

# Medical Care for the Elderly Living at Home: Home-based Primary Care and Hospital at Home

Bruce Leff, MD, Professor of Medicine, Johns Hopkins University School of Medicine, APSA Health and Aging Policy Fellow

Thomas Edes, MD, MS, Director, Geriatrics & Extended Care, US Department of Veterans Affairs

Bruce Kinosian, MD, Associate Professor of Medicine, Hospital of the University of Pennsylvania

# Agenda

- Provide context of home-based care with focus on Hospital at Home and Home-based Primary Care – Independence at Home (section 3024 ACA)
- VA experience in home-based primary care (HBPC)
- Home-based primary care for dually-eligible

# The Spectrum of Home-based Care


Informal  
Services

Formal  
Personal  
Care  
Services

Skilled  
Home Care

Home-  
Based  
Primary  
Care

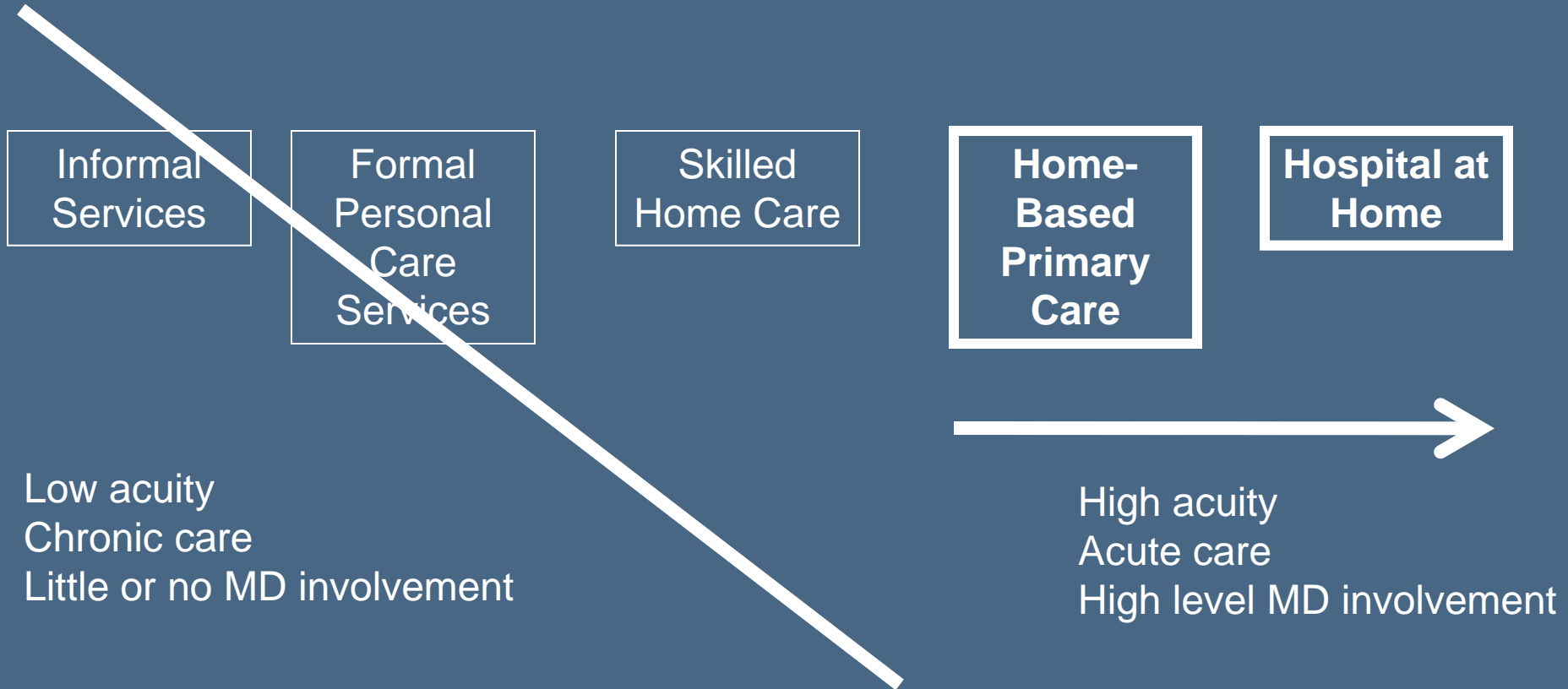
Hospital at  
Home



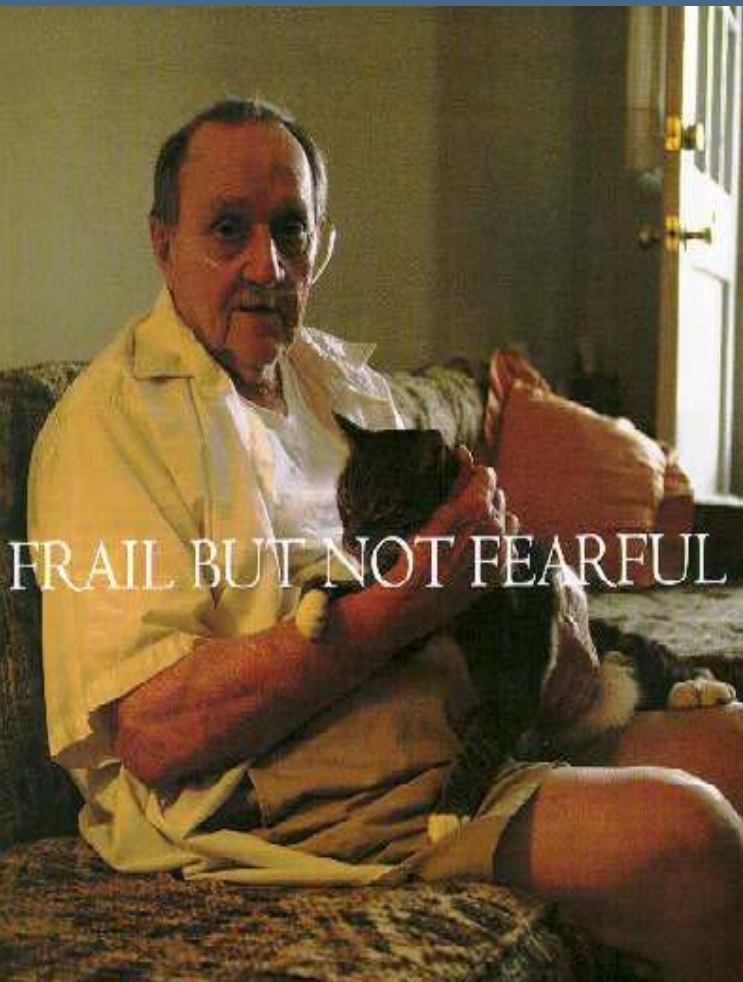
Low acuity  
Chronic care  
Little or no MD involvement

High acuity  
Acute care  
High level MD involvement

# Our Focus Today



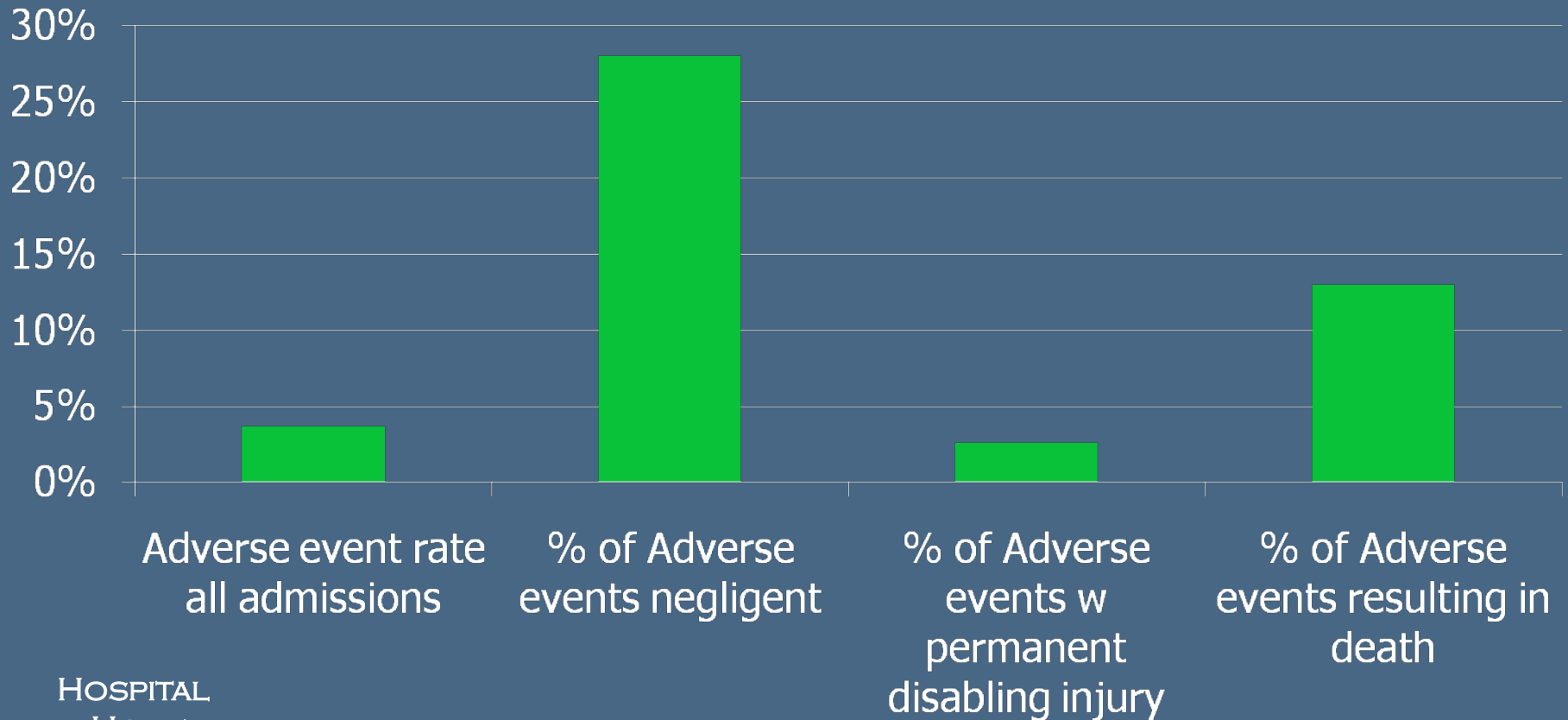
# Why We Need Hospital at Home



- Walter, 82, lives with his cat
- Multiple chronic conditions, meds, and admissions
- Walter's Gripes
  - "I can't get nebs on time so I end up on the tube"
  - "Food stinks"
  - "Wake up in middle of night and can't get to bathroom"
  - "No one talks to me"
  - "I get confused –get tied down"
  - "I always come home with a completely new set of medicines"
  -
- "I won't go to the hospital"

# Hospital Safety Pre IOM

**Harvard Medical Practice Study 1991; 30K  
Records, 50 Hospitals**



# How Hospital at Home Can Help

## Homeward bound

*Snapshot of the Hospital at Home process*

### Assessment



Patient presents to ED. Clinicians determine patient has acute illness that could be treated at home. Patient chooses home-care option.

### Transport



Patient transported home accompanied by nurse or physician with appropriate medications and equipment, including oxygen, if necessary.

### Home care



Nurse remains with patient

### Discharge



Nurse provides instruction about medications, follow-up care, sends letter to primary care physician.

Source: *Watch* interview, 5/8/06; Naik, *Wall Street Journal*, 4/19/06; Leff et al., *Annals of Internal Medicine*, December 2005.

## Annals of Internal Medicine

## IMPROVING PATIENT CARE

# Hospital at Home: Feasibility and Outcomes of a Program To Provide Hospital-Level Care at Home for Acutely Ill Older Patients

Bruce Liff, MD; Lynda Burton, ScD; Scott L. Mader, MD; Bruce Naughton, MD; Jeffrey Burl, MD; Sharon K. Inouye, MD, MPH; William B. Greenough III, MD; Susan Guido, RN; Christopher Langston, PhD; Kevin D. Frick, PhD; Donald Steiner, PhD; and John R. Burton, MD

- 61% chose HAH care
- HaH is feasible and efficacious
- High-quality care
- Fewer complications
- Higher satisfaction
- Lower costs of care
- Less CG stress
- Better function
- High provider satisfaction

*Ann Intern Med.* 143:798-808, 2005. *J Am Geriatr Soc.* 54:1355-1363, 2006. *J Am Geriatr Soc.* 2008;56(1):117-23. *Am J Manag Care.* 15:49-56, 2009. *J Am Geriatr Soc.* 2009;57(2):273-8. *Medical Care,* 47(9):979-85, 2009.



# What Did Walter Think?



“I definitely would have ended up on a breathing machine if I had been in the hospital.”

“It was great to get the attention I had from the nurses and to have the doctor see me at home.”

“I didn’t have to worry about my cat.”

# Moving from Research to Practice



HOSPITAL  
*at HOME*

# Ms. Irene



- 91 year-old 2 weeks of mental and physical decline. Hx of severe dementia, diabetes, diffuse joint pains, ? Seizure vs. fainting spells
- **House call:** "Sleeping 99% of the time", lethargic and talking less. Poor oral intake. "She was playing cards 2 weeks ago"
- **Medicines:** seizure med, tylenol w/ codeine, diuretic, aricept, namenda, antidepressant
- Drowsy, dry mouth, heel sore

# Usual Care for Ms Irene

- 911 to ER, admit to hospital
- Care by strangers, multiple FFS specialists
- Functional decline - long hospital stay
- ? SNF or inpatient rehab care
- ? Return home



# Chronic Conditions and Expenditures to the Medicare Program

<u>Number of Chronic Conditions</u>	<u>Percent of Beneficiaries 65+</u>	<u>Percent Medicare Expenditures</u>
0	18	1
1	19	4
2	21	11
3	18	18
4	12	21
5	7	18
6	3	13
7+	2	14

24% 66%

# House Call Medicine Clinical Model: Focuses on Cement, Not Just Bricks

- Continuous, comprehensive, longitudinal medical care in a patient's residence,
- Interdisciplinary team care - coordinate ALL medical AND social services
- Geriatrics and palliative care skill sets
- Strong medical component, MD, NP - extraordinary means to prevent crises
- Careful selection of specialists
- Portable diagnostics
- Support and empowerment of caregivers / family
- 24/7 ready access to care
- **Not in the body part business! A model that builds trust!**

# Outcomes of House Call Medicine

- VA - 24% ↓VA costs and 11% in Medicare costs. Highest patient satisfaction of any VA program
- U Penn ↓ health care costs by 50% and hospitalizations by 64%. Also ↓ Medicaid costs 24%
- Medicare managed care
- VCU Medical Center- ↓ hospital costs 60%
- Urban Medical House Calls, Boston- ↓ hospital admissions by 29% and hospital days by 34%

# Why it Works: Targeted Population, Right Tool, Right Outcome



## Outcomes

- Safer, higher quality, more satisfactory care
- Lower costs



# Independence at Home (IAH)

- ACA, Section 3024
- H.R. 2560 (Rep. Markey), S. 1131 (Sen. Wyden)
  - Developed by AAHCP and IAH Coalition
  - Bipartisan – Co-Sponsors: 13 Senators, 27 Reps
- Demonstration to begin 1/1/12 – 10K patients

# IAH- Attacks Root of Current System on Payment and Quality

- Targets high cost MC benes with mult chronic conditions ( $\geq 2$ ), hosp prior year, use of post-acute care w functional impairment
- Team care: MD and/or NP as part of "team that includes MDs, RNs, PAs, pharmacists, and other health and social services staff as appropriate..."
- Requires practitioners and providers as a condition of participation to
  - Achieve annual minimum savings of 5%,
  - Improve outcomes, and achieve patient/caregiver satisfaction
- Share Savings- First 5% to Medicare, then share further savings with successful providers
- Metrics: relevant clinical outcomes, satisfaction, cost-reductions

# How Did Ms. Irene Do?

- Offending medications stopped, oxygen and blood tests show only dehydration
- NP visit in 24-48 hrs., RN for heel sore
- Aide and family push fluids/food
- Calls from MD to son about goals
- Day 3- Alert, eating and drinking
- Not admitted - got safer care at home



# Summary - HBPC, IAH, and Hospital at Home

- Bring care to ill elders, when and where they need it
- Disruptive, mobile innovation that prevents high-cost events -- more convenience, higher satisfaction
- Tackles FFS incentives that drive high costs and poor care and will save serious Medicare \$\$
- Also solutions for managed care and Medicaid