Changing service delivery by focusing on prevention and function

Sarah L. Szanton, PhD ANP FAAN
Professor
Johns Hopkins School of Nursing
Johns Hopkins Bloomberg School of Public Health
Director, Center for Innovative Care in Aging
sszanto1@jhu.edu

Alice Bonner, PhD, RN
Director of Strategic Partnerships for CAPABLE
abonner9@jhu.edu
Function as target for better fiscal, population health

• Health systems don’t generally cover function in a preventive way – often unaddressed
• Only after an event has occurred
• Addressing function can be expensive
• *But as shift to value happens, health systems and aging agencies may start*
Relative Risk of Being in the Top 5% of Health Care Spenders, 2006

Exhibit 13: Relative Risk of Being in the Top 5% of Health Care Spenders by Selected Groups, 2006

Source: "LewinGroup" analysis of 2006 Medical Expenditures Panel Survey, 2009
Aging and financial strain

• 30% of older adults live on less than $23,000/yr
• Assisted living costs \textit{at least} $32,000/yr
• Less than 10% can afford a retirement community
• 25% have no retirement savings
CAPABLE Approach

• Age in place = person *and* home
• Older adult is the expert
• Professionals use specialized knowledge only to elicit, support what older adult wants
• ↑Physical function ↓depression
• ↓hospitalization, ↓nursing home
Her Hazardous floor
Perfect time and opportunity to improve health
CAPABLE Team - at a glance

**Person/Participant**
- Self-assessment
- Readiness to change
- Goal setting – participant driven & priorities set by participant
- Brainstorming options/solutions; team in consultative role
- Work/actions to progress between each visit – Action Plan
- Exercises, education, practice
- Learn and apply tips for safe independent living

**OT**
- Functional/Mobility assessment
- Home risk; modifications & equipment needs
- Fall prevention

**Handyman**
- Receives work order; confers with participant
- Obtains equipment, installs instruction/guidance for participant

**RN**
- Pain, depression, medication review, exercise
- Key health issues/risks
- Participant priorities

Created by Dr. Deborah Paone for the Special Needs Alliance, under a grant from The SCAN Foundation and The Commonwealth Fund, based on information offered by Johns Hopkins University School of Nursing via the CAPABLE website found at: https://learn.nursing.jhu.edu/instruments-interventions/CAPABLE/CAPABLE ; 2018.
CAPABLE

• Focused on individual strengths and goals in self-care (ADLs and IADL)
• Client-directed ≠ client-centered
• Handyman, Nurse and Occupational Therapist (OT)
• OT: 6 visits; RN:4 visits; Handyman: $1300 budget over 4 months
• Total program cost = $2825 per client
Why do we see improvement?

- Function is modifiable
- Person/environment fit
- Unleashing participants’ motivation
- Their own strengths and goals
- Providing resources to achieve those goals
- Builds self-efficacy for new challenges
MRS. D: STUCK TO UNSTUCK–

• Confused, over medicated
• 30 minutes to walk to the bathroom
• Sat on commode all day as a chair, isolated
• CAPABLE: medication schedule, chair along hall, chair at top of stairs, railing on both sides, bed risers,
• No longer stuck in her room
27 Implementation Sites
Exhibit 1. Changes from Baseline to Follow-up in Activities of Daily Living Limitations and Instrumental Activities of Daily Living Limitations

**ADL Limitations**
- Improve: 74.8%
- Stay the Same: 15.4%
- Worsen: 9.8%

**IADL Limitations**
- Improve: 65.0%
- Stay the Same: 22.2%
- Worsen: 12.8%
Exhibit 2. Changes from Baseline to Follow-up in Depressive Symptoms and Home Hazards

**Depressive symptoms**
- Improve: 52.9%
- Stay the Same: 30.6%
- Worsen: 16.5%

**Home Hazards**
- Improve: 77.6%
- Stay the Same: 12.2%
- Worsen: 10.2%
### Hospitalization

<table>
<thead>
<tr>
<th>Model</th>
<th>Per quarter, per 1,000 patients</th>
<th>95% CI</th>
<th>Per quarter, per 1,000 patients</th>
<th>95% CI</th>
<th>Per quarter, per patient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC (over a 3-year period)</td>
<td>3</td>
<td>-36, 42</td>
<td>-26</td>
<td>-69, 17</td>
<td>-2,765**</td>
<td>-4,963, -567</td>
</tr>
<tr>
<td>CAPABLE (over a 2-year period)</td>
<td>3</td>
<td>-36, 42</td>
<td>-26</td>
<td>-69, 17</td>
<td>-2,765**</td>
<td>-4,963, -567</td>
</tr>
<tr>
<td>DASH (over a 3-year period)</td>
<td>-17**</td>
<td>-25, -9</td>
<td>-24***</td>
<td>-36, -12</td>
<td>-316</td>
<td>-745, 113</td>
</tr>
<tr>
<td>AIM (in the last month of life, over a 3-year period)</td>
<td>-76***</td>
<td>-100, -51</td>
<td>30***</td>
<td>11, 49</td>
<td>-5,985***</td>
<td>-7,010, -4,959</td>
</tr>
</tbody>
</table>

### Medicare Expenditure

<table>
<thead>
<tr>
<th>Model</th>
<th>Per quarter, per patient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC (over a 3-year period)</td>
<td>311, 431</td>
<td></td>
</tr>
<tr>
<td>CAPABLE (over a 2-year period)</td>
<td>-2,765**</td>
<td>-4,963, -567</td>
</tr>
<tr>
<td>DASH (over a 3-year period)</td>
<td>-316</td>
<td>-745, 113</td>
</tr>
<tr>
<td>AIM (in the last month of life, over a 3-year period)</td>
<td>-5,985***</td>
<td>-7,010, -4,959</td>
</tr>
</tbody>
</table>

---

**MEDICARE INNOVATION**

By Sarah Ruiz, Lynne Page Snyder, Christina Rotondo, Caitlin Cross-Barnet, Erin Murphy Colligan, and Katherine Giuriceo

Innovative Home Visit Models Associated With Reductions In Costs, Hospitalizations, And Emergency Department Use

Health Affairs, 2017
Driving the savings

• In Ruiz et al (prior slide) driving the savings are
  – Reduced readmissions
  – Reduced observation stays
  – Decreased specialty care
  – Reduced nursing home admissions
    (see key on next slide)
Monthly Medicaid cost for a hypothetical cohort of 1,000 people per service type and study arm.
Early Adopter Experience

• Variety of types of organizations involved as lead or in partnership:
  – Healthcare delivery system/ACO
  – Housing organizations
  – Meal/nutritional home delivery organization
  – Home health care agency
  – Other community-based social service agency
• Able to secure start-up funding through grants, partnerships, or self-funded
• Successful pilot/initial experience – scaling up underway
• Additional agencies and organizations interested/exploring ways to support CAPABLE implementation:
  – State Medicaid agencies
  – Medicare program
Key Steps Toward Implementation

1. Contact Johns Hopkins CAPABLE team
2. Lead organization - commitment from leadership to explore CAPABLE
3. Identify key program champion – person who will lead effort at the early stage
4. Consider partner approach – ensure healthcare and housing modifications components will be effectively and professionally addressed
5. Secure funding for start-up
6. Scale initial implementation/start-up to match capacity and funding
7. Establish a pilot workplan – timeframe, milestones, what and how data will be collected, key metrics to evaluate how the pilot went
8. Hire/contract for staff; train team through JHU
9. “Dry run” to test workflow and communication and ensure readiness
Tips & Strategies before Adopting CAPABLE

• *Pilot funding* - Consider funders within your region with a focus on older adults “aging in place”

• Prepare a simple proposal or Letter of Interest (e.g., 2-3 pages)

• *Healthcare organization as lead* - reach out to potential community-based service organizations that help build, repair or modify home settings.

• *Community service organization as lead* - reach out to potential healthcare partners such as home health care agencies, care management organizations, and healthcare delivery systems.

• *Referral and Outreach* – Begin exploring the feasibility to attract participants to the program; engage partners, local Area Agencies on Aging and other key informants to test assumptions about who, how many, and through what process people will accept an invitation to participate in CAPABLE
Mrs. H.

- Asthma, DM, HTN, Arthritis
- Breathless – limited ADLs, couldn’t walk up steps, or outside house

**CAPABLE:**

- Connected with PCP for long acting inhalers
- Switched from ibuprofen to acetaminophen
- Taught and practiced CAPABLE exercises
- Made it easier to take a bath → decreased pain
- Got her a super ear
- Put in railings, repaired linoleum floor
Addressing Function

- Poor function is costly
- It’s what older adults care about
- It’s virtually ignored in medical care
- It is modifiable
How to change policy
PAYER POSSIBILITIES (TRIPLE AIM)

- CMS could scale - PTAC has given their support
- Accountable Care Organizations
- Medicare Advantage Plans
- PACE
- Medicaid waivers
- Maryland Hospital Waiver
Policy levers

• Chronic Care Act of 2018
  – Flexibility to cover “non-medical” costs
  – Permanently authorizes special needs plans (SNPs)

• PTAC – Medicare coverage

• HUD – appropriations

• State Public Health Policies
Questions and Discussion
Select CAPABLE References


For More Information

Contact Johns Hopkins CAPABLE Team:

• Sarah Szanton - Founder sarah.szanton@jhu.edu

• Deborah Paone – Director of Implementation & Evaluation dpaone1@jhu.edu

• Alice Bonner – Director of Strategic Partnerships abonner9@jhu.edu