Tectonic Shift in Care Delivery
Home is the fastest growing care setting in the US.

Care is Moving Home

13.6M
# of patients age 65 years or older discharged annually in the US

19.6%
% of Medicare beneficiaries rehospitalized within 30 days of discharge

$33.6B
Loss in productivity attributed to employees caring for 'aged dependents'

Source: AHRQ, Agency for healthcare research and quality
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1. CDC, National Hospital Discharge Survey, number and rate of hospital discharge, 2010
3. Metlife Mature Market Institute and the National Alliance for Caregiving

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The Tectonic Shift

Value-based reimbursement for health systems

CMS bundled payment models

Managing larger at-risk populations

Desire to move patients to lower cost care settings - home care

Home care will be responsible for readmissions

Placing home care at the center of new care delivery

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The Tectonic Shift

New emerging care models

➡ Chronic Care Management (CCM)

➡ Transitional Care Management (TCM)

Placing home care at the center of emerging models

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These Changes Expand the Care Continuum

35% of Medicare beneficiaries discharged from short-term acute hospitals receive post-acute care

Higher → Intensity of Service → Lower

<table>
<thead>
<tr>
<th>SHORT-TERM ACUTE CARE HOSPITALS</th>
<th>LONG-TERM ACUTE CARE HOSPITALS</th>
<th>INPATIENT REHAB</th>
<th>SKILLED NURSING FACILITIES</th>
<th>OUTPATIENT REHAB</th>
<th>HOME HEALTH CARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients’ first site of discharge after acute care hospital stay</td>
<td>2%</td>
<td>10%</td>
<td>41%</td>
<td>9%</td>
<td>37%</td>
</tr>
<tr>
<td>Patients’ use of site during a 90 day episode</td>
<td>2%</td>
<td>11%</td>
<td>52%</td>
<td>21%</td>
<td>61%</td>
</tr>
</tbody>
</table>

Medicare Patients’ Use of Post-Acute Services Throughout an “Episode of Care”

Source: RII, 2009: Examining Post Acute Care Relationships in an Integrated Hospital System

Home Care and Coordination Challenges Today

Role is undervalued

Limited knowledge of what is needed until in the home

Chasing paper vs. providing care

Documentation for reimbursement is extensive and varied

Limits in home care benefits

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Imagine a World Where …

- Clear and dynamic care plan
- All paperwork comes with the record
- Single form to complete for all payers
- Reimbursed for outcomes vs. chasing reimbursement
- Your judgment and feedback drives a dynamic care plan
- Ability to remotely monitor patient and manage by exception
- Seamless technology supporting care
- Home is recognized as a preferred option for care

Home care is a valued and integral part of the care team

Opportunity to Set New Standards

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Pace of Change and Adoption is Accelerating

<table>
<thead>
<tr>
<th>Technology</th>
<th>Years to 25% Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>46</td>
</tr>
<tr>
<td>Telephone</td>
<td>35</td>
</tr>
<tr>
<td>Radio</td>
<td>31</td>
</tr>
<tr>
<td>Television</td>
<td>26</td>
</tr>
<tr>
<td>PC</td>
<td>16</td>
</tr>
<tr>
<td>Mobile Phone</td>
<td>13</td>
</tr>
<tr>
<td>The Web</td>
<td>7</td>
</tr>
</tbody>
</table>

1994: "What is the Internet, Anyway?"
Opportunity to Set New Standards

• It’s happened before with e-prescribing
• New standard of care – reliable, accessible, e-prescribing and clinical decision support
• Improve safety, efficiency and adherence

Reduced error rates by nearly sevenfold:
From 37 per 100 prescriptions to 7 per 100 prescriptions1

Where Was Prescribing Before?

• Analog – paper-based
• Very labor intensive
• Not standardized
• No visibility into benefits, formularies, drug-drug interactions
• Reliance on patient to report Rx history
• Inefficient - phone calls and faxes

Sound familiar?

E-Prescribing Evolution

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>4% of office-based physicians e-prescribed</td>
</tr>
<tr>
<td>2007</td>
<td>American Recovery and Reinvestment Act provided $19 billion to drive health IT adoption</td>
</tr>
<tr>
<td>2009</td>
<td>58% of office-based physicians e-prescribed Meaningful Use Stage 1 initiated</td>
</tr>
<tr>
<td>2010</td>
<td>73% of office-based physicians e-prescribed EPCS legalized in 48 states</td>
</tr>
<tr>
<td>2011</td>
<td>36% of office-based physicians e-prescribed</td>
</tr>
<tr>
<td>2012</td>
<td>69% of office-based physicians e-prescribed</td>
</tr>
<tr>
<td>2013</td>
<td>E-prescribing legalized in all 50 states and D.C.</td>
</tr>
<tr>
<td>2013</td>
<td>6 Billion transactions annually (2013)¹</td>
</tr>
<tr>
<td>2013</td>
<td>&gt;70% of physicians e-prescribing in &lt;10 years¹</td>
</tr>
</tbody>
</table>

¹ Surescripts, 2013 National Progress Report and Safe-Rx Rankings

Opportunity to Set New Standards

Emerging Standard - continuous care, informed interventions

- Scalable, personalized care
- Connected, accountable, team-based care
- Real-time, dynamic care plan
- Informed therapy and medication adjustments
- Educated patients, engaged family and caregivers

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Connecting Fragmented Care

Why is care coordination so challenging?

- Accountability for the process is shared
- PCP relationships with hospitals and home care has waned
- Health systems and PCPs lack the enterprise grade infrastructure and dedicated personnel
- Lack of reimbursement for effective referral or transition
Connecting Fragmented Care

What constitutes high quality transition and care coordination?*

- Timely and Safe
- Effective
- Patient-centered
- Efficient
- Equitable

What role can connected solutions play?


High Tech, High Touch Continuous Care

Connected solutions can reduce barriers for patients and establish orderly, scalable, and manageable processes for coordinating care and transitioning patients

- Seamless connectivity
- Exception-based management
- Broadcast and bi-directional communication (asynchronous)

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High Tech, High Touch Continuous Care
Seamless Connectivity Platform

Interoperability  Security  Scalability

Benefits / Outcomes
- Interoperability among healthcare ICT systems would deliver a national annual savings of $77.8 billion¹
- Remote monitoring reduces readmission by 44%²
- Secure exchange of vital information across health care settings

² Population Health Management, Volume 0, Number 0, 2014a, DOI: 10.1089/pop.2013.0107
High Tech, High Touch Continuous Care

Exception-Based Management Tools

- Remote monitoring integration and visualization of data
- Reflex algorithms - near real-time alerts
- Smart dashboards for efficient care management

Benefits / Outcomes

- Reduce rehospitalizations for HF by as much as 72%\(^1\)
- Deliver population level interventions
- Focus resources based on documented needs
- Manage large at-risk populations effectively

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Traditional Care Coordination and Care Management

High Tech, High Touch Continuous Care

Asynchronous Communication

Secure record sharing  Near real-time therapy and medication adjustments  Dynamic care plan

Benefits / Outcomes
- Decrease in physician visits\(^1\)
- Increase in self-management/self-efficacy\(^1\)
- Fewer emergency admissions (20% reduction)\(^2\)
- Decrease in mortality rates (45% reduction)\(^2\)
- Improve clinical collaboration

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\(^1\) de Jong C.C., Ros W.J., Schrijvers G. The Effects on Health Behavior and Health Outcomes of Internet-Based Asynchronous Communication Between Health Providers and Patients With a Chronic Condition: A Systematic Review. J Med Internet Res 2014;16(1):e19

High Tech, High Touch Continuous Care

Asynchronous Communication

Synchronous Communication

Patient's Family

Pharmacy

Patient

Physician

Nurse

HealthyCircles

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It’s Time to Bring Healthcare Back Home

- Support healthy, independent living at home
- Getting patients the care they need where they want it, when they need it
- Enabled by technological advancement in HCIT and POC diagnostics

19.5% of SNF residents would rather be at home*

* CMS
CareCentrix: Connecting the Home

George invites his daughter Michelle into his Care Circle – she can be confident in the care George is receiving.

The Home Care Agency managed the care plan, identifies gaps and notifies other members of the care circle.

Doctor is alerted to issues; follow-up visits are scheduled.

A non-healing wound post-discharge requires a specially trained agency nurse.

The PBM is alerted to complete a medication reconciliation and ensure refills.

CareCentrix nurse manager consolidates information, creates the care plan, and coordinates the home care plan, leveraging the home care nurse expertise and health plan case managers & community support as needed.

Successfully Reducing Readmissions

1. Caregiver Availability & Education
2. Medication Reconciliation
3. Discharge Order Review
4. Signs & Symptoms Education
5. Follow-up Physician Appointment

Individual care plan centered around five proven interventions

Frequent coordinated communication with the nurse in the home, patients, & care-givers, around a unified & personalized care plan.

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Leveraging Technology to Improve Care

- A centralized care plan
- Consistent, available, documentation
- Secure messaging re: patient care
- In-between visit patient engagement
- Repository of health assessments and educational materials
- Tele-monitoring with ‘gap alerts’
Connected Care Program Elements

- Early identification & engagement
- Home-based interventions & coaching
- Coordination among the care circle
- Scalable & Consistent program delivery

**HomeSTAR Results**
- High patient satisfaction (90%+)
- Avoided readmissions (36%)
- Reduced health care costs ($2.70 PMPM)
Connected Health Demo

Future Proofing Connected Health Decisions
## Future Proofing

### Interoperability and safety

- Bankable benefits

### Keeping pace with mobile

### Matching technology and your organization

### Future Proofing

#### Interoperability and Safety

<table>
<thead>
<tr>
<th>Open solutions vs. vertical solutions</th>
<th>Customer driven roadmap</th>
<th>Keeping pace with encryption</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDA Class 1 compliance, HIPAA compliant, PCI compliant</td>
<td>Ecosystem partners - breadth and kit flexibility</td>
<td></td>
</tr>
</tbody>
</table>

Only 53% of doctors claim that the connected health applications and services they use work with their organization’s information technology (IT).\(^1\)

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\(^1\) PwC - Emerging mHealth: Paths for growth, March 2013
Future Proofing

Chasing Features vs. Bankable Benefits

Enhance competitiveness  
Opportunity to set a new standard  
Expand capacity and reach

Meet health system and CMS qualification criteria  
Improve efficiencies with exception-based management

62.7% reported increased productivity for mobile clinicians since deployment of wireless data applications¹


Keeping Pace with Mobile

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Keeping Pace with Mobile

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Future Proofing

Matching Technology and Your Organization

Pragmatic and realistic evaluation of the user base
Competencies, sophisticated and history with other technologies

Equal parts change management, training, and technology

Recognize that traditional roles and relationships with patients, family, care givers and providers could change significantly

Set strategic priorities for functionality and integration while maintaining ‘business as usual’

48% of consumers are interested in storing and transmitting personal health information or records via mobile

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Future Proofing

Keeping Pace with Mobile

Consumer driven health care will dictate mobile integration

Empower and engage family and caregivers

Improve medication and treatment plan adherence

Personal data for the ‘public good’ is gaining traction

Cost effective, go anywhere surveillance tool

ACA and HITECH have spurred the development of digital health technology and influenced the adoption across all care settings
Thank you.