

NEW MODELS OF CARE AND APPROACHES TO PAYMENT

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Key issues related to in-home care

- Define population and needs
- Deliver combination of medical care and social support that is truly patient-centered, and is affordable
- Align funding with care and support models
- Measure quality and estimate value
 - $\text{Value} = \text{Quality} / \text{Cost}$
 - Cost must be risk-adjusted for specific populations
 - Quality measures: specific to care setting and population
 - Measures must be accurate and not too burdensome

Quality: Structure, Process, Outcome

**Social Support
System**

**Health Care
System**

- Engaged patient and family
- Defined preferences and goals
- Delivery system processes

- Patient experience
 - Clinical results
 - Costs

General Population

Home Care User Categories

A No illness (acute or chronic); use self-help resources	B > Ambulatory, independent, not “sick” > Some chronic health conditions exist		
	C > Younger; function (ADLs) limited by one condition > Not “sick” often, but need continuous ADL support		
	D > Older with chronic cognitive or functional impairment > Acutely ill infrequently (low cost), need ADL support		
	E > Post-acute care at end of discrete illness episode > Rapid return to stable condition, home care ends		
	F > High co-morbidity & illness burden, “sick”, high cost		
	Acute care at home	Post-acute, in-home transitional care	Longitudinal in-home health care

Who needs home-centered health care

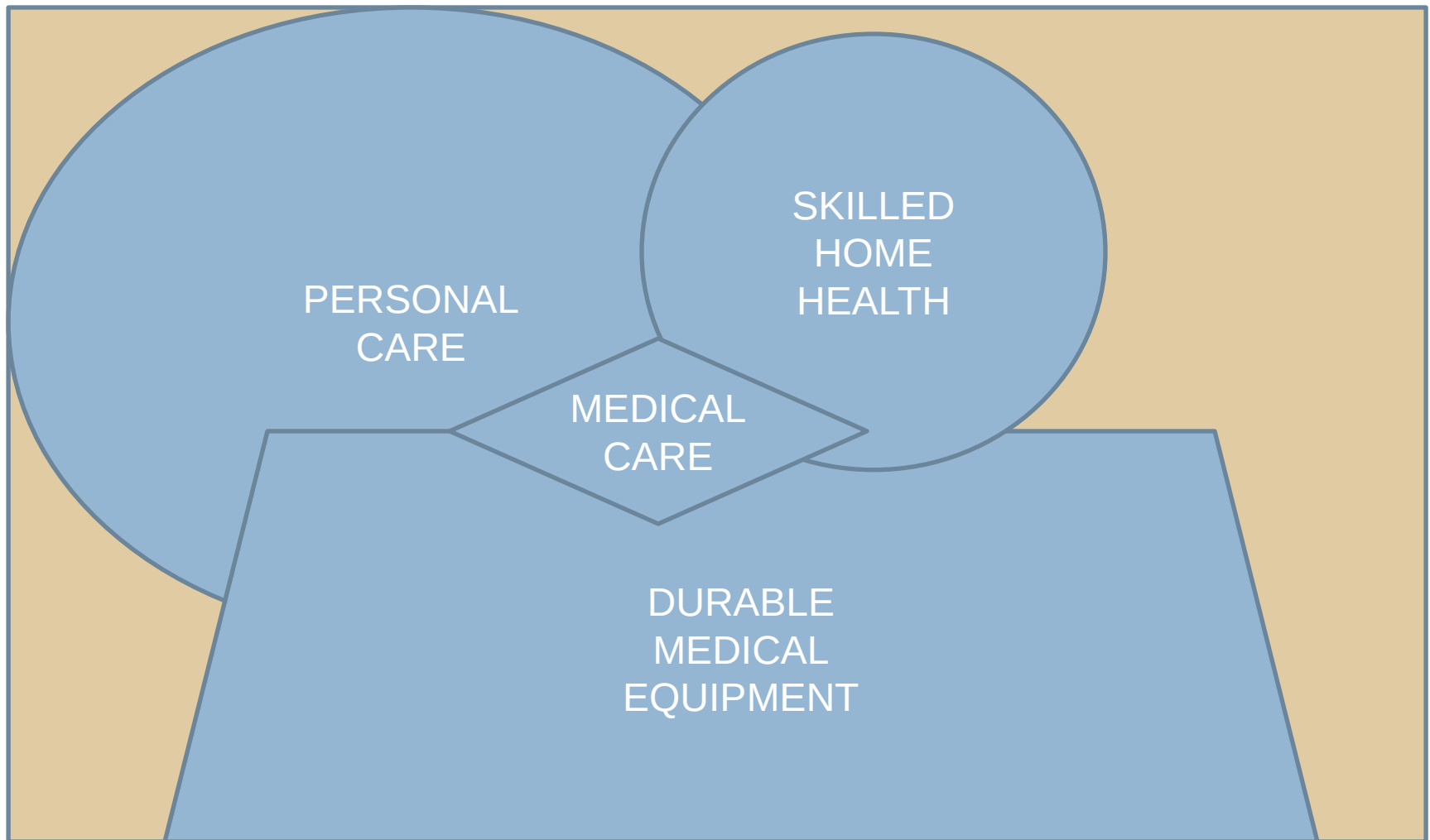
- Chronically home-limited, in community
 - About 3 - 4 million, with 3+ ADL deficits
 - Mostly elderly, some younger adults and kids
 - 1% of elderly in community are bedfast
 - Wide range of conditions, high co-morbidity
 - Reduced life expectancy
 - Most are not hospice-eligible at any given time
 - Some are technology dependent (ventilators, etc.)
- Short-term home-limited subset
 - Another 2-3 million; acute illness/injury; hospice

Social Supports ... and... Health Care

- Friends + family, in-kind
- Paid personal care
- Transportation, food, shelter, safety
- Communication
- Insurance
- Financial resources

- Accessible
 - Mobile team care
- Coordinated
 - Providers, time, settings
- Comprehensive
- Aligned with goals and needs

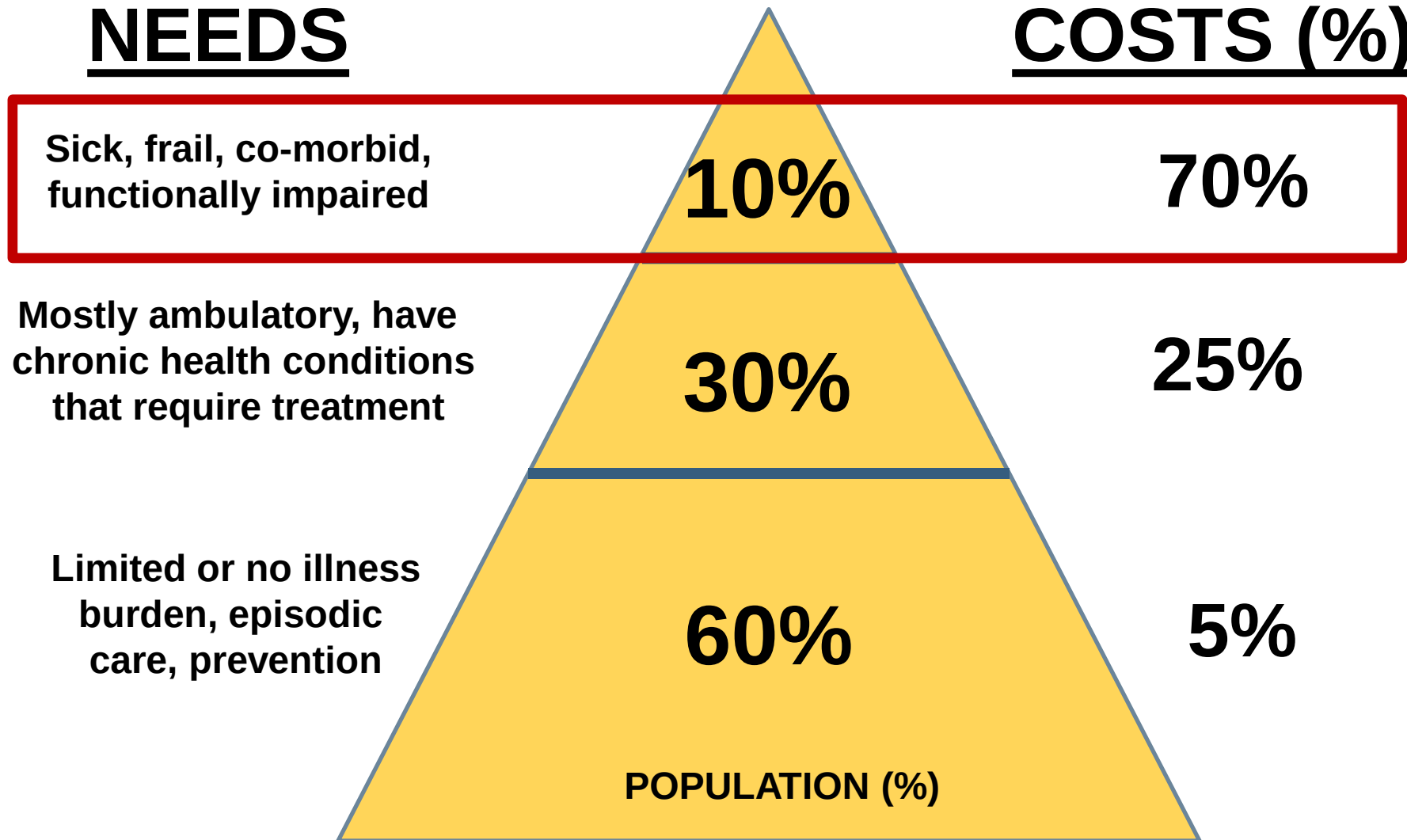
Use of In-Home Services by Home-Limited Persons



Population Needs + Resource Use

NEEDS

COSTS (%)



Home care, “usual care”

- Facility-based medical care
 - Fee-for-service
- Intermittent skilled home health care
 - 60-day episodes (Medicare)
 - 12,000 + agencies in U.S.
 - Large existing workforce
- Chronic ADL support
 - Home health aides
 - Financial coverage criteria
 - Hourly, with approval
- Discontinuous skilled care, intermittent
- Weak medical model
- Slow response to urgent problems
- Inconsistent, variable ADL support
- Payment in silo's, not aligned

Improvements to Usual Care

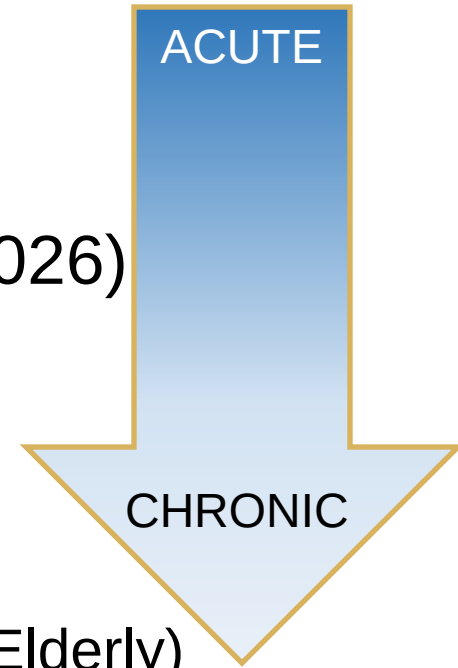
- OASIS + OBQI
- Demonstration (1995)
 - 54 exemplar agencies
 - 27 states
 - 156,000 patients
 - 249,000 controls
 - 25% reduction in hospital admissions
- HHCAHPS

- Intermittent care
- Not consistently replicated
- Weak medical model
- Hospital admissions remained at 26%-29%
- Workforce issues in personal care

J Am Geriatr Soc. 2002 Aug;50(8):1354-64.

Newer Care Models

- Hospital at Home
- Transitional care (6 weeks, post-acute)
 - Coleman, Naylor, CCTP (ACA section 3026)
- Consultative
 - GRACE
- Risk contracts
 - P.A.C.E. (Program for All-Inclusive Care of the Elderly)
 - Special Needs Programs
- Home-based primary care
 - Veterans Affairs Home-Based Primary Care (HBPC)
 - Non-V.A. home-centered primary care
 - Independence at Home



Hospital at Home

- RCT
 - Replicated in one or more care systems
 - Focus on selected defined conditions
 - Direct substitution for inpatient care
 - Better care
 - Lower cost (20%-30%)
- Small, intensive
 - Needs a supportive system
 - FFS payment is inadequate...
 - Supplemental funding
 - Care integration
 - Discontinuous model
 - Limited availability

Ann Intern Med. 2005 Dec 6;143(11):798-808.

Transitional Care, Naylor

- RCT, 180 / group, 1992-6
- NP intensive bridge, 4 weeks, multiple home visits
- 6-week readmissions 10% vs. 25% (62% reduction)
- Hospital costs reduced
 - \$3,093 lower in 6 months
 - 50% savings
 - Big bang for the buck

JAMA 1999; 281:613–620.

- Intensive
 - Most effective for sicker patients
 - Big bang for buck
 - Targeting essential
- Less easily scaled
 - Need experienced staff
- Funding?
- Who gets savings?
- What if patients can't return to clinic ?

Transitional Care, Coleman

- RCT, 370 / group; 2002-5
 - Coach model
 - Written care plan
 - Patient empowerment
 - Relatively light clinical touch
 - 30-day readmissions lower
 - 8.3% vs. 11.9% (30% relative)
 - Hospital costs reduced
 - \$488 in 6 months
- Less intensive
 - Less ideal for sicker patients?
 - Less bang for the buck
 - Lower control group costs than Naylor
 - More easily scaled
 - Funding ?

Arch Intern Med 2006; 166:1822–1828

Community-based Care Transitions Program (CCTP, ACA Section 3026)

- Contract with community-based organization (CBO)
 - CBO partners with acute care hospitals;
 - high readmission rates
 - CMMI pays direct cost of transition services (\$500 M)
 - 102 partnerships
 - 2011-2015
- Evaluation pending
 - Short term model
 - Can it change local culture, process
 - Future funding?
 - Intermittent: what happens when transition ends?

Consultative: GRACE

- RCT, 475 / group, 2002-4
 - Patients have PCP
 - NP structured quarterly home assessments, 3 years
 - Care processes much better
 - Hospitalizations lower for high risk subgroup (n=114) in year 2
 - 44% relative decrease
- Lower intensity model
 - Not primary care; no urgent care
 - Need experienced team
 - Fiscal impact in high risk quartile
 - Funding ?

JAMA. 2007 Dec 12;298(22):2623-33.

Comprehensive, PACE

- Full risk contract
 - Medicare + Medicaid duals, NH eligible
 - Adult day health center
 - Team care
 - Primary care = PACE
 - Home care included
 - Institutional costs lower
- Clinical model works
 - Expensive
 - Capital required, + risk
 - Significant overhead
 - Cost shift vs. savings ?
 - Transfers primary care
 - Transfers insurance
 - Slow growth, low census

J Gerontol A Biol Sci Med Sci. 2010 July;65(7):721–726

Comprehensive, V.A. HBPC

- Before + after cohort
- 9,426 patients, 2006
- Longitudinal, team-based care at home funded by VA
- “Too sick to go to clinic”
- Reduced costs 13.4%
 - VA + Medicare costs lower
 - Less hospital and NH use
 - More home care use
- Model works
- Scalable in the V.A.
 - Strategic investment made
- Expensive
 - \$10,000 - \$13,000
 - Targeting essential

J Am Geriatr Soc 2014; 62(suppl 1): S136

Comprehensive, Non-VA Home-Centered Care

- Case-control cohort
 - Risk-adjusted match
- 721 patients, 2004-8
- Team model: medical home care + network
- Costs reduced \$8,477; 17% in 2 years
 - High risk had 31% savings
 - Hospital, NH costs less
 - More home care, hospice
- Better care
 - lower cost
- Longitudinal
 - patient-centered
- Expensive
 - Targeting required
- Experienced team required - workforce
- FFS payments do not cover cost

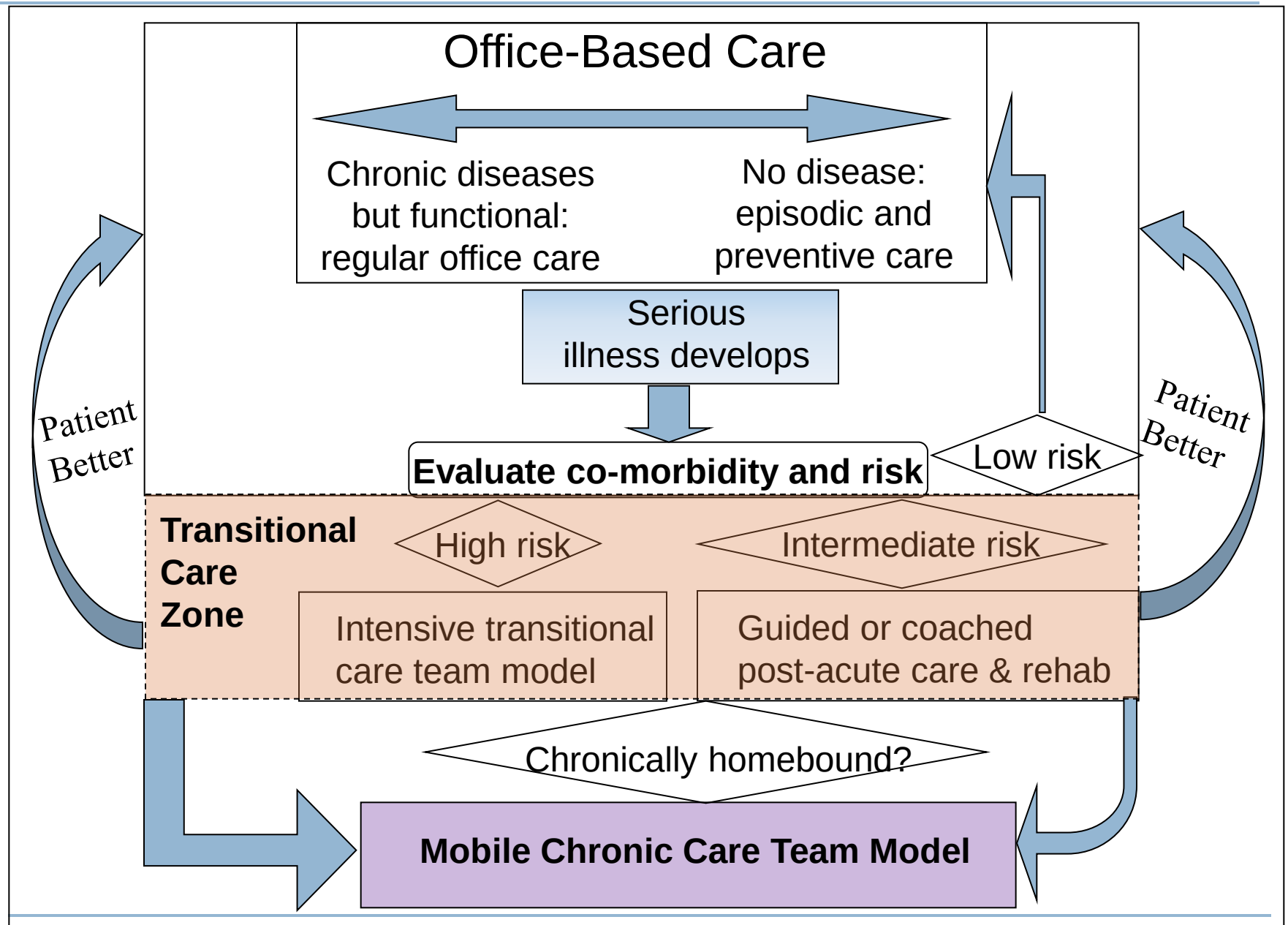
J Am Geriatr Soc 2014 (advanced e-publication, DOI: [10.1111/jgs.12974](https://doi.org/10.1111/jgs.12974)).

Independence at Home: ACA Section 3024

- Sick patients
 - Hospital stay
 - Post-acute care use
 - 2+ ADLs, 2+ serious chronic conditions
 - House call program
 - Quality measures
 - 5% minimum savings
 - Gain-share payment
 - 18 sites, 10,000 persons
- Gain share payments are key to fund model
 - Risk-adjustment key in estimating savings
 - Varied organizations being tested
 - Expansion will require legislation

Strategies that have not worked well for this frail population

- Care coordination independent of primary care
 - Medicare Coordinated Care demo, others
- PCMH, as usually implemented
 - Guided Care design, PGP demo, typical PCMH
- Many ACO and MCO care models



Value, Quality, Relativity

- Many accepted “standards of care”
 - Statins
 - 3% absolute risk reduction
 - 800 / 24,000 benefit
 - No benefit in the very frail
 - Drug-eluting stents
 - AICDs
 - Hospitalists
 - And so on.....
- In-home team care costs money, but...
 - If done well, coordinated well, and targeted well
 - better for patients
 - saves money
 - better for society
 - ***It is time to act***