tier (21-100%) 3,592 pts
- Caregiver education, monitoring and usual care

Dementia population as of Jan 2018
Utilization: Feb 2017-Jan 2018
Championing Dementia Care

- Frame the problem
- Identify solutions
- Provide data
- Persevere
Championing Dementia Care

• Frame the problem
• Identify solutions
• Provide data
• Persevere
• Bring passion