The Cost and Quality Implications of Dual Use of VA and Medicare Health Services

HSR&D Cyberseminar
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Overview

• VA-Medicare Dual Use: What it is; Why we care
• Research: What we know
  – The Basic Facts
  – Who Are Dual Users
  – Factors That Affect Dual Use
  – Consequences of Dual Use
• Policy Responses
  – Expand? Privatize?
  – Move to comprehensive model?
    • PACT
  – Improve gap model?
    • MyHealtheVet/Blue Button
    • NwHIN
• Future Research: The Affordable Care Act
Poll Question #1

• What is your primary role in VA?
  – student, trainee, or fellow
  – clinician
  – researcher
  – manager or policy-maker
  – other
VA-Medicare Dual Use: What it is; Why we care

• Over half of VA enrollees are also enrolled in Medicare
• Most dual enrollees use mixtures of services from VA and Medicare
• This has cost and quality implications
• Cost
  – When VA resources are at capacity, many Veterans can obtain Medicare services
  – When VA improves access or quality, there is a reservoir of demand
• Quality
  – VA and Medicare provider networks do not overlap
  – Dual use implies transitions between providers
  – Coordination of care may suffer
VA-Medicare Dual Use: Some Basic Facts

- VA enrollees’ other insurance
- Reliance on VA for outpatient care by type of Veteran
- VA and Medicare dual use by detailed service
VA Enrollee’s Other Insurance

% Enrollees

Source: ADUSH 2010 Survey of Enrollees
VA Enrollees with Any Medicare Coverage

% with Medicare

Priority 1-3

Priority 4-6

Priority 7-8

Source: ADUSH 2010 Survey of Enrollees
VA Reliance for Outpatient Care

Source: ADUSH 2010 Survey of Enrollees
VA Reliance for Outpatient Care

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VA Reliance for Outpatient Care

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VA Reliance for Outpatient Care

Source: ADUSH 2010 Survey of Enrollees
VA Reliance for Outpatient Care

Mean Reliance by Age

Source: Petersen et al., HSR 2010
### Health Care Use by Veterans Enrolled in Both VHA and Medicare, by Type of Service, Fiscal Year 2005

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>No Use</th>
<th>Medicare Use Only</th>
<th>Both VHA and Medicare Use</th>
<th>VHA Use Only</th>
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</thead>
<tbody>
<tr>
<td>Inpatient Hospital Care</td>
<td>76.2</td>
<td>19.2</td>
<td>1.2</td>
<td>3.4</td>
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<tr>
<td>Ambulatory Care</td>
<td>3.1</td>
<td>28.0</td>
<td>53.6</td>
<td>15.3</td>
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<tr>
<td>All Categories</td>
<td>3.0</td>
<td>28.1</td>
<td>53.9</td>
<td>15.0</td>
</tr>
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</table>

Source: Congressional Budget Office based on data from the Department of Veterans Affairs.

Note: Data reflect the use of health care services by Medicare-eligible enrollees age 66 and older who have also been enrolled in the Veterans Health Administration (VHA) for one year or more.

Source: “Quality Initiatives Undertaken by the Veterans Health Administration,” CBO, August 2009
VA-Medicare Dual Use by Inpatient Service

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Medicare Use Only</th>
<th>Both Medicare and VHA Use</th>
<th>VHA Use Only</th>
<th>Probability of Use in Health Service Category (Percentage of Dual Enrollees)</th>
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</thead>
<tbody>
<tr>
<td>Inpatient Hospital Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>79</td>
<td>4</td>
<td>17</td>
<td>17</td>
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<tr>
<td>Surgical</td>
<td>87</td>
<td>1</td>
<td>13</td>
<td>11</td>
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<tr>
<td>Psychiatric</td>
<td>67</td>
<td>3</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>63</td>
<td>4</td>
<td>34</td>
<td>*</td>
</tr>
<tr>
<td>Skilled nursing facility/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>extended care facility (nonacute)</td>
<td>96</td>
<td>1</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Overall Inpatient Hospital Care</td>
<td>81</td>
<td>5</td>
<td>14</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: “Quality Initiatives Undertaken by the Veterans Health Administration,” CBO, August 2009
## VA-Medicare Dual Use by Outpatient Service

<table>
<thead>
<tr>
<th>Ambulatory Care</th>
<th>Medicare</th>
<th>Medicare + VA</th>
<th>VA</th>
<th>Pr(Use)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergy immunotherapy</td>
<td>94</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Allergy testing</td>
<td>91</td>
<td>*</td>
<td>9</td>
<td>*</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>92</td>
<td>*</td>
<td>8</td>
<td>15</td>
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<tr>
<td>Cardiovascular</td>
<td>72</td>
<td>8</td>
<td>20</td>
<td>52</td>
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<tr>
<td>Chiropractic</td>
<td>100</td>
<td>*</td>
<td>*</td>
<td>7</td>
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<tr>
<td>Consultations</td>
<td>72</td>
<td>5</td>
<td>23</td>
<td>37</td>
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<tr>
<td>Emergency room visits</td>
<td>77</td>
<td>5</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>Hearing/speech exams</td>
<td>26</td>
<td>3</td>
<td>71</td>
<td>11</td>
</tr>
<tr>
<td>Immunizations</td>
<td>48</td>
<td>4</td>
<td>49</td>
<td>56</td>
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<tr>
<td>Miscellaneous medical</td>
<td>67</td>
<td>12</td>
<td>21</td>
<td>71</td>
</tr>
<tr>
<td>Office/home/urgent care visits</td>
<td>30</td>
<td>48</td>
<td>23</td>
<td>94</td>
</tr>
<tr>
<td>Outpatient psychiatric</td>
<td>27</td>
<td>4</td>
<td>69</td>
<td>8</td>
</tr>
<tr>
<td>Outpatient substance abuse</td>
<td>10</td>
<td>1</td>
<td>89</td>
<td>*</td>
</tr>
<tr>
<td>Pathology</td>
<td>35</td>
<td>31</td>
<td>34</td>
<td>88</td>
</tr>
<tr>
<td>Physical exams</td>
<td>22</td>
<td>1</td>
<td>77</td>
<td>11</td>
</tr>
<tr>
<td>Physical medicine</td>
<td>39</td>
<td>3</td>
<td>58</td>
<td>14</td>
</tr>
<tr>
<td>Radiology</td>
<td>67</td>
<td>12</td>
<td>21</td>
<td>68</td>
</tr>
<tr>
<td>Surgery</td>
<td>73</td>
<td>8</td>
<td>19</td>
<td>65</td>
</tr>
<tr>
<td>Therapeutic injections</td>
<td>74</td>
<td>3</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Vision exams</td>
<td>68</td>
<td>4</td>
<td>27</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: “Quality Initiatives Undertaken by the Veterans Health Administration,” CBO, August 2009
VA-Medicare Dual Use: The Basic Facts

• Half of VA enrollees have Medicare coverage
• VA reliance is about 40% for outpatient care, lower for inpatient care
• Inpatient demand is strongest for psychiatric and substance abuse care
• Outpatient demand is also strong for primary care and hearing/speech
• Demand is strongest from un/underinsured, high priority, lower income, under 65
Who Are Dual Users?

% Black

Source: Hynes, Koelling, Stroupe et al., Med Care 2007
Who Are Dual Users?

Source: Hynes, Koelling, Stroupe et al., Med Care 2007
Who Are Dual Users?

**Median Risk Score**

- **VA-only**: Median Risk Score of 0.2
- **Mostly VA**: Median Risk Score of 0.4
- **Dual**: Median Risk Score of 0.6
- **Mostly Medicare**: Median Risk Score of 1.4
- **Medicare-only**: Median Risk Score of 1.2

Source: Hynes, Koelling, Stroupe et al., Med Care 2007
Factors That Affect Dual Use

- African-Americans and Veterans who live near VAMC are more likely to rely exclusively on VA
- As disease burden grows, Veterans rely more heavily on Medicare
Consequences of Dual Use: VA Cost

Average Outpatient Cost, 1999

- VA Cost: $1,056
- Medicare Cost: $2,055

Source: Hynes, Koelling, Stroupe et al., Med Care 2007
Consequences of Dual Use: Veteran’s Cost

- Study Medigap purchasing by Medicare-VA duals in Medicare Current Beneficiary Survey
- Link to VA administrative data on waiting times from appointment request to actual appointment
- 10% increase in VA wait time leads to 5% increase in demand for Medigap
- Representative Veteran indifferent between 5-day wait increase and $300 annual premium increase
Consequences of Dual Use: Quality

VA-Medicare vs. VA-Only Stroke Patients (AORs)

Source: Jia, Zheng, Reker et al., Stroke 2007
Consequences of Dual Use: Quality

- Wow! Those are big effects of dual use
- Jia and colleagues controlled for demographics, length of stay, stroke type, comorbidity index, ICU days, stroke and TIA history, other variables
- But dual users may have been sicker in unmeasured ways
- Can we do a study that filters out effects of unobserved differences?
Brief Detour: How Instrumental Variables Work

- We have a question about a treatment
- Plan A: Run an experiment!
  - Randomize into treatment; compare outcomes
- We can’t
- Plan B: Build a statistical model of probability of treatment
  - Find a variable that affects treatment probability, but not outcome (except thru Tx)
  - Isolate variation in Tx that’s due to quasi-random variable
  - Measure only effect of quasi-random variation on outcome
Consequences Of Dual Use: Quality

- 288,000 observations on Veterans with VA and/or Medicare outpatient use
- Calculated “fragmentation of financing” = 1 – max(VA%, Mcare%)
  - VA or Mcare only => zero fragmentation
  - Max fragmentation is 0.5
- Outcome: Hospitalization for ambulatory care sensitive condition (AHRQ, 2001)
- Methodological challenge: Fragmentation and ACSC hospitalization jointly determined
- Solution: Use distance to VA as instrumental variable to predict fragmentation, then measure effect of predictable component only
Results: Fragmentation Moves Hospitalization Risk 20%

Source: Pizer and Gardner, Inquiry 2011
Implications

- Coordination problems between VA & Medicare are serious
- Effects on Veterans’ health and budgets are significant
- Quality consequences are costly for both systems
Poll Question #2: Policy Responses

- What is the best policy response to dual use?
  - Expand VA services (VA absorbs Medicare services)
  - Privatize VA services (Medicare absorbs VA services)
  - Change to comprehensive model (e.g., PACT)
  - Improve VA-Non-VA coordination (e.g., My HealtheVet)
Policy Responses: Expand VA Services?

• Could VA provide comprehensive care to current enrollees?
  – Roughly double volume of outpatient care
  – Increase inpatient volume much more (4-5X?)
  – Increase prescription volume

• If VA provided more comprehensive care, would demand for enrollment grow?

This we could do!
Figure 1  Elderly Medicare Beneficiaries\(^{(a)}\) in 2003 by Veterans Status and VA Priority\(^{(b)}\) and VA Enrollment Status. Sources: Authors’ analysis of 2000 Census Data; United States Census Bureau (2007); United States Congressional Budget Office (2001).

(a) There were 41 million Medicare beneficiaries in 2003. These figures illustrate the 35 million of them who were elderly.
(b) Priority status imputed by authors using 2000 Census data. Low-priority veterans are those with priority status eight. High-priority veterans are those with any priority status number below eight.

Source: Frakt, Pizer, Hendricks, JHPPL 2008
Policy Responses: Expand VA Services?

- Rate of VA capacity growth limits expansion
  - Exception: VA could offer a Medicare prescription drug plan (Frakt, Pizer, Hendricks 2008)
- Potential demand for VA care is vastly larger than likely capacity
Policy Responses: Privatize VA Services?

- If VA can’t absorb Medicare utilization, should Medicare (or TRICARE) absorb VA?
  - Perennial question in Congress
- Nugent, Hendricks, Nugent, Render, MCCR 2004 “Value for Taxpayers’ Dollars: What VA Care Would Cost at Medicare Prices”
- Constructed Medicare prices for VA services delivered at 6 sites in 1999
- Used results to estimate Medicare costs for VA services nationwide
Policy Responses: Privatize VA Services?

Source: Nugent et al., 2004
Policy Responses: Privatize VA Services?

- Overall, Medicare prices were 20% higher than VA costs.
- In 2003, it would have cost $5 Billion more to provide VA services through Medicare, nationwide.
- Clearly not an efficient solution to the problem.
- Quality and access issues too (e.g., mental health services).
Policy Responses: Change to Comprehensive Model?

- Patient-Aligned Care Teams (PACT) designed to provide comprehensive care
- Improve coordination, communication
- PACT evaluation finding modest savings for <65, not for >65
  - <65 ACSC hosp and OP primary care were lower
  - >65 no change in ACSC hosp and OP primary care was higher
- PACT is costing about $2 billion; hard to justify w/o savings for >65
- Is lack of savings for >65 because of increased VA reliance?
- Either way, VA primary care has to coordinate with non-VA specialty care
Policy Responses: Improve VA-Non-VA Coordination?

- Personal Health Record: My HealtheVet
- Sharing clinical data through Nationwide Health Information Network (NwHIN)
Personal Health Record (PHR)

- MyHealtheVet personal health record (PHR) designed to improve communication
- Veteran-provider (secure messaging)
- VA provider – Medicare provider?
- PHR interoperability still in infancy
- Blue Button is a first step
  - Burden on patient to print & carry
  - Very few actually do it
- Privacy vs. coordination
- Privacy is formidable concern, but battle is not over
Interoperable PHR: The Potential

Survey
- Zulman et al., Annals 2011, “Patient Interest in Sharing Personal Health Record Information”
- Web survey of 18,471 users of MyHealtheVet
- Convenience sample; may not be representative

Results

<table>
<thead>
<tr>
<th>% Interest in Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse</td>
</tr>
<tr>
<td>70</td>
</tr>
</tbody>
</table>

0 10 20 30 40 50 60 70
Spouse Child Non-VA Provider
Virtual Lifetime Electronic Record (VLER) started as VA-DOD data sharing in 2009

VLER Health links VA and non-VA providers through local exchanges participating in Nationwide Health Information Network (NwHIN)

13 pilot sites as of March 2012 including: San Diego, Puget Sound, Minneapolis, Indianapolis, Buffalo

Data elements include: allergies, medications, labs, vitals, immunizations, problems, encounters, procedures, other unstructured data including reports and notes
Challenges to EMR Sharing

- VA can plug into regional HIN, but it won’t help if non-VA providers aren’t plugged in yet
- Long-term VA HIN software development projects have suffered from OIT reorganization, budgetary changes, shifting priorities
- Will data sharing approval process be too burdensome for patients and clinicians on both sides to use?
  - As of May, 68,000 Veterans authorized VA to share, but community partner may also require authorization
  - Current HSR&D study of local exchange in Indianapolis (PI: Haggstrom)
Future Research: The Affordable Care Act

- ACA uses mostly federal funds to expand eligibility for Medicaid to 138% of Federal Poverty Line in states that opt in
- Currently 24 states likely to expand; 6 still considering
- In addition, individuals without employer-sponsored insurance will qualify for subsidized coverage through insurance exchanges
- VA enrollment qualifies as coverage
- Will there be more dual users?
  - VA enrollment might increase to comply with individual mandate
  - Dual use might increase due to Medicaid expansion and exchanges
- How will dual use be different under ACA?
Discussion

- Questions?
- Additional questions or comments: Steven.Pizer@va.gov