Impact of VA Home Based Primary Care: Access, Quality and Cost

National Health Policy Forum

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July 22, 2011
Impact of VA Home Based Primary Care (HBPC)

- Department of Veterans Affairs (VA) HBPC - differences from Medicare home care
- HBPC growth – Can we afford HBPC?
- HBPC impact - economic & clinical outcomes
- Beyond VA – analyses; Independence at Home
% Change in Population from 2000

United States

% Change in Population

US 85+

US 65+

US Total

0% 20% 40% 60% 80% 100% 120% 140%

2000 2010 2020 2030
% Change in Population from 2000

United States

- Veterans 85 +
- US 85+
- US 65+
- US Total

% Change in Population

- 0%
- 20%
- 40%
- 60%
- 80%
- 100%
- 120%
- 140%
- 160%

Years:
- 2000
- 2010
- 2020
- 2030
VA Home & Community Based Care

**CHALLENGE:** Greater access, better care, lower cost?

**GOAL:** Support Veterans to remain at home as long as feasible, with optimal health, safety, independence and purpose. (And do this at lower cost)

**Focus:** 7% of Veterans account for 52% of the cost
20% of Medicare recipients account for 68% of costs; those with 5+ chronic conditions

**SHIFT** care from institution to home

- Increase Veterans’ access to home services
- Minimize avoidable hospital days
- Prevent or delay nursing home care
- Reduce total cost of care
Congressional Budget Office Report, Dec 2007

• Increase in health care cost, 1998 – 2005
  – Medicare costs/ patient rose 29.4% (4.4% /yr)
  – VA costs/ patient rose (compared to 29.4%)
    a. Less than 2%
    b. 12%
    c. 24%
    d. 36%
Congressional Budget Office Report, Dec 2007

• Increase in health care cost, 1998 – 2005
  – Medicare costs/ patient rose 29.4% (4.4% /yr)
  – VA costs/ patient rose
    a. Less than 2% (0.3% per year)
    b. 12%
    c. 24%
    d. 36%
Congressional Budget Office Report, Dec 2007

• **Increase in health care cost, 1998 - 2005**
  – VA costs/ patient: rose 1.7% (0.3% /yr)
  – Medicare(65+) costs/ patient rose 29.4% (4.4% /yr)

• **Highest cost**: chronic disabling disease; homebound.

• **Elements of VA healthcare system**
  – Electronic medical record
  – Quality and performance measures
  – Systems specifically for chronic disabling disease: Home Based Primary Care
What is VA Home-Based Primary Care (HBPC)?

- Comprehensive, longitudinal primary care
- Delivered in the home
- By an Interdisciplinary team: Nurse, Physician, Social Worker, Rehabilitation Therapist, Dietitian, Pharmacist, Psychologist
- Targets patients with complex, chronic, disabling disease
- When routine clinic-based care is not effective

*For those “too sick to go to clinic”*
HBPC is **NOT** like
Medicare (MC) Home Care

- Different target population
- Different processes
- Different outcomes

- HBPC provides *longitudinal comprehensive, interdisciplinary care* to veterans with complex chronic disease
Characteristics of HBPC Population

“Too sick to go to clinic” -

Mean age 78.4 years; 96% male; 24% annual mortality

More than 8 chronic conditions; among 5% highest cost

48% dependent in 2 or more Activities of Daily Living (ADL)

47% married; 30% live alone; Caregivers: 30% limited ADL

Mean duration in HBPC 315 days; 3.1 visits/mo; 28 visits/yr

# Disease Prevalence in HBPC

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percent of patients with disease</th>
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<tbody>
<tr>
<td>Heart disease</td>
<td>72%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>48%</td>
</tr>
<tr>
<td>Depression</td>
<td>44%</td>
</tr>
<tr>
<td>Heart failure</td>
<td>35%</td>
</tr>
<tr>
<td>Dementia</td>
<td>33%</td>
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<tr>
<td>Substance abuse</td>
<td>29%</td>
</tr>
<tr>
<td>Cancer</td>
<td>29%</td>
</tr>
<tr>
<td>Anxiety/Personality Disorder</td>
<td>24%</td>
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<tr>
<td>PTSD</td>
<td>21%</td>
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<tr>
<td>Schizophrenia</td>
<td>20%</td>
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<tr>
<td>Differences Between VA HBPC &amp; Medicare Home Care</td>
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<tr>
<td>-------------------------------------------------</td>
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<tr>
<td><strong>VA Home Based Primary Care</strong></td>
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<tr>
<td>Targets complex chronic disease</td>
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<td>Comprehensive Primary Care</td>
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<td>Skilled care not required</td>
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<td>Accepts declining status</td>
<td></td>
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<tr>
<td>Interdisciplinary team</td>
<td></td>
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<tr>
<td>Longitudinal care</td>
<td></td>
</tr>
<tr>
<td>Reduces hospital days</td>
<td></td>
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<tr>
<td>Limited geography &amp; intensity</td>
<td></td>
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<tr>
<td><strong>Medicare Home Care</strong></td>
<td></td>
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<tr>
<td>Remediable conditions</td>
<td></td>
</tr>
<tr>
<td>Specific problem-focused</td>
<td></td>
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<tr>
<td>Requires skilled care</td>
<td></td>
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<tr>
<td>Must be homebound</td>
<td></td>
</tr>
<tr>
<td>Requires improvement</td>
<td></td>
</tr>
<tr>
<td>One or Multidisciplinary</td>
<td></td>
</tr>
<tr>
<td>Episodic, post-acute care</td>
<td></td>
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<tr>
<td>No definitive impact</td>
<td></td>
</tr>
<tr>
<td>Anywhere; anytime</td>
<td></td>
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</tbody>
</table>
Great Program

• But we have to close it.

• We just can’t afford Home Based Primary Care
Total Annual health Care Cost per patient (n=30), contrasted with the VERA allocation of approximately $33,000/patient/year for their care. The cost of health care for the 6 months prior to enrollment in Home-Based Primary Care (HBPC) is compared with the cost of care while in HBPC. The cost of HBPC is included.

T Edes. JAMA 1999; 282: 1129
Great Program

• We must not close it.

• We must EXPAND it.

• We cannot afford to NOT have Home Based Primary Care
### 2002 Utilization Before vs During HBPC

All HBPC programs; n=11,334  
Care days or visits per patient per year

<table>
<thead>
<tr>
<th></th>
<th>Before HBPC</th>
<th>During HBPC</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital BDOC</td>
<td>14.8</td>
<td>5.6</td>
<td>- 62%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P &lt; 0.0001</td>
</tr>
<tr>
<td>Nursing home BDOC</td>
<td>26.8</td>
<td>3.2</td>
<td>- 88%</td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>31.6</td>
<td>32.2</td>
<td>+ 2%</td>
</tr>
<tr>
<td>All home care visits</td>
<td>20.6</td>
<td>73.8</td>
<td>+ 264%</td>
</tr>
</tbody>
</table>
## Costs of Care Before vs During HBPC for 2002 (per patient per year) *includes HBPC cost*

<table>
<thead>
<tr>
<th></th>
<th>Before HBPC</th>
<th>During HBPC</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Cost of VA Care</strong></td>
<td>$38,168</td>
<td>$29,036*</td>
<td>- 24%</td>
</tr>
<tr>
<td>Hospital</td>
<td>$18,868</td>
<td>$7026</td>
<td>- 63%</td>
</tr>
<tr>
<td>Nursing home</td>
<td>$10,382</td>
<td>$1382</td>
<td>- 87%</td>
</tr>
<tr>
<td>Outpatient</td>
<td>$6490</td>
<td>$7140</td>
<td>+ 10%</td>
</tr>
<tr>
<td>All home care</td>
<td>$2488</td>
<td>$13,588*</td>
<td>+ 460%</td>
</tr>
</tbody>
</table>

*P < 0.0001*
2007 Utilization Before vs During HBPC
All HBPC programs; newly enrolled in FY2007; n= 10,409
Change in Admissions and Bed Days of Care (BDOC)

<table>
<thead>
<tr>
<th>Rate per patient per year</th>
<th>Before HBPC</th>
<th>During HBPC</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Admissions</td>
<td>1.2</td>
<td>0.8</td>
<td>-31 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P &lt; 0.0001</td>
</tr>
<tr>
<td>Hospital BDOC</td>
<td>7.4</td>
<td>3.0</td>
<td>-59 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P &lt; 0.0001</td>
</tr>
<tr>
<td>Nursing home Admissions</td>
<td>0.3</td>
<td>0.22</td>
<td>-25 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P &lt; 0.0001</td>
</tr>
<tr>
<td>Nursing home BDOC</td>
<td>12.9</td>
<td>1.5</td>
<td>-89 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P &lt; 0.0001</td>
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HBPC Quality Outcomes

• Inpatient days: 78% reduction
• 30 day readmission rate: 18.2% decrease
• Caregiver assessment: 74%; 96% support
• Medication reconciliation note: 71%
• Satisfaction: “Very Good or Excellent ...82.7%....the highest overall satisfaction rating from all (VA) patient surveys"
Veterans Served Daily in HBPC
2000 to 2010

Avg Daily Attendance

2000 2004 2006 2007 2008 2009 2010

24,257
21,065
16,514
14,428
12,546
9,825
7,312
Impact of HBPC on VA + Medicare

• VA data strong, but are we sure not shifting to Medicare (MC)?
• 2006: 9625 Veterans in HBPC, 6951 used MC.
• Analysis of same Veterans, same time: While in HBPC, MC inpatient days dropped 9.5%, MC costs dropped 10.2%

Enrollment into VA HBPC associated with:

1. 25% reduction in combined VA+MC hospital admissions
2. 36% reduction in combined VA+MC hospital days
3. 13.4% reduction in combined VA+MC costs

- a drop from $45,980 to $39,796 in total cost (after adding in the costs of HBPC $9113 per pt/yr)
- Analyze using Hierarchical Condition Category (HCC) score
VA Inpatient Days Before and During HBPC

All VISNs BDOC 1FY08 - Acute, LTC TRTs

$38,359

$33,580 $31,390

+/- 30 d
Average Observed & Predicted Costs by CMS-HCC Risk Adjustment Decile: A) all Veterans (N= 6.6 M) and B) 10th Docile (N=660,000)
Average Observed, Predicted & Post Enrollment Annualized Costs by Risk Adjustment Decile:
HBPC (942 participants per decile); n = 9,425 for total
Annualization Adjusted for 1-yr Mortality of 24%
Mean Observed $45,980 +/- $34,383; Mean Predicted $45,948 +/- 3,692
Independence at Home Act
Section 3024, Patient Protection and Affordable Care Act

• President signed March 23, 2010
• Model in Medicare like VA HBPC, with economic structure in CMS to support it
• Targets complex chronic disabling disease
• Interdisciplinary, longitudinal care in home
• Geriatric skills, EHR, quality, satisfaction
• Outcomes: Fewer inpatient days, lower cost, savings shared by home care team
<table>
<thead>
<tr>
<th>VA Home Based Primary Care</th>
<th>Independence at Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targets <strong>complex chronic disease</strong></td>
<td>Same</td>
</tr>
<tr>
<td>Comprehensive Primary Care</td>
<td>Same</td>
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<tr>
<td>Skilled care not required</td>
<td>Same</td>
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<td>Same</td>
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<tr>
<td>Longitudinal care</td>
<td>Same</td>
</tr>
<tr>
<td><strong>Use of EHR and Coordination of care</strong></td>
<td>Expected</td>
</tr>
<tr>
<td>Reduces hospital days and costs</td>
<td>Expected</td>
</tr>
</tbody>
</table>
Independence at Home - Outcomes

• Targets complex chronic disabling disease
• Holds participating practitioners and providers strictly accountable for (a) minimum net savings of 5% annually, (b) Quality outcomes, and (c) patient/caregiver satisfaction.
• Initial 5% savings to CMS (taxpayer)
• Savings beyond CMS: shared with home care team

• Independence at Home: IAHnow.com and aahcp.org
Veterans’ View of HBPC

• Ethnographic evaluation by external organization
• Visited Veterans and their family caregivers
• How does HBPC impact your daily life?
• How does HBPC compare to clinic-based care?
• How does HBPC affect your decisions when facing an urgent health issue?
• What can be done to improve HBPC?
Interactions with Staff:  
“They are just like family”

- Veterans and caregivers value personalized care of HBPC.
- Staff knowledge of the Veterans’ situation produced care plans tailored to their needs and preferences

“That’s what I like about the Home Based [Primary] Care. It’s personal. It’s like [nurse] is my nurse. She’s got 30 patients, but she’s my nurse. That’s the way I look at it. She takes care of me. She knows me.” (Vietnam Veteran)
Keeping Veterans Out of the Emergency Room

• Early awareness of and response to symptoms by HBPC staff helps veterans avoid Emergency Room (ER) visits
• Veterans and caregivers are educated about important signs and symptoms

“They kept me out. Yeah, I haven’t even had to go to the emergency room, not one time that I remember. As far as I remember, I wasn’t in there at all. So I’m just thrilled, you know. When you go from five [ER visits] to none, somebody is doing their job.”
(Vietnam Veteran)
Keeping Veterans in Their Homes

HBPC makes it possible for Veterans to remain independent at home.

“[HBPC] makes a great difference. Because I get good care. I’m not in a nursing home. I thought I was going to have to go into one. But I’m not. I’m still out.” (WWII Veteran)

“There would have been a lot of times, like now, that I couldn’t hardly make it…. But now in this program, I believe that I can keep him right here in the house.” (Caregiver of WWII Veteran)
Helping Veterans Achieve Goals

• HBPC Care team collaboration helps identify Veterans’ needs and aspirations
• Working together, the team develops plans to help Veterans’ achieve their goals

HBPC Care team in Tucson helped a Veteran achieve his wish to return to a camp for youth he started but hadn’t been able to visit for years. “We bought him a week. It was a proud thing for us.” HBPC Nurse Case Manager
Benefits to Caregivers

Caregivers
• feel less stress because they are supported in the care of their loved ones
• value education on how to better care for the veteran, medications management and oversight of Veterans’ medical needs
• reported that reduced stress resulted in better health

“Well, [HPBP] just about saved my life. I’d a went down sooner, if it hadn’t of been for them coming out here. It’s a wonderful program. Because if I need anything, all I have to do is tell one of them….It’s done wonders for me.”
(Caregiver of WWII Veteran)
Summary - Home Based Primary Care

1. Serious chronic disease – key to cost control
2. Home Based Primary Care substantially reduces hospital, nursing home, and total health care costs
3. Cost savings occur as a result of INCREASING services, improving access for those too sick to go to clinic through care in their home, NOT through any restriction of services.
4. Greater access, better care, at lower cost: Demonstrated in VA Home Based Primary Care; Emerging in Medicare Independence at Home
What is Medical Foster Home?

- Merges adult foster home with VA Home Care – Home Based Primary Care or Spinal Cord Injury
- Angel in community takes dependent veteran into their private home, as MFH caregiver
- MFH caregiver provides daily personal assistance and supervision
- VA HBPC provides comprehensive medical care and management; caregiver education
- VA MFH Coordinator provides oversight
- Veteran pays for MFH
What is different about VA Medical Foster Home?

• ALL residents meet **nursing home level of care**
• ALL residents have **medical complexity**
• ALL residents are **enrolled in VA HBPC** or Spinal Cord Injury Home Care program
• This home is the MFH **Caregiver’s home**
• **No more than 3 residents** receiving care
• **Personal care in a private home**, for persons with medical complexity and disability
• **Higher quality, at half the cost of nursing home**
Growth of MFH Implementation – 2008 to April 2011

When nursing home is the only option, MFH provides another option. Safe, high satisfaction, half the cost of nursing home

Growth from 3 VA Medical Centers 2008
Now 54 VAMCs, in 32 states.

74 sites in 38 states, in a stage of MFH

1043 Veterans placed since inception

389 current census

With IAH, MFH opens beyond VA