The Changing Nature of Healthcare Delivery

October 18, 2017
~60% of the Company's IRFs are located within a 30-mile radius of one or more of the Company's home health locations.

**Inpatient Rehabilitation**

**Portfolio - As of June 30, 2017**

- 125 Inpatient Rehabilitation Hospitals
  - 39 operate as joint ventures with acute care hospitals
- 31 Number of States (plus Puerto Rico)
- ~29,100 Employees

**Key Statistics - Trailing 4 Quarters**

- ~$3.1 Billion Revenue
- 167,906 Inpatient Discharges
- 619,161 Outpatient Visits

**IRF Market Share**

- Largest owner & operator of IRFs
- 22% of Licensed Beds
- 29% of Medicare Patients Served

**Home Health and Hospice**

**Portfolio – As of June 30, 2017**

- 193 Home Health Locations
- 37 Hospice Locations
- 25 Number of States
- ~8,100 Employees

**Key Statistics - Trailing 4 Quarters**

- ~$731 million Revenue
- 197,480 Home Health Episodes
- 4,070 Hospice Admissions

Note: One of the 125 IRFs and two of the 193 adult home health locations are nonconsolidated. These locations are accounted for using the equity method of accounting.
• Focused on post acute care (its what I know)
• Focused on PT, OT, SLP (its what I am)
• Intended to relate to many other allied health members
• Not all inclusive of healthcare changes and challenges—just those most acutely felt by our sector at this point
Goals for presentation

• Understand some of the alternative payment models and changing delivery of healthcare
• Challenges and opportunities facing the industry today
• Contemplate the way academia and healthcare industry can work more closely together
• Reinforce the benefits of clinical rotations and how to enhance these relationships
• Discuss the qualities employers are looking for in the new and seasoned graduates
What are these?

June 1 – December 3

6 months+

June 1 – June 24

23 days
Changing Delivery of Healthcare
“...goal of 30 percent traditional FFS Medicare payment through alternative payment models by the end of 2016... 50 percent by the end of 2018”

Department of Health and Human Services, Press Office 1-26-15
Episodic Spending Highlights

Bubble size is based on case volume

Coefficient of Variation (CV%) – a measure that indicates the variation of spending across the episodes, a high CV% indicates high variation from low to high spend

Source: CMS SAF Files, HealthSouth Analysis 2013-2014 Data Years, DHG HealthCare and Dobson | DaVanzo
The CMMI Portfolio is Complex, Overlapping, and Perhaps Counterproductive; Many of These Activities are Under Scrutiny from the New Administration

Notes:
BPCI is Bundled Payments for Care Improvement.
CJR is Comprehensive Care for Joint Replacement.
LEJR is Lower Extremity Joint Replacement.
MSPB is Medicare Spending Per Beneficiary.
MACRA is Medicare Access and CHIP Reauthorization Act.
VBP is Value Based Purchasing.
APM is Alternative Payment Models.
CABG is Coronary Artery Bypass Graft.
AMI is Acute Myocardial Infarction.
SHFFT is Surgical Hip/Femur Fracture Treatment.

Various Alternative Payment Models

- Accountable Care Organizations

- Bundling
  - Voluntary
  - Mandatory
Winning at Episodic Payment Models Focuses on “Bundle Busters”

*Bundle Buster* – those cases with multiple destinations, high length of stay and/or readmissions

CJR “bundle busters” are primarily from fracture cases

Source: DHG Analysis of High Volume Sample Hospital, 1400 MJLE Episodes
Effective CJR Performance Requires Focused Fracture Management

Strategy 1. Robust Episodic Management of Fractures and Complex Patients in High Acuity Setting (IRF)

100% of episodes with losses between $25k and $47k are the more acute patients (fracture and DRG 469)

Strategy 2. Manage 470 Non Fracture Around Home/Home Health Setting

Source: DHG Analysis of 5600 MJLE Episodes, Spend and Target Price
Why the focus on APMs?

- US spent $3.2 trillion on healthcare in 2015
- Medical spending increases with age
- According to the CDC, for someone born in 2015, overall life expectancy is 78.8 (76.3 for men and 81.2 for women).
Expanding Medicare Beneficiary Population

Key Observations:

- The growth rate of Medicare beneficiaries increased in 2011 to an approx. 3% CAGR as “baby boomers” started turning 65.

- In 2030, the Medicare population is projected to increase to 81 million beneficiaries from 56 million beneficiaries today.

### Average Age of the Company’s Patients

<table>
<thead>
<tr>
<th>Age Group</th>
<th>IRF</th>
<th>Home Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 65 years</td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>65 to 69 years</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>70 to 74 years</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>75 to 79 years</td>
<td>14%</td>
<td>14%</td>
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<tr>
<td>80 to 84 years</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>85 to 89 years</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>&gt; 90 years</td>
<td>6%</td>
<td>15%</td>
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Challenges and opportunities facing the industry today
Challenges and Opportunities

• 1 in 5 patients are admitted to post acute care after a hospital discharge.¹
• Variation in post-acute care services accounts for 73% of Medicare spending variation.²

Allied health providers have large role in determining post acute care decisions after discharge from the short term acute hospital

Large number of our allied health providers work in a post acute field: LTACH, IRF, SNF, OP, HH

1. Wen Tian, An all-payer view of hospital discharge to post acute care, 2013
Opportunity

- History – STACH focus on LOS management and little regard to quality of post acute providers.
- Now – opportunity in that STACH now cares where patients go (readmissions, MSPB, etc)
How can allied health providers help?

**Short Term Acute Care**
What can’t the patient do? What resources do they need (clinical and community)?

**Outpatient & Home Health**
How can I identify the patient centered goals to motivate them to continued recovery?

**Post Acute Facility Setting (LTACH, IRF, SNF)**
How can I help remove barriers and assist this patient back to sustained successful community living?
Contemplate the way academia and healthcare industry can work more closely together
Academia and Industry

Integrated research – pose topics to schools for research studies

Knowledge translation

Integrated research

Training and education to our clinicians on supervising students

Grant Projects

Access to databases for industry to search public studies

Developing and supporting residency programs
• Identify the challenges and work together on the solutions: (examples):
  – How do we do a more effective handoff to the next provider of care?
  – What are the best practices for medication reconciliation?
  – How do we prevent patients from readmitting to the hospital?
  – How do we help patients integrate back into community living?
**Previous Plan of Care**

- May have included several post acute settings and focus on ambulation

**Current Plan of Care**

- How do we remove barriers to help this patient safely and successfully return home while they continue to improve their overall performance?
- Currently have 48 studies in 15 locations:

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Research Focus</th>
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<tbody>
<tr>
<td>Psych and Neuro of Spatial Cognition</td>
<td>Fitness to Drive in Older Adults</td>
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<tr>
<td>Review of Stroke Patients that Return to Acute</td>
<td>Optimizing Stroke Rehab</td>
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<tr>
<td>Prism Adaptation Therapy</td>
<td>Flexor Tendon Repair</td>
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<tr>
<td>Animal Assisted Activity</td>
<td>Telerehab vs in-clinic therapy</td>
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<tr>
<td>Prolonging Safe Driving - Stroke</td>
<td>Predicting Fall Risk in an Acute In-patient</td>
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<tr>
<td>Dose Response of Movement</td>
<td>Rehabilitation Setting</td>
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<tr>
<td>Driving Study - Dementia</td>
<td>Is The Ability To Detect A Foreign Accent Located In The Right Hemisphere?</td>
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<tr>
<td>Medication Communication Tool</td>
<td>Group Treatment with Stroke Patients</td>
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<td>Manual Medicine in COPD</td>
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Benefits of clinical rotations and how to enhance these relationships
Clinical Rotations

Benefits

• Number 1 recruiting strategy
• Opportunity to orient & train
• Select “cream of the crop”

Enhancements

• Work with CMS to get them to allow students to treat under supervision of licensed clinicians
• Provide supervising clinicians access to evidence data bases
• Offer training for our clinicians with CEUs (clinical instructors, evidence based practice, knowledge translation)
Qualities employers are looking for in the new and seasoned graduates

Competent documentation skills

Clinical reasoning and professional judgement

Independent problem solving

Ethics and compliance

Understanding of practice standards

Understanding of evidence based practice and ability to translate it to practice
Some Best Practice Examples

- Hospital staff serve as Lab Assistants/Teaching
- Hospital staff attend student presentations
- Education on literature review to hospital staff
- Student involvement on committees
- Open forum meetings with industry clinicians to pose questions on topics where research gaps exist.
- Guest lecture at institutions to cover changes in healthcare, payment, documentation, etc.
QUESTIONS?