



*Bringing acute hospital care  
home for older persons*

# Learnings from the AHRQ Health Care Innovations Exchange: Hospital at Home

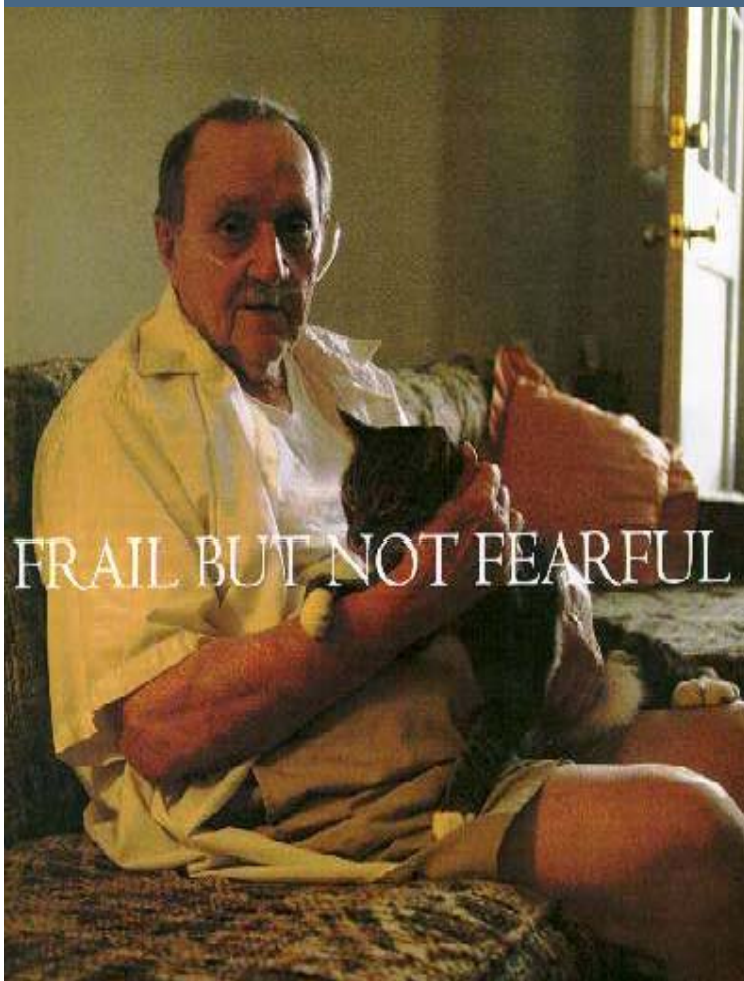
Bruce Leff, MD, Professor of Medicine  
Johns Hopkins University Schools of Medicine & Public Health

4<sup>th</sup> Annual NIH Conference on the Science of  
Dissemination and Implementation  
March 21, 2011, Rockville, MD

## Let's Think About...

- The innovation – Hospital at Home - why we need it, what it is, and the evidence for it
- Our experience in disseminating Hospital at Home – successes, challenges
- Moving forward

# 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"

# The Hospital at Home Model

## 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.

# Brief History of Hospital at Home

Determined who and what to treat

Developed eligibility criteria (*JAGS 45:1066, 1997*)

Evaluated patient acceptability of program (*JAGS 46:605, 1998*)

(Early experience with CMS)

Pilot Studies: clinical/econ feasibility (*JAGS 47:697, 1999*)

RFP to managed care organizations

**National Demonstration & Evaluation Study**  
(*Annals 143:798-808, 2005*)

Dissemination efforts



'95   '97   '98   '99   '00   '01-04   '05

**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 Leff, 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 Guldo, RN; Christopher Langston, PhD; Kevin D. Frick, PhD; Donald Steinerachs, 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.

# Moving from Research to Practice



# Dissemination of Hospital at Home

1. Broaden awareness and create interest in HaH
2. Define dissemination paths in Medicare managed care, VA, fee-for-service, & home care
3. Shrinkwrap the HaH model to enable adoption
4. Provide technical assistance to dissemination sites

# Endorsements By Thought Leaders

- AHRQ Health Innovation Exchange
- The Advisory Board
- Robert Wood Johnson Foundation



## Innovative Care Models

Profiles of innovative care delivery models and the leaders behind them.

Encouraging replication and spurring innovation.



Online article and related content current as of October 9, 2008.

### Programs Bring Care to Homebound Seniors

M. J. Friedrich

JAMA. 2008;299(22):2618-2619 (doi:10.1001/jama.299.22.2618)

<http://jama.ama-assn.org/cgi/content/full/299/22/2618>

*Funded by the Robert Wood Johnson Foundation*

# Important Media Coverage



**THE WALL STREET JOURNAL.**  
O N L I N E

April 19, 2006

PAGE ONE

*House Calls*

## **Portland Hospital Gives Acutely Ill A Homecare Option**

To Free Up Valuable Beds  
Care Is Brought to Patient;  
An Alternative for Elderly



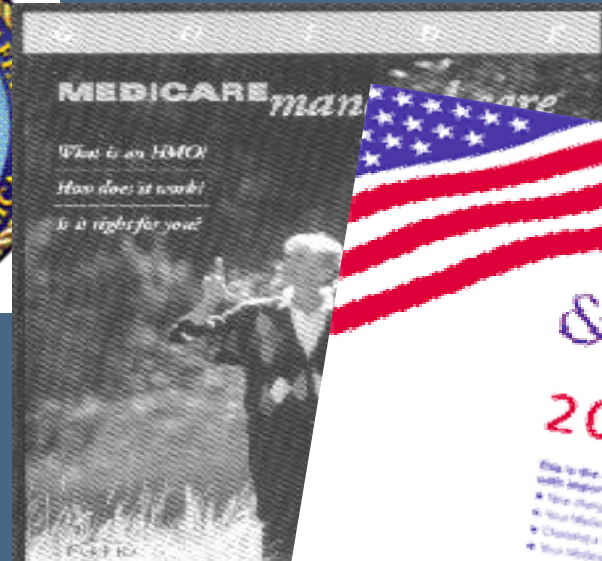
**Paul Willer**

# Packaging HaH and Providing Technical Assistance to Adopters

- Technical assistance manuals
- Interactive financial models
- Protocols for additional conditions
- Ongoing technical assistance to adopters

# Dissemination Paths

- VA
- Managed care
- FFS – CMS
- ACOs
- Home Care
- International
- Business approaches / VC



# Academic-based Dissemination of *Complex* Clinical Service Delivery Models is Difficult

Venture capital

# Some Lessons Learned

**The Evidence**: scientific evidence of effectiveness does not prove effectiveness of implementation of models of care. Most adopters really don't care about  $p$  values and many think our best scientific evidence is misguided . Berwick

**The Model**: complex interventions are a special challenge

**The Field**: geriatrics is viewed as a negative

**The Adopters**: suspicious of academia, no two are alike

**The Business Issues are absolutely key**: chasing reimbursement, difficult to value savings in a revenue driven world, financial incentives lacking, silo-based money, start up costs, scalability

# Keep in Mind...

