Models of Community Based Long Term Care

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Agenda

• Expanded evidence of Interdisciplinary Team directed, community based long term care, with focus on Home-based Primary Care

• Implementation of Independence at Home (section 3024 Affordable Care Act)

• Hospital at Home and other Non-institutional Care Initiatives at VA

• Challenges and Opportunities in Pennsylvania
The Population is Aging and Increasingly Frail

% of Older Adults Who Need Daily Personal Care

- There are ~2-3 million older adults with high grade functional impairment
- Will double in about 15 years
Problem of Duals

- Sickest, frailest, least educated and most expensive Medicare and Medicaid beneficiaries
- The 8M duals represent 46% Medicaid and 25% of Medicare expenditures
- More than ¼ have 3 or more ADL dependencies, while 11% have 5 or more chronic conditions
- Complex social and medical needs
- Current siloed programs create inefficiencies, overlaps, and gaping holes through which beneficiaries end up institutionalized
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 NP/MD involvement
Our Focus Today

- 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/NP involvement
BJW

- 78 yo AA woman,
- Lives independently in neighborhood for past 50 years
- 2-story row home
- BiPolar daughter who lives in home with her along with her 2 children (one with autism)
- Recurrent utility crisis due to poor money management
- Oxygen dependent
- Held and personally catered annual block party
- Multiple cats with fleas
- Medicare risk score 4.6
- Personal goal to survive to 80th birthday

- 491.21 COPD
- 518.83 Resp Fail 02
- 327.3 Sleep Apnea
- 440.2 PVD
- 585.3 CKD
- 404.11 HTN c CKD and HF
- 416.8 Pulmonary Htn
- 428.3 Diastolic CHF
- 427.89 SVT
- 358.8 Neuropathy
- 274.0 gout
- 285.29 anemia
- 721.9 Cervical spondylosis
- 366.9 cataract
- 530.81 GERD
- 389.9 Hearing loss
BJW Hospitalizations Pre/Post Housecall Management

- 2004
- COPD
- COPD/ICU
- 2005
- COPD/ICU
- COPD/ICU
- 2006
- Start Housecall
- COPD
- COPD/ICU
- 2007
- ED
- 2008
- 80th birthday
- 2009
ElderPAC

- integrated, interdisciplinary team care for 16 years
- combines home and community based services through Philadelphia Corporation on Aging with medical care (In-Home Primary Care Program) in an IAH-type program

- ElderPAC team:
  - NP/MD, SW from UPHS
  - case manager from PCA
  - community nurse from Caring Way

- serves both Waiver (dual) and Options (non-dual) nursing-facility clinically eligible consumers
Long Term Care: Deconstructing a Nursing Home

- Complex Health Management
- Independence at Home
- HCBC waivers
- Supportive Living Services
- Housing

HCBC waivers
Pre-Elder PAC

3 Nurse Practitioners
Managers
180 patients

39 Case Managers

39 Case
at PCA

Case Manager
60 PCA consumers
providers

50
UPHS In-Home Primary Care Program

- Active census of 200 homebound elderly patients in In-Home Program; 38 homebound elderly patients in Medicare Advantage
- Primary Care provided by NP/SW/MD teams
- Many patients receiving PCA services when they enter the In-Home Program
- Nearly 2/3 receive PCA services while in program.
- Majority of patients receiving skilled home health services, including chronic care coordination.
Home Visit Activity

• Social Worker
  -- Makes initial contact
  -- Social/service map
  -- Usually bi-weekly contact

• NP-Physician teams
  - see patients every 6-8 weeks (6 NP/2 MD visits/yr)
  - Physical exams, diagnostic studies
  - Home environmental modifications
  - Evaluate and strengthen social supports
  - Ensure contact with appropriate community agencies
    -- CONSUMER CHOICE (sort of)
  - Weekly team meeting /monthly with community agencies

2009 average 7.5 visits/pt (6 NP:1 MD)
Supportive Living Service Integration

- Environment
  - Information for modification and repair programs
  - Durable medical equipment
  - Stairglides

- Transportation
  - Shared Ride
  - Non-Emergency Ambulance
  - MA / Wheels
ElderPAC Team Members

- Case Managers (2) from the Options/Waiver Programs of the Philadelphia Corporation for Aging
- Social worker from Geriatrics
- Geriatric Nurse Practitioners (GNP)
- Physicians from Geriatric Medicine
- Home care nurse from HHA (Penn Care at Home)
• Socialization
  – Information, lists and application process for:
    • Senior Centers
    • Adult Day Care
    • Senior Companion
    • Friendly Visiting
• Counseling / Mental Health
  – Community Mental Health Center / Base Service Units
• Home Health Aides / Personal Care Aides
• Safety
  – Emergency Response Systems
  – Locks / Windows Program
  – Financial Management
  – Older Adult Protective Services
Medical / Health:
Switching between AAA and CMS before IAH

- Home Health Agencies
- Registered Nurse
- Physical Therapist
- Occupational Therapist
- Speech Therapist
- Home Health Aide
- Incontinence Specialists
Cement

- Weekly team meeting for In-Home Primary Care Team (NP/SW/MD), community and hospice nurses
- Monthly team meeting with PCA
- Care Plans (PCA, Home Health Agency)
- Daily electronic communication: Text, email, phone, EMR
Does it work?
Objectives:

Determine if an inter-agency IDT providing comprehensive, all-inclusive care could:

• *Increase the share of total survival* spent in the community for frail elders; and

• *Reduce Medicaid nursing home costs* by providing home and community based care to frail elders.
Evaluation

- Original EPAC cohort study 1997-2002
- Reassembled E-PAC cohort for 2004 base year
- Accrued new consumers during subsequent 4 years
  - Included all living at end of interval, rolling enrollment
- Controls: consumers matched for program (waiver/options), age, gender, zip code, LTC intake risk score (1-85, mean = 69.2), year of enrollment

- Medicare costs estimated from HCC score for EPAC patients
- Medicaid costs for NH and HCBS taken from State SAMS system
- Death from state vital records
- Utilization (hospitalization) from program data
- HCBS costs (from AAA and from State Medicaid)
- Functional scores from AAA
  - (all participants screened with common intake assessment)
- Measures: community survival (Kaplan-Meier), NH use, mortality, costs
3 Comparison Groups

• PACE (national) -- Benchmark
• HCBS without ElderPac IDT
  (216 Waiver, 84 Options; 6910 waiver months)
• HCBS with ElderPAC IDT
  (72 waiver, 20 Options; 4360 member-months)
<table>
<thead>
<tr>
<th></th>
<th>E-PAC 2 (2004-2009) (N=92/4360 member months)</th>
<th>Waiver/Options Controls (N=216/6910 member-months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>3.8 /100 mm</td>
<td>7.2/100 mm</td>
</tr>
<tr>
<td>Long-term Nursing Home</td>
<td>5.9%</td>
<td>24.9%</td>
</tr>
<tr>
<td>Community Survival/ Survival 5-year</td>
<td>38% /43%</td>
<td>20%/28%</td>
</tr>
<tr>
<td>HCBS Care Plan mean cost/month Est. mean HCC Annual/ 5-yr Total</td>
<td>$1942 +/- 1117 3.55 $41,962/$15.3M</td>
<td>$1084 +/- 477 n/a</td>
</tr>
<tr>
<td>Medicare Savings Annual/ 5-yr Total @ .48 @ .37</td>
<td>$20,054/$7.22M $15,458/ $5.5M</td>
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</tbody>
</table>
ElderPAC Increases both Survival and Community Survival compared to usual HCBS

Community months of survival/total months survival
EPAC 44.3/46.8 months
Waiver 24.2/31.9 months
Community Survival with In-Home LTC Services
EPAC, PA- PACE, PA-Waiver

![Graph showing community survival with in-home LTC services]
Community Choices, Palmetto Senior Care, nursing home Overall survival (Kaplan–Meier) trajectories, by program cohort

Log-rank (Mantel–Cox) test = 40.27 (df = 2); p < .001
Survival for Low and High risk admissions to Waiver, PACE, and NH: Simpson’s paradox revealed

Median survival among **moderate-risk** admissions to PSC was 4.7 years compared with 3.4 years in CC (log rank = 3.08; *p* = .079). Among the **high risk**, PSC and CC median survival was 3.0 and 2.0 years, respectively (log rank = 6.53; *p* = .01).
Risk Strata by Program

\[ \chi^2(4) = 57.45; \ p=0.000 \]
EPAC reduces Average Monthly Costs Compared to Waiver Controls

**Medicaid:** EPAC 24% less

- EPAC: $20,640
- Waiver: $27,084
- EPAC: $2257/MM
- Waiver: $1720/MM

**Medicaid + Medicare:** 32% less

- EPAC: $47,028
- Waiver: $68,520
- EPAC: $3919/MM
- Waiver: $5710/MM

- EPAC: $20,640
- Waiver: $27,084

- EPAC: $2257/MM
- Waiver: $1720/MM

- EPAC: $3919/MM
- Waiver: $5710/MM
5-Year Total Cost of State Nursing Home and HCBS payments for E-PAC and Waiver/Options Consumers

Medicaid Only

$2.3M saving for 4360 member months (23%)

$6740/ Year of Life Saved  N=92
(4360 MM EPAC, 2994 MM HCBS)

Medicare & Medicaid

$7M - $8.7M saving for 4360 member months

$170K - 1.7M saving for N=92
(4360 MM EPAC, 2994 MM HCBS)
Summary

- All-inclusive care delivered through a housecall practice can reduce Medicaid costs by 23% compared to usual HCBS.
- Despite a 46% increase in survival, there was a net cost savings (up to $1.7M) to Medicare and Medicaid in an Integrated Care Organization/Independence at Home structure.
What’s missing

• Financing structure to cover the cement that keeps the bricks together.
• Currently dependent upon individual commitment and effort to keep patients connected with all team members.
• Need for new models of financing integrated care beyond single all-inclusive organizations—e.g., Independence at Home.
Independence at Home

- Authorized in the Patient Protection and Affordable Care Act as a demonstration to run 2012-2015
- Focuses on top 5% of Medicare beneficiaries by cost—clinically complex, multiple hospitalizations, multiple functional impairments.
- Provides for gain-sharing between CMS and housecall providers.
- Interdisciplinary, longitudinal care in home
- Geriatric skills, EHR, quality, satisfaction
- Outcomes: Fewer inpatient days, lower cost, savings shared by home care team (all partners)
Independence at Home (IAH)

- Three options for practices to join:
  - Independent Practices (15) size 100-700, minimum average size 200 first year
  - Consortia (3)
  - National pool (0)

- Patient criteria: 1.4 M nationally meet; mean HCC=3.4
  - Prior hospitalization
  - Post-acute rehab (MDS or OASIS)
  - 2+ Chronic conditions
  - 2+ ADL dependencies
  - FFS Medicare (excludes Medicare Advantage; includes ESRD, duals)

- Outcomes:
  - Quality measures- Advance directives, Comprehensive Geriatric Assessment annually, 48-hr follow-up after hosp/ED discharge and after admission
  - Hospital/ED/ Potentially avoidable hosp (CHF/COPD/DM)
  - Gain sharing- Practice spending target set by pre-enrollment HCC
    - predicted, with annual cost factor; 1% outlier cost protection.
**Individual Practices (Announced April 2012):**

- **Boston Medical Center** (Boston, Massachusetts)
- **Christiana Care Health Services** (Wilmington, Delaware)
- **Cleveland Clinic Home Care Services: Medical Care at Home Program** (Independence, Ohio)
- **Comprehensive Geriatric Medicine P.C.** (Brooklyn, New York)
- **Doctors Making Housecalls, LLC** (Durham, North Carolina)
- **Housecall Providers, Inc.** (Portland, Oregon)
- **MD2U** (Louisville, Kentucky)
- **National House Call Practitioners Group** (Austin, Texas)
- **North Shore - Long Island Jewish Health Care Inc.: Physician House Calls Program** (Westbury, New York)
- **RMED, LLC** (Jacksonville, Florida)
- **Visiting Nurse Housecall, LLC** (Atlanta, Georgia)
• Visiting Physicians Association, P.C. - Flint/ Saginaw/ Marysville (Flint, Michigan)
• Visiting Physicians Association, P.C. - Lansing/ Ann Arbor (Okemos, Michigan)
• Visiting Physicians Association, P.C. - Milwaukee (West Allis, Wisconsin)
• Visiting Physicians Association of Texas, PLLC - Dallas (Irving, Texas)

• **Consortia (Announced August 2012):**
• Innovative Primary Senior Care LLC (Skokie, Illinois)
• Treasure Coast Healthcare, LLC (Stuart, Florida)
• Virginia Commonwealth University Health System/ University of Pennsylvania, Washington Hospital Center (Richmond, Virginia)
Inspiris’ IAH-type program and Outcomes

• Housecall team (MD, NP, RN, SW) contracted to manage a defined panel of high risk patients (2+ chronic conditions, 1+ admission) across 8 markets

• **63% reduction in hospital admissions** among 800 matched duals (1608/1000 to 593/1000 pts/yr)

• **33% reduction in 30-day readmissions** (21% to 13%)

• **42% reduction total cost** over 2009-2010 (15% absolute net reduction for 300 pts compared to all high risk duals in 15,000 member plan)

• **74% reduction in SNF days, 40% reduction in ED use** among 1000 pts in 50,000 member plan.
Inspiris IAH model within Medicare Advantage
12,445 beneficiary months of observation
Avg. Risk Score on IAH = 3.95 (HCC + frailty @ 0.28)

First two blue bars are actual pre and post, with some regression to the mean
Red = Modeled costs using HCC score method
Last two bars assume IAH program is relieved of outlier costs above $100,000
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”
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.

Why We Need It

How it Helps

Annals of Internal Medicine

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 Burt, MD; Sharon K. Inouye, MD, MPH; William B. Greenough III, MD; Susan Guido, RN; Christopher Langston, PhD; Kevin D. Frick, PhD; Donald Steinwachs, 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

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.”
VA T-21 Non-institutional Care Initiatives

Nationally
- Hospital at Home (5 sites)
- VA-PACE partnership (7 sites)
- Geriatric Primary Care
- GRACE
- Veteran Directed Care
- Transitions care (Naylor, Coleman)

Philadelphia VAMC
- PACE (2010)
- Medical Foster Home (2011)
- Hospital at Home (2011)
- Veteran Directed Care (2012)
- Transitions (2012?) --internal
Philadelphia Hospital at Home

**PVAMC model**

- Provider Agreement—Penn Home and Hospice services
  - Physician, Coordinator, SW from VA--.3 total FTE
  - PH&H provides infusion, nursing, CNA, Thereapies
  - VA provides DME, oxygen
  - All with 4 hour delivery cap

**First 6 months**

- 25 patients
  - 16 CHF
  - 7 ED admits
  - aLOS 3.4 d/ 4.6 DRG pred
  - 4% 30d readmit
  - 28% repeat customers (2 called directly)
  - Average cost/admit $2400; PVAMC expected $6500
Environmental Challenges: PCA’s ability to provide a broad range of services to older patients has now become much more limited.

• Act 22
  – No longer a lump sum received each month for care managers. The position is now a service coordinator and they must submit billing hour units and then get reimbursed.
  – Case management is a bid service, consumer choice
  – Direct Cuts: No more nursing, extermination, ambulance rides
  – Big changes to the Personal Care/PAS programs and how they are managed/reimbursed. New financial manager about to be installed.
Opportunities

- **Jimmo v. Sebelius**– settlement with CMS to re-write Medicare manual to remove “improvement” requirement for skilled home health/therapies
- Department of Aging to replicate EPAC in Pittsburgh
- Medicaid managed care/ICOs auto-enrollment
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!
Common Care Processes*

• Comprehensive geriatric assessment
• Evidence-based care planning, monitoring
• Self- and caregiver activation, education, support
• Interdisciplinary team management and coordination of medical and social inputs
  - …all tailored to patients’ goals and preferences.

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

Outcomes
• Safer, higher quality, more satisfactory care
• Lower costs
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 a solution for managed care and Medicaid
Substantial reduction in institutional care can be achieved by integrating services and adding flexibility rather than restricting services.

Success in reducing institutional care requires trust, built best by the patient provider relationship established within the home.

Greatest success in reducing institutional care requires an interdisciplinary team, and the economic incentives to sustain them.