Reducing Avoidable Acute Care Days

5 key delays hindering hospital to post-acute discharges
More coffee, faster service, more money

Efficiency is the key to financial sustainability

How coffee shops generate profit

Coffee sales - Time, resources per customer = Total profit

↑ Volume
Price

↓ Inefficiency
Redundancy

↑ Profit margins

Source: Post-Acute Care Collaborative interviews and analysis.
Individual days add up to a big problem

1.2
Average number of avoidable days per patient

25%
of hospital days are avoidable

10.8
million avoidable days 2017-2018

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
Contextualizing avoidable days

What 10.8 million means in practice

Thousands of beds maintained to house avoidable patient days

10.8M = 29,590

Avoidable days

Hospital beds full for an entire year

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
Hospital bottom lines damaged by inefficiency

Health systems hurt by avoidable days, regardless of occupancy

Hospitals with high occupancy

Limited bed availability

Avoidable days reduce the number of new patients hospitals are able to admit

Hospitals with low occupancy

Unnecessary resource use

Avoidable days limit hospitals’ flexibility to scale down staffing and resource use as appropriate

Negative financial implications

- Missed revenue from potential patients
- Increased labor and facility costs

Source: Post-Acute Care Collaborative interviews and analysis.
For post-acute, a mixed picture

Avoidable hospital days offer both challenges and opportunities

Excess hospital days exacerbate financial troubles, but can also create incentives

Challenge

Reduced reimbursement
Inability to quickly backfill empty beds reduces total reimbursement for post-acute settings

Opportunity

Increased referrals
Post-acute providers who can help hospitals reduce avoidable days position themselves to solve a tangible problem

Source: Post-Acute Care Collaborative interviews and analysis.
Taking a closer look

Calculations for our analysis of avoidable acute care days

Methodology in brief

Analysis uses data from CMS’ Standard Analytical Files (SAF) which include 100% Medicare FFS claims data

Utilizes GMLOS\(^2\), which is determined by multiplying all of the length of stay values and then taking the N\(^{th}\) root, where N is the number of values

Includes Medicare FFS claims data from Q2 2017 to Q1 2018

Representative avoidable days calculation

\[
\text{(Average length of stay for a specific hospital or patient group)} - \text{(National GMLOS for that patient group)} \times \text{(Patient volume for that specific hospital or group)} = \text{Avoidable days}
\]

\[
4.2 - 4.0 \times 100 = 20\]

1) Fee-for-Service.
2) Geometric Mean Length of Stay.

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
Avoidable days are ubiquitous across service lines...

Share of avoidable days by service line

*Medicare FFS¹, Q2 2017-Q1 2018*

<table>
<thead>
<tr>
<th>Service Line</th>
<th>Avoidable Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopedics</td>
<td>23%</td>
</tr>
<tr>
<td>Cardiac Services</td>
<td>23%</td>
</tr>
<tr>
<td>General Medicine</td>
<td>24%</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>25%</td>
</tr>
<tr>
<td>Spine</td>
<td>26%</td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td>26%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>27%</td>
</tr>
<tr>
<td>Neurology</td>
<td>28%</td>
</tr>
<tr>
<td>ENT²</td>
<td>29%</td>
</tr>
<tr>
<td>Other Trauma</td>
<td>30%</td>
</tr>
<tr>
<td>Oncology/Hematology (Medical)</td>
<td>30%</td>
</tr>
<tr>
<td>Urology</td>
<td>31%</td>
</tr>
<tr>
<td>Vascular Services</td>
<td>31%</td>
</tr>
<tr>
<td>Gynecology</td>
<td>31%</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>32%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.

¹ Fee for Service
² Ear, Nose, Throat
...and also common among the majority of hospitals

On average, patients stay half a day longer than necessary

**Share of avoidable days by hospital per 1000 cases**

*Medicare FFS, Q2 2017- Q1 2018*

n = 3,357 hospitals

- Greater than or equal to 500: 71%
- Less than 500: 29%

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
Excess hospital days not deterring readmissions

Longer hospital stays don’t correlate with lower readmission rates

30 day readmission rates vs. avoidable days per 1000 cases

Medicare FFS, Q2 2017-Q1 2018

n = 3,357 hospitals

1) Values greater than 40% not displayed due to outliers.
2) The coefficient of determination explains how much of the variability in the Y-variable can be explained by the X-variable. Values close to 1 indicate perfect correlation whereas values near 0 indicate no correlation.

R-squared value (coefficient of determination)²

0.076

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
Post-acute discharges fraught with excess days

Discharges to PAC comprise a disproportionate share of avoidable days

Post-hospital discharge setting, all patients

Medicare FFS, Q2 2017 to Q1 2018

Discharged to a PAC setting
Discharged home

Share of days deemed avoidable, by discharge destination

Medicare FFS, Q2 2017 to Q1 2018

Avoidable days

Discharged to a PAC setting
Discharged home

39%

24%

61%

76%

All post-acute settings share the burden

Avoidable hospital days by discharge setting

*Setting-specific GMLOS*¹, *Q2 2017-Q1 2018*

<table>
<thead>
<tr>
<th>Discharge setting</th>
<th>Total number of inpatient days</th>
<th>Total number of avoidable days</th>
<th>Share of days deemed avoidable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospice</td>
<td>2,085,917</td>
<td>611,651</td>
<td>29.2%</td>
</tr>
<tr>
<td>LTACH</td>
<td>1,195,290</td>
<td>277,734</td>
<td>23.2%</td>
</tr>
<tr>
<td>Home Health</td>
<td>4,837,081</td>
<td>1,093,972</td>
<td>22.6%</td>
</tr>
<tr>
<td>IRF</td>
<td>2,080,198</td>
<td>468,271</td>
<td>22.5%</td>
</tr>
<tr>
<td>SNF</td>
<td>12,171,650</td>
<td>2,392,904</td>
<td>19.7%</td>
</tr>
</tbody>
</table>

¹) Geometric Mean Length of Stay.

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
Uncovering barriers to timely transitions

Five major sources of delayed transitions

1. Difficult-to-place complex patients
2. Insurance preauthorization
3. Clinical complications at point of discharge
4. Misaligned discharge and intake times
5. Lack of available transportation

Patient’s stay in hospital unexpectedly extended

Source: Post-Acute Care Collaborative interviews and analysis.
Effective, timely transitions hinge on acute and post-acute settings providing the necessary care to address patient complexity and clinical requirements.

1. **The Post-Acute Care Clinical Quality Compendium**
   Understand how to deliver high-quality outcomes for various patient types, manage complex patients in the community, hardwire effective information exchange with post-acute settings.

2. **Pursuing Clinical Excellence in Post-Acute Care**
   Promote safety, efficiency, and training for post-acute staff in advance of rising patient acuity in acute and post-acute settings.

3. **Managing the Tail End of Risk**
   Learn strategies to identify complex patients in advance of post-acute transitions and offer appropriate support to manage them throughout their care episodes.

Source: Post-Acute Care Collaborative interviews and analysis.
A creative way to ensure placement

Sometimes, paying for PAC placement is the most efficient option

### Luna Health’s PAC funding mechanism

<table>
<thead>
<tr>
<th><strong>Payment agreements established</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Luna Health entered into a payment contract with five of their PAC partners</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Patients identified</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients—underfunded or without post-acute benefits—are flagged by case manager as unable to transition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Predetermined payment completed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Luna Health pays the contracted SNF a predetermined rate, based on patient severity, for patients flagged as unable to transition</td>
</tr>
</tbody>
</table>

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**Luna invests in post-acute care for ready-to-transition patients**

“If a patient no longer requires inpatient services, **you think about right care, right place**…if you were to clear that bed and pay for the SNF bed, it provides access to others in need of tertiary and quaternary care.”

*AVP Care Transitions*

*Academic Health Center*

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1) Pseudonym.
Luna Health

- Based in southeastern United States
- Multi-hospital system offering a variety of services including a comprehensive cancer center and partnerships with LTACHs

► Luna Health maintains a contracted payment system with 5 post-acute providers within their network where they pay to transition patients based on severity.

► Luna Health piloted the program in 2015 with 5 post-acute providers already in their network. After conducting internal data analysis, Luna Health determined that paying to transition patients lacking payer source was more financially advantageous than holding them in the hospital and created hospital access for patients waiting on a bed.

► Luna Health supports 20 to 30 patients per month under this model.
Eliminating preauthorization for specific patient groups

Negotiating with MA payers to bypass acute care stay reduces delays

Standard post-acute transition timeline

<table>
<thead>
<tr>
<th>Wednesday, day 1</th>
<th>Wednesday, day 1</th>
<th>Thursday, day 2</th>
<th>Monday, day 6</th>
<th>Tuesday, day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Acute care</td>
<td>Post-acute</td>
<td>Preauthorization</td>
<td>Post-acute</td>
</tr>
<tr>
<td>ED arrival</td>
<td>transition</td>
<td>care coordinated</td>
<td>obtained</td>
<td>transition</td>
</tr>
</tbody>
</table>

Aultman’s expedited post-authorization process

<table>
<thead>
<tr>
<th>Wednesday, day 1</th>
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<th>Wednesday, day 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Direct transition</td>
<td>SNF submits</td>
</tr>
<tr>
<td>ED arrival</td>
<td>to SNF</td>
<td>insurance</td>
</tr>
</tbody>
</table>

Notable benefits

- Avoids unnecessary hospital stay
- Improves ED and acute care throughput
- Mitigates opportunities for discharge delays

Source: Aultman Health Foundation, Canton, OH; Post-Acute Care Collaborative interviews and analysis.
Post-authorization helps avoid an acute care stay

Aultman’s post-authorization process explained

1. Patient identification
   - ED social services flag patients that don’t need acute stay, and can’t safely transition home
   - Plan allows direct PAC transition for certain conditions like cardiac or medical respiratory
   - Acute care hospitalizations avoided in 2 years

2. SNF transition
   - Partnering SNF admits patients around the clock
   - SNF postpones preauthorization until after transition

3. Insurance authorization
   - Insurance approves entirety of the patient’s SNF stay
   - Payer prevents unnecessary acute stay, hospital avoids potential readmission

100% Post-authorization requests approved

Source: Aultman Health Foundation, Canton, OH; Post-Acute Care Collaborative interviews and analysis.
Aultman Health Foundation

- Based in Canton, Ohio
- Multi-hospital system offering a variety of acute and post-acute services including LTACHs, home health, hospice/palliative care, skilled nursing care, and inpatient rehab

- Aultman Health Foundation directly transitions medical respiratory and medical cardiac patients from the ED to a partnering SNF, bypassing an acute care stay. The SNFs complete the preauthorization process after the patient begins care in the SNF setting.

- Aultman has piloted this program with three Medicare Advantage payers.

- The program has been in place since 2017 and Aultman has transitioned 78 patients under this model, with two readmissions in 2017 and zero in 2018. No post-authorization request has been denied by payers to this date.

Source: Aultman Health Foundation, Canton, OH; Post-Acute Care Collaborative interviews and analysis.
## Interdisciplinary rounds proactively surface issues

### Standard discharge rounds

<table>
<thead>
<tr>
<th>Delayed huddles</th>
<th>Maddox Health’s(^1) proactive rounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge plans discussed late, often on the day of discharge</td>
<td>Early and regular discussions</td>
</tr>
<tr>
<td>Informal agenda</td>
<td>Physicians meet daily to discuss discharge needs and send reports to discharge staff</td>
</tr>
<tr>
<td>Meetings don’t include detailed discussions of every patient’s discharge plans and potential red flags</td>
<td>Comprehensive agenda</td>
</tr>
<tr>
<td>Inconsistent tracking</td>
<td>Agenda includes a discussion of every patient’s discharge plan, dates, and areas of potential complications</td>
</tr>
<tr>
<td>No formalized process to identify patients with delayed discharges and offer additional discharge assistance</td>
<td>Elevated assistance</td>
</tr>
<tr>
<td></td>
<td>Patients who fail to discharge by anticipated date are automatically flagged for additional assistance</td>
</tr>
</tbody>
</table>

### Decrease in time

15% Decrease in time from discharge order to actual patient discharge post implementation of rounds

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\(^1\) Pseudonym.

Source: Post-Acute Care Collaborative interviews and analysis.
Maddox Health

- Based out of Mid-Atlantic US
- Three-hospital network offering a variety of services such as a comprehensive cancer center, urgent care services, home care and hospice

► Maddox Health implemented daily interdisciplinary care rounds, meetings between physician, pharmacy, social worker, and nurse representative, to discuss discharge plans for each patient.

► The physicians meet in the morning to discuss discharge plans, anticipated discharge times, and discharge delays. All daily discharges that are completed are then logged into their EMR. The team reconvenes in the afternoon in a “huddle” to discuss progress, identify any additional discharge barriers, and elevate pending discharges for additional assistance.

► Maddox Health reduced the average time from discharge order to discharge by 15% after implementation.

1) Pseudonym.

Source: Post-Acute Care Collaborative interviews and analysis.
Reallocating staff to better meet hospital needs

Redstone Presbyterian Seniorcare shifts nurse staffing to match intake volumes

Pending Admissions | Nurse Staffing Shifts

<table>
<thead>
<tr>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Pending Admissions AM" /></td>
<td><img src="image2" alt="Pending Admissions PM" /></td>
</tr>
<tr>
<td><img src="image3" alt="Nurse Staffing Shifts AM" /></td>
<td><img src="image4" alt="Nurse Staffing Shifts PM" /></td>
</tr>
</tbody>
</table>

Morning nurse reallocated to assist evening admissions
Telemedicine offers clinical support for evening admissions

“We're competing for those patients. If it's hard for those patients to come to Redstone, they will go to the nursing home down the street.”

Vicki Loucks, VP & COO
Redstone Presbyterian Seniorcare

Source: Redstone Presbyterian Seniorcare, Greensburg, PA; Post-Acute Care Collaborative interviews and analysis.
Redstone Presbyterian Seniorcare

- Based out of Greensburg, PA
- Offers rehab, hospice and palliative care, home health, and a variety of ancillary senior care services

- Redstone Presbyterian Seniorcare receives a significant number of intake requests in the evenings.

- Redstone restructured their Nurse Navigation department, reallocated morning staff to the evening shift, and implemented a physician and nurse supported telemedicine model to meet increased need for evening intakes.

- This has increased Redstone’s ability to intake patients later in the day and has helped improve relationships with upstream providers.

Source: Redstone Presbyterian Seniorcare, Greensburg, PA; Post-Acute Care Collaborative interviews and analysis.
Transportation investment key to timely transitions

Owned van fleet speeds up patient movement

Key components of a successful transportation program

- **Vehicles**: Operates five ambulances and four ambulettes
- **Payer source**: Billed to Medicare/Medicaid or private pay
- **Patient base**: Available to patients going to both Shiloh Care settings and other post-acute facilities

Potential roadblocks

- **High cost of initial investment**
- **Competition from community ambulances**

Shiloh Care solutions

- **Ambulances are rented to other PACs**, creating an additional revenue source
- **Patients aren’t delayed**, resulting in fewer bed vacancies
- **Non-competitive intentions** are communicated to ambulance providers to establish goodwill

Source: Post-Acute Care Collaborative interviews and analysis.
Shiloh Care

- Based out of Midwestern United States
- Multi-service post-acute provider offering skilled nursing care, post-acute rehabilitation, hospice, and home health services among other services

► Shiloh Care owns five ambulances and four ambulettes that transport patients out of the hospital and into their care.

► Shiloh Care invested in their own ambulances to mitigate transportation delays for patients relying on hospital or community ambulances.

► The ambulances also serve as an additional source of revenue as Shiloh Care offers transportation services to other skilled nursing facilities in their area.

1) Pseudonym
## Alternative transportation options available, for a price

Vendors stepping up to fill delivery system gaps

### Key Differentiator | Payment Source
--- | ---
**Uber Health**
**Renown Health**
Case managers order rides on UberHealth’s dashboard

- Options range from cars to wheelchair accessible vans
- Rides can be ordered instantly or scheduled up to a month in advance

- Health system

### Key Differentiator | Payment Source
--- | ---
**Door-to-door transport**
**FirstLight Home Care**
Transport included in Readmission Rescue program

- Non-medical home care support (medicine pick up, DME supplies) also available
- Improves timely care access and adherence to care plan

- Health system
- Insurance

Source: Renown Health, Reno, NV; FirstLight Home Care, Cincinnati, OH; Post-Acute Care Collaborative interviews and analysis.
Renown Health

- Based out of Reno, Nevada
- Three-hospital network offering a variety of services including an urgent care center, lab services, x-ray and imaging services, primary care, and home health and hospice services

► Renown partners with UberHealth to provide patients with transportation out of the acute care setting into post-acute and home settings.

► UberHealth is a rideshare transportation service providing both scheduled and on demand medical transportation.

► As a part of this program, case managers can arrange Uber transportation, up to a month in advance, if a patient requires transportation services. The Uber Health drivers also provide door-to-door support.

► Renown has provided 2,024 rides over a 14 month period.

Source: Renown Health, Reno, NV; Post-Acute Care Collaborative interviews and analysis.
FirstLight Home Care

- Based out of Cincinnati, Ohio
- Offers a variety of non-medical home care services including companion, personal, and dementia care to seniors in over 240 US markets

- FirstLight Home Care offers Readmission Rescue services to hospitals. Part of this program includes services such as medication pick up, sitter services, and transportation support.

- FirstLight Home Care staff offer door-to-door transportation support and additional services like medication pick up and telehealth solutions for patients discharged from the hospital with FirstLight services.

- FirstLight is working with several payers and hospitals that will pay for the service due as a means of reducing readmission rates and improving discharge efficiency.
Discover underlying sources of avoidable days

Introduction to today’s activity

Group exercise in brief

1. Within your small groups, select a scenario that contributes to discharge and intake delays | 5 minutes

2. Through discussions, determine the underlying causes of delays and brainstorm related solutions | 25 minutes

3. Reconvene with the larger group to share overall findings and learn how different groups addressed similar challenges | 30 minutes
Identify the root causes of delays

Example scenario: Ambulance transportation out of the hospital is delayed by several hours

1. Assess the underlying sources of delay

   For example:
   - Ambulance providers are overburdened due to lack of ambulances and licensed drivers
   - Patients are often discharged to facilities that are several hours away

2. Identify the responsible stakeholders

   For example:
   - Community ambulance providers are unavailable at needed times
   - Hospital discharge planners arrange transport late in a patient’s stay

3. Select 2-3 root causes for which to build solutions

   - Insufficient supply of ambulances
   - Limited driver availability
   - Patients discharge across a large geographic area

Source: Post-Acute Care Collaborative interviews and analysis.
Debrief with your peers

Topics to address with the full group

- **Strategies** identified to address challenges
- **Stakeholders** needed to implement strategies
- **Real world success** stories with identified strategies

Source: Post-Acute Care Collaborative interviews and analysis.
Seize the avoidable day opportunity

- 10.8 million avoidable days 2017-2018
- 25% of hospital days are avoidable
- 1.2 Average number of avoidable days per patient

Source: CMS, Advisory Board Analysis; Post-Acute Care Collaborative interviews and analysis.
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