From clinical insight through study design to policy change: CAPABLE program, lessons learned

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Career path

- Lobbyist
- Nursing school
- Migrant workers
- Homeless Adults
- Homebound adults

Older adults: key drivers of population outcomes

Disability

- Risk factor – poor outcomes, heavy utilization
- Generally unaddressed in clinical practice
- Most interventions ineffective
- Person AND Environment

Mrs. B

Her medical conditions

- HTN
- CHF
- Arthritis
- Diabetes

Her Hazardous floor

Person focused vs patient centered

- What makes someone a patient versus a person?

Person focused vs. patient centered

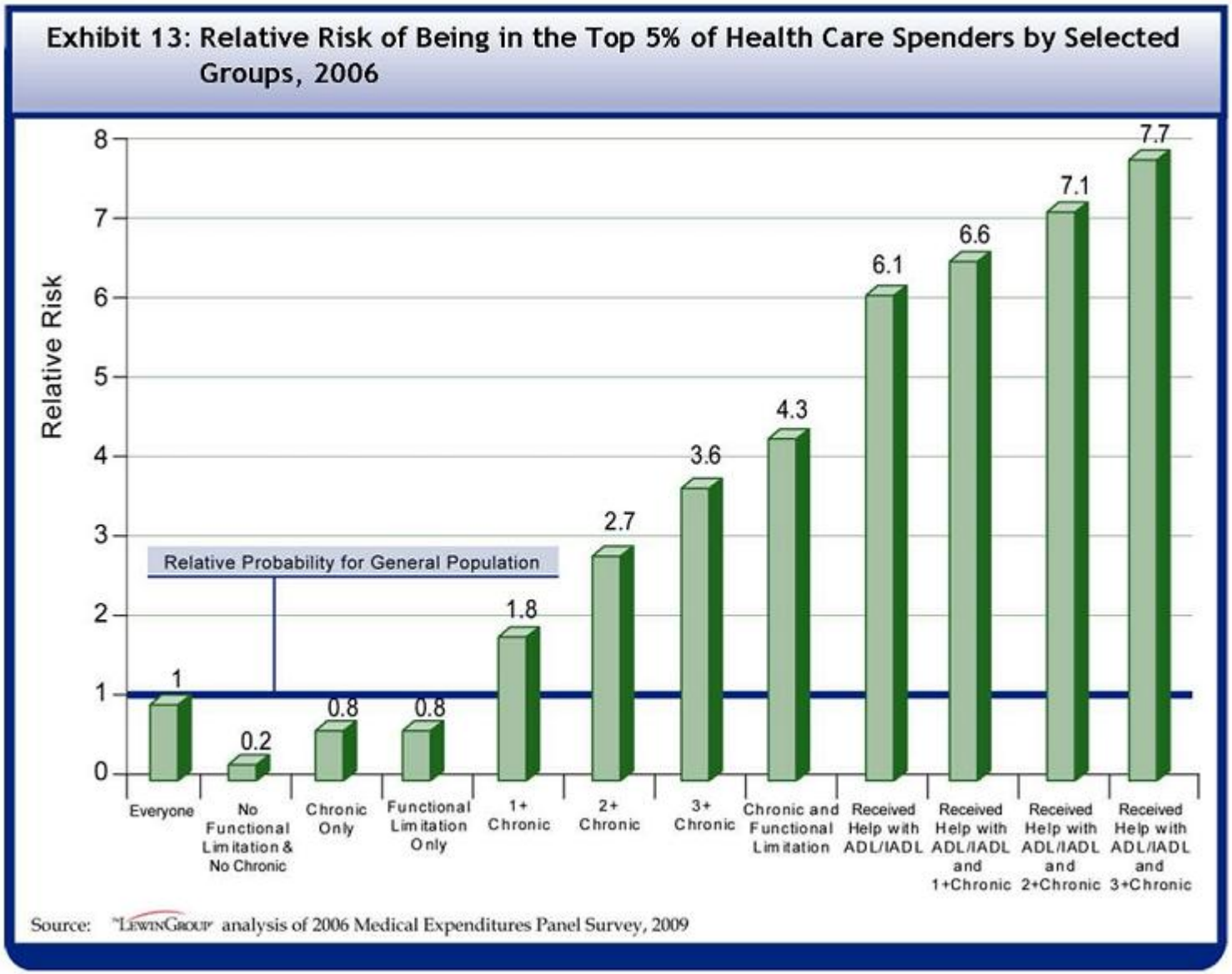
- What makes someone a patient versus a person?

Table 1. Differences between patient-centered care and person-focused care	
Patient-centered care	**Person-focused care**
Generally refers to interactions in visits	Refers to interrelationships over time
May be episode oriented	Considers episodes as part of life-course experiences with health
Generally centers around the management of diseases	Views diseases as interrelated phenomena
Generally views comorbidity as number of chronic diseases	Often considers morbidity as combinations of types of illnesses (multimorbidity)
Generally views body systems as distinct	Views body systems as interrelated
Uses coding systems that reflect professionally defined conditions	Uses coding systems that also allow for specification of people's health concerns
Is concerned primarily with the evolution of patients' diseases	Is concerned with the evolution of people's experienced health problems as well as with their diseases

Starfield, 2011

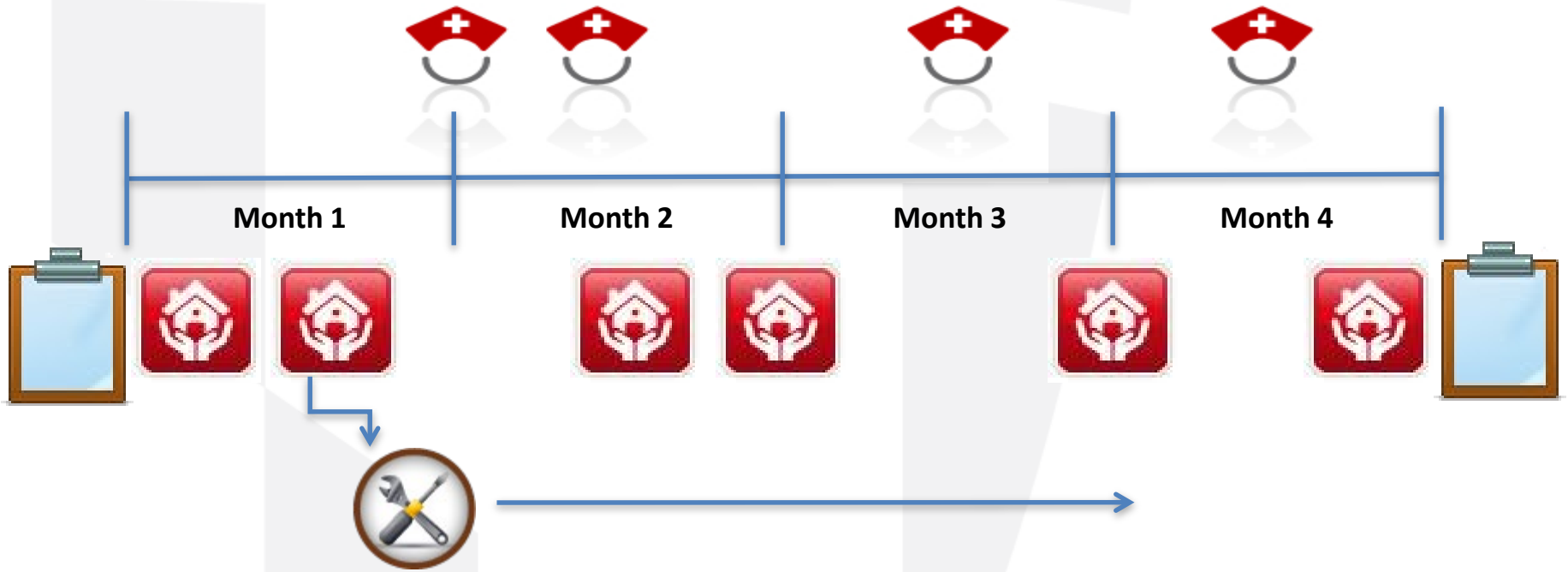
Perfect timing to change health

Relative Risk of Being in the Top 5% of Health Care Spenders, 2006



CAPABLE

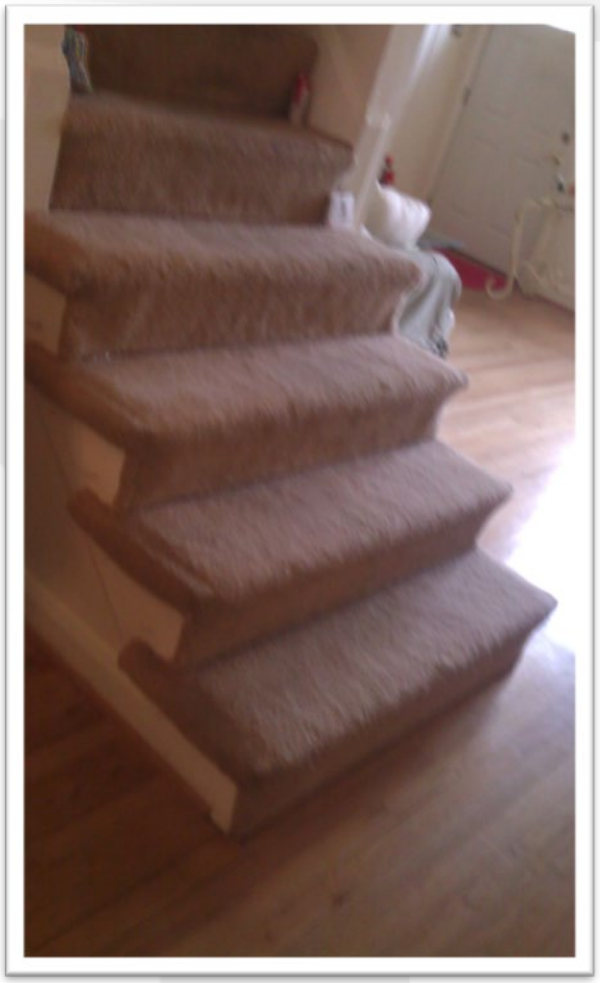
- Focused on individual strengths and goals in self-care (ADLs and IADL)
- Client-directed ≠ client-centered
- Handyman, Nurse and Occupational Therapist
- OT: 6 visits, RN:4 visits, Handyman: $1300 budget over 4 months
- Whole cost = $2825


Month 1
Month 2
Month 3
Month 4

You have given me my independence

- Mrs B tells us about how CAPABLE set goals

Before



After

CAPABLE

27 Implementation Sites

National Center for Healthy Housing

Habitat for Humanity®

Trinity Health

Allina Health

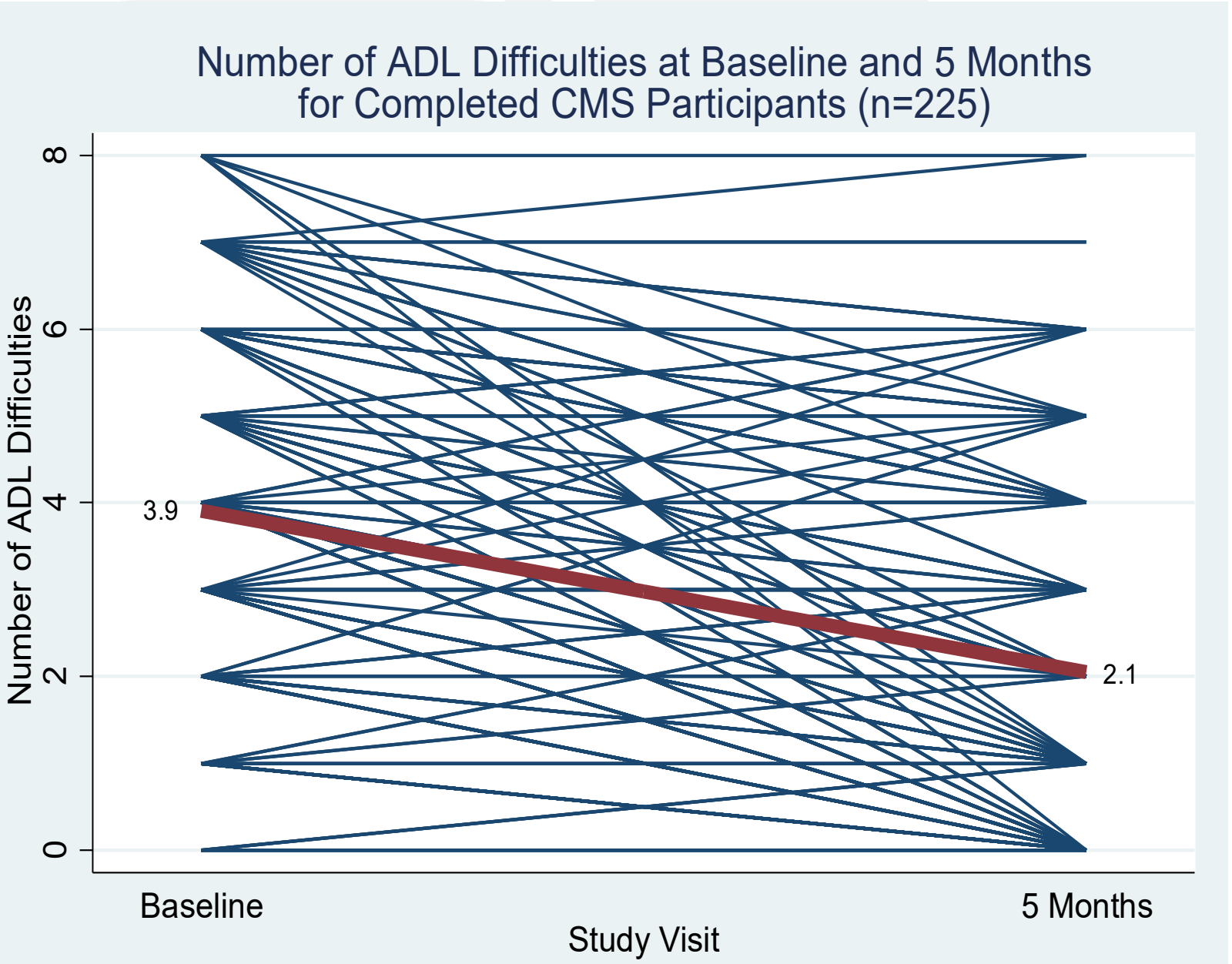
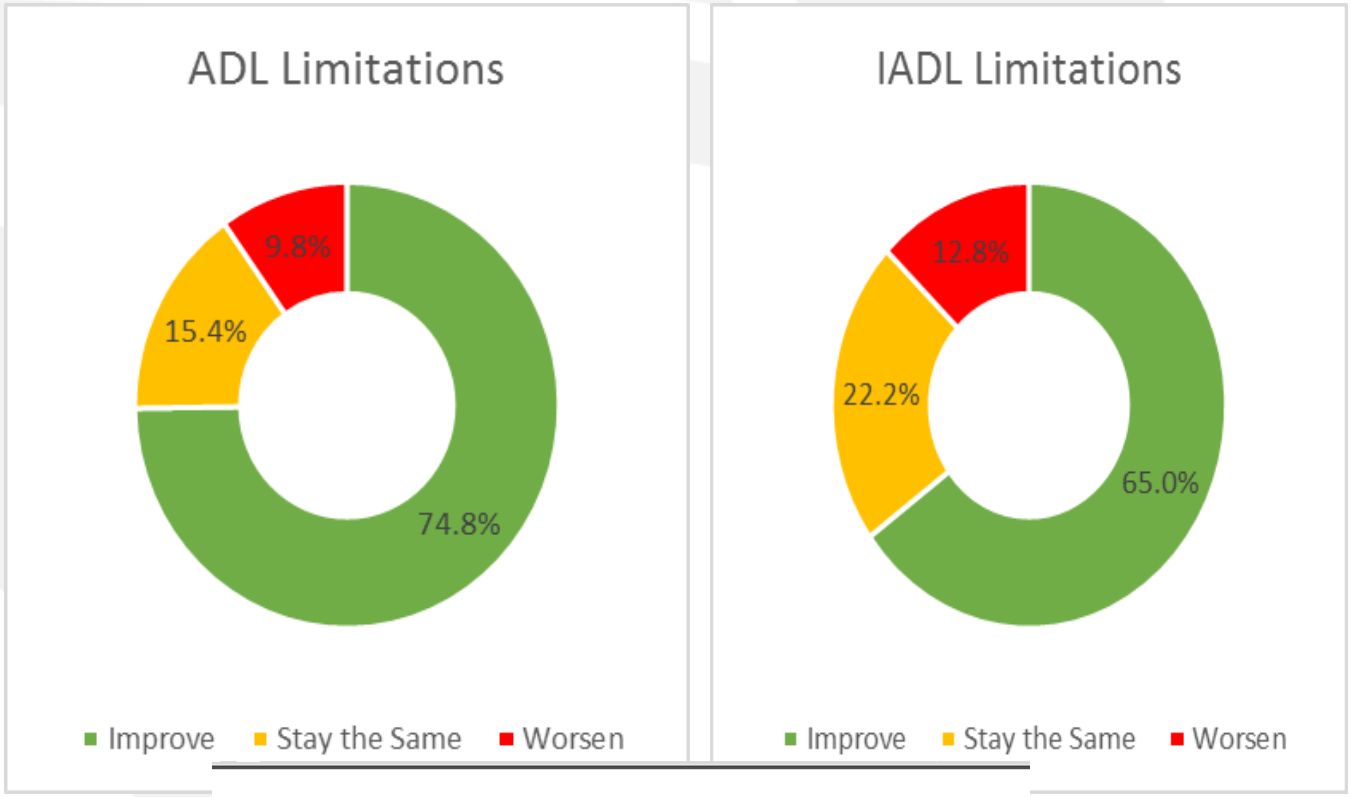

Number of ADL Difficulties at Baseline and 5 Months
for Completed CMS Participants (n=225)
Number of ADL Difficulties
0
2
4
6
8
3.9
2.1
Baseline
5 Months
Study Visit

Exhibit 1. Changes from Baseline to Follow-up in Activities of Daily Living Limitations and Instrumental Activities of Daily Living Limitations



AGING & HEALTH

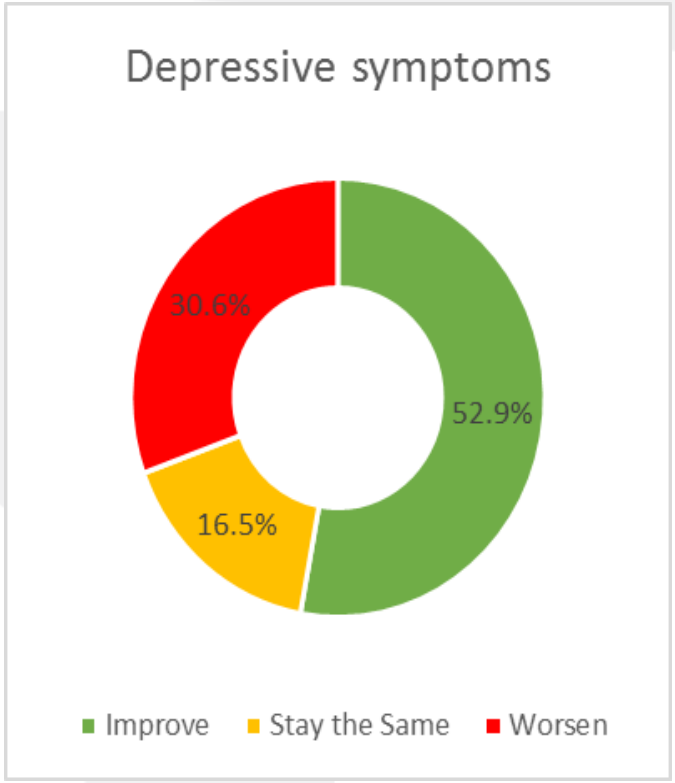
By Sarah L. Szanton, Bruce Leff, Jennifer L. Wolff, Laken Roberts, and Laura N. Gitlin

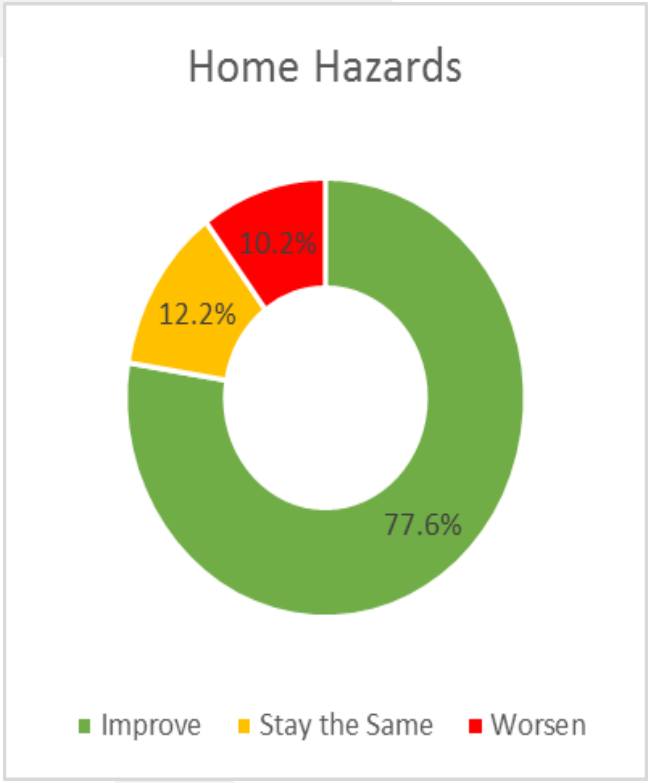
AGING & HEALTH

Home-Based Care Program Reduces Disability And Promotes Aging In Place

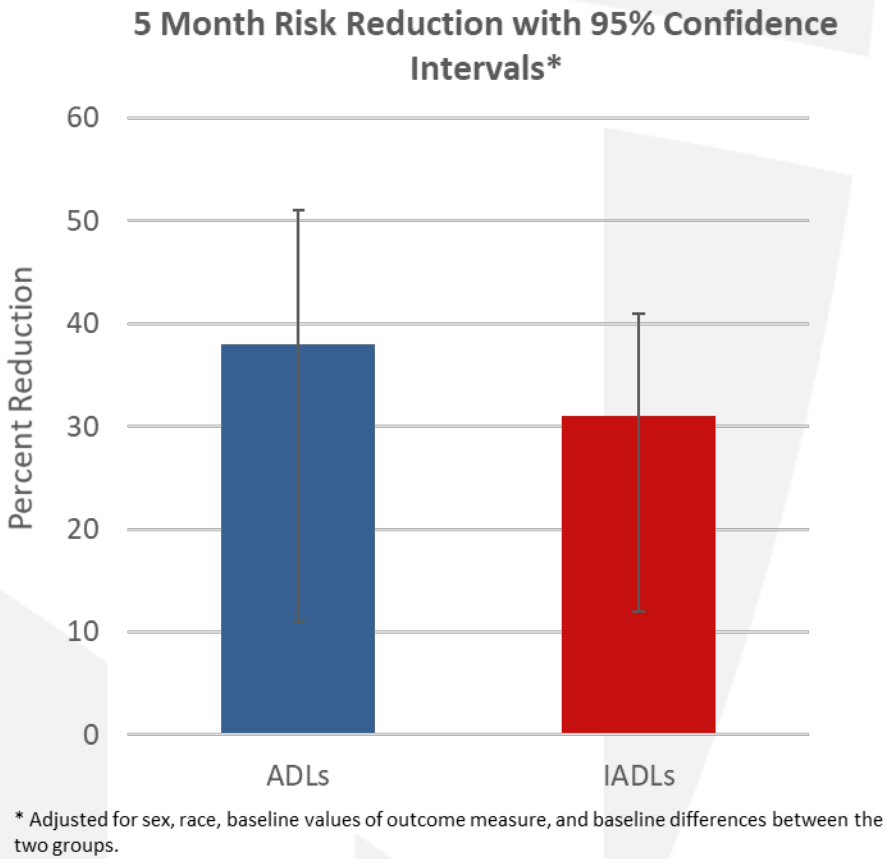
JOHNS HOPKINS SCHOOL of NURSING

Exhibit 2. Changes from Baseline to Follow-up in Depressive Symptoms and Home Hazards





5 Month Reduction in ADL and IADL difficulty



* Adjusted for sex, race, baseline values of outcome measure, and baseline differences between the two groups.

Szanton et al JAMA Internal Medicine, 2019

CAPABLE saves Medicare >10k per patient per year

	Hospitalization		ED visit		Medicare Expend	
Model	**Per quarter, per 1,000 patients**	**95% CI**	**Per quarter, per 1,000 patients**	**95% CI**	**Per quarter, per patient**	**95% CI**
ABC (over a 3-year period)	−4	−14, 6	2	−12, 16	$ 60	−311, 431
CAPABLE (over a 2-year period)	**3**	**−36, 42**	**−26**	**−69, 17**	**−2,765****	**−4,963, −567**
Stroke Mobile (over a 2-year period)	−52b*	−113, −8	35	−28, 98	2,088	−2,157, 6,333
DASH (over a 3-year period)	−17**	−25, −9	−24***	−36, −12	−316	−745, 113
AIM (in the last month of life, over a 3-year period)	−76***	−100, −51	30***	11, 49	−5,985***	−7,010, −4,959

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

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ABC (ov…						311, 431
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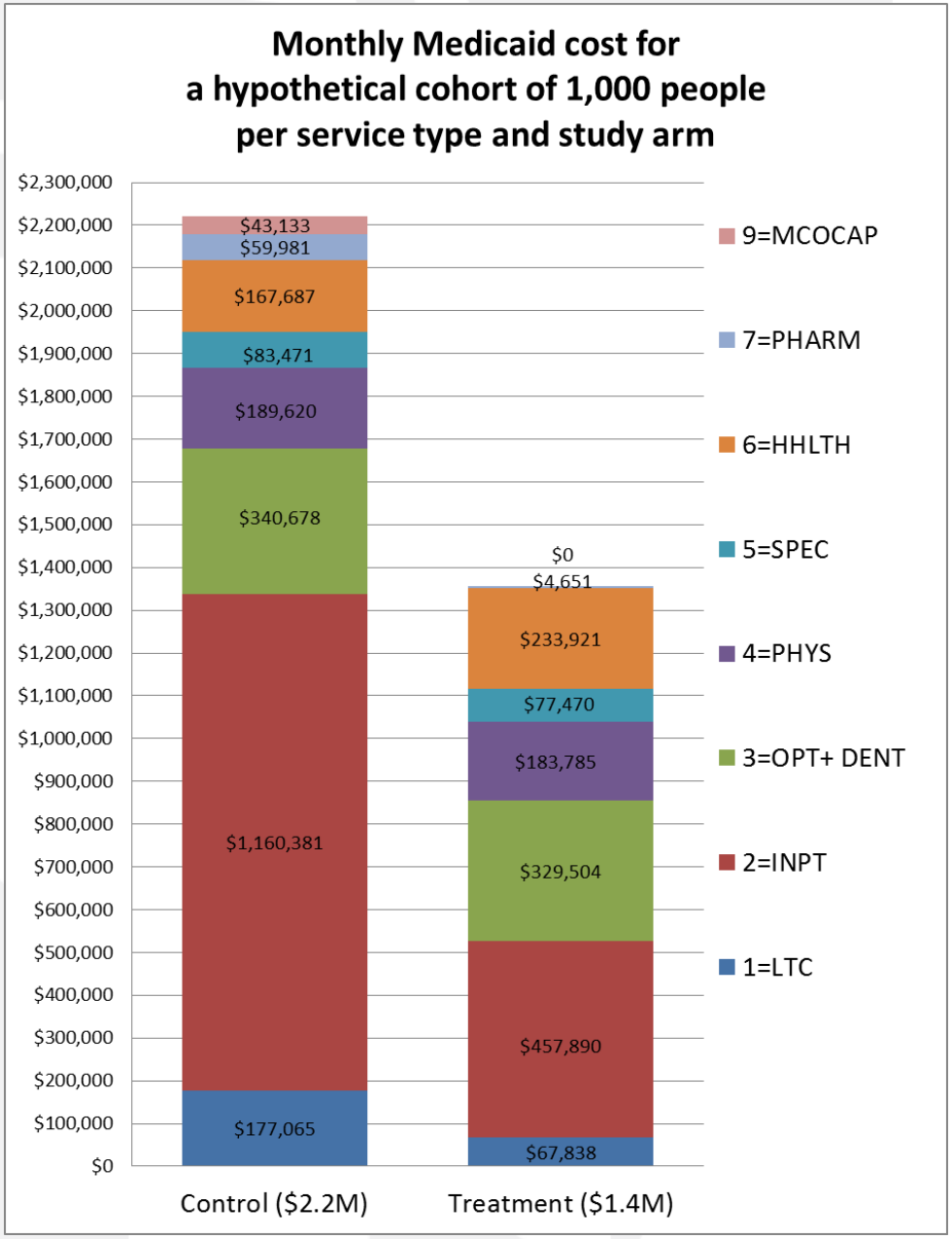
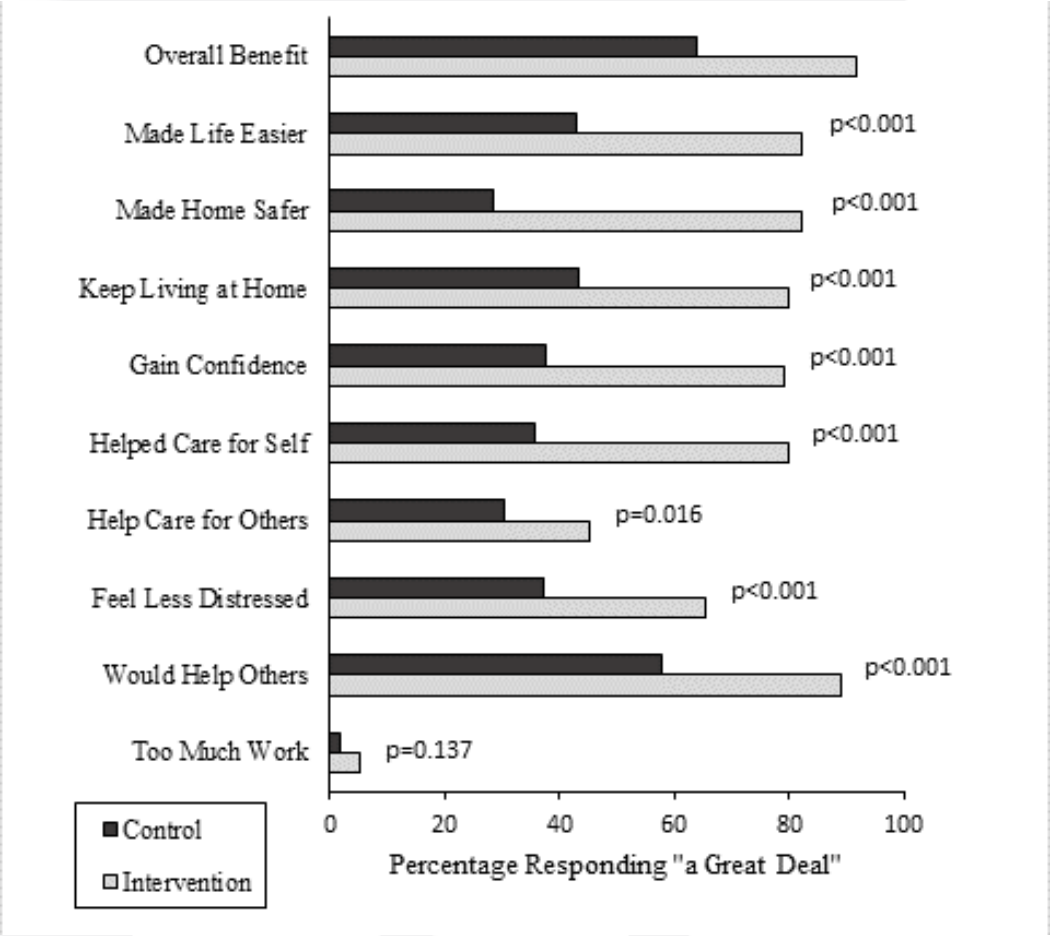
Driving the savings

- 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
$2,300,000
$2,200,000
$2,100,000
$2,000,000
$1,900,000
$1,800,000
$1,700,000
$1,600,000
$1,500,000
$1,400,000
$1,300,000
$1,200,000
$1,100,000
$1,000,000
$900,000
$800,000
$700,000
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$0
$43,133
$59,981
$167,687
$83,471
$189,620
$340,678
$1,160,381
$177,065
$0
$4,651
$233,921
$77,470
$183,785
$329,504
$457,890
$67,838
Control ($2.2M)
Treatment ($1.4M)
9=MCOCAP
7=PHARM
6=HHLTH
5=SPEC
4=PHYS
3=OPT+ DENT
2=INPT
1=LTC

Program Satisfaction: CAPABLE v. attention group after participation



Szanton et al, 2019 JAMA Internal Medicine

Mrs. D.

- Confused, over medicated
- 30 minutes to walk to the bathroom
- Sat on commode all day as a chair
- CAPABLE: Med schedule, chair along hall, chair at top of stairs, railing on both sides, bed risers, wider commode

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 Aleve to Tylenol
  - CAPABLE exercises
  - Easier to take a bath -> decreased pain
  - Super ear
  - Railings, repaired linoleum floor

Addressing Function

- Poor function is costly
- It's what older adults care about
- It's virtually ignored in medical care
- Modifiable

If I had 10,000 tongues…

- “If I had 10,000 tongues and they could all speak at the same time, I could not praise the CAPABLE program enough.”

How to change policy

Payor Possibilities (Triple Aim)

- CMS could scale –through PTAC
- Accountable Care Organizations
- Medicare Advantage
- PACE
- Medicaid waivers
- Maryland Hospital Waiver

Policy levers

- Chronic Care Act of 2018
  - Flexibility to cover “non-medical”
  - Permanently authorizes SNPs
- PTAC
- HUD - appropriations

Lessons learned

- Patient/person in charge
- Addressing more than one thing
- Flexible while sticking with mission

Positioning for success

- Best study design one can
- Lead with mission
- Hire carefully
- Collect many kinds of data
- Figure how your idea fits into larger streams

Acknowledgements

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- CMS 330970-01: CMMI
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- Bruce Leff David Bishai
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Questions and discussion