Infusion Therapy: A Comprehensive Approach to Census Development, Reducing Avoidable Rehospitalization, and Revenue Enhancement

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Objectives

- Review FY 2014 reimbursement rates for infusion-related RUGs categories and compare with 2013 rates
- Present case studies for residents receiving parenteral nutrition and antibiotic therapy
- Define components needed to develop a successful infusion program
- Discuss admission criteria, clinical management and economic impact when admitting residents receiving infusion
- Identify marketing strategies to improve census through infusion admissions
Facilities must be prepared to accept residents with high acuity/clinical complexity to remain economically viable and relevant to post-acute care.

*Infusion Therapy is a key component in the care of an increasingly complex resident*
Industry Drivers - 2014

• The Patient Protection and Affordable Care Act (PPACA)
  – Accountable Care Organizations (ACO)
    • Integrated Healthcare-Shared Risk and Shared Savings
  – Bundled Payments for Care Improvement Initiative
  – The Hospital Readmissions Reduction Program-2012
    • Acute Care Providers will be penalized for preventable re-hospitalizations
      – Diagnoses (CHF-Pneumonia-Acute MI)
  – Protecting Access to Medicare Act of 2014

• RUGs IV
  – In FY 2012 Revenue neutral, but shifts funds from rehab categories to medically/clinically complex categories
Accountable Care Organizations
A group of health care providers who give coordinated care, chronic disease management, and thereby improve the quality of care patients get. The organization’s payment is tied to achieving health care quality goals and outcomes that result in cost savings.

CMS “Triple Aim”

- Integrated Healthcare
- Shared Risk
- Shared Savings

Better Health
Better Care
for
Lower Cost
Providers that are Extensions of Hospitals Will Win in the ACO Era

Nursing homes and other post-acute providers should position themselves now as top-tier candidates for accountable care organizations, or they risk losing significant market share.

Northwest Ohio ACO
Physician Organization of Michigan ACO
Accountable Healthcare Alliance, PC
Oakwood Accountable Care Organization, LLC
Michigan Pioneer ACO
ProMedica Physicians Group, Inc.
Southeast Michigan Accountable Care, Inc.
Genesys PHO
University of Michigan

• McKnight’s webcast, August 09, 2013
Surviving ACOs

- Develop post acute care transition programs
- Invest in technology
- Monitor metrics
- What are providers in your service area looking for?
- Revisit traditional staffing
- Market what you do well
Bundled Payments for Care Improvement

- Organizations will enter into payment arrangements that include financial and performance accountability for episodes of care.
- 48 Episodes (DRGs)
- By 2021 50% of all payments in PAC will be bundled payments

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>All acute patients, all DRGs</td>
<td>Selected DRGs, hospital plus post-acute period</td>
<td>Selected DRGs, post-acute period only</td>
<td>Selected DRGs, hospital plus readmissions</td>
</tr>
<tr>
<td>All Part A services paid as part of the MS-DRG payment</td>
<td>All non-hospice Part A and B services during the initial inpatient stay, post-acute period and readmissions</td>
<td>All non-hospice Part A and B services during the post-acute period and readmissions</td>
<td>All non-hospice Part A and B services (including the hospital and physician) during initial inpatient stay and readmissions</td>
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<tr>
<td>Retrospective</td>
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<td>Retrospective</td>
<td>Prospective</td>
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ACA Hospital Readmissions Reduction Program

On October 1, 2012 payments to hospitals were reduced for excess readmissions of patients with certain conditions:

- Pneumonia
- CHF
- Acute MI

2013

- 2,217 hospitals were penalized
- 307 were docked the maximum amount: 1 percent of their regular Medicare reimbursements

2014

- 2,200 hospitals face readmissions penalties
- 18 hospitals will incur the maximum: Medicare reimbursements reduced by 2%
- Medicare has estimated it will recoup about $280 million from hospitals where it determined too many heart attack, heart failure or pneumonia patients readmitted within 30 days

SNF Readmission Penalties

Protecting Access to Medicare Act of 2014

Under “Protecting Access” SNFs will not experience an across-the-board cut to help pay for the one-year “doc fix.” However, they would have 2% of their Medicare reimbursements withheld upfront starting in October 2018; 70% of this money then would be distributed to providers that improve their rate of hospital readmissions.
How Does Rehospitalization Impact Skilled Facilities

- Health policy experts say hospital readmission penalties have the power to transform relationships between hospitals and skilled nursing facilities*
  - Improve Occupancy Rates
  - Improve Quality of Care
  - Opportunity for
    - Partnerships with Acute Care Providers
    - Inclusion in ACOs
    - Success in Bundled Payment for Care Improvement
Risks to Your Facility & Your Residents

Avoidable readmissions to acute care settings represent a significant cost to government agencies like Medicare; can negatively impact resident health; and are a major cause of variability in census for Skilled Nursing Facilities.

**Risks to Residents**
- Nosocomial infections
- Delirium
- Fractures
- Falls
- Adverse drug effects
- Reduced functioning on return to the skilled nursing facility

**Risks to Your Facility**
- Increased census variability
- Lower customer/resident satisfaction
- Increased costs associated with hospitalizations and readmissions
- Inability to meet Quality Assurance Performance Improvement requirements
It can be a tough decision .........
Risk Factors for Readmission

78% of all readmissions are caused by:

- Electrolyte Imbalance
- Respiratory Infection/Pneumonia
- Urinary Tract Infection
- Congestive Heart Failure
- Sepsis
Dehydration 17%

- Dehydration is a serious acute condition occurring mostly in elderly patients and patients with other underlying illnesses due to insufficient fluid intake
- It is treatable with oral rehydration therapy and/or intravenous (IV) fluids
- If left untreated in older adults, serious complications including mortality are possible
- Dehydration can be treated, for the most part in an outpatient setting, but is potentially fatal for the elderly or patients with serious comorbidity conditions

* JAGS 2002; vol 48, 154-167: Appropriateness of the Decision to Transfer Nursing Home Residents to Hospital, (D.Saliba)
Hypodermoclysis

- Hypodermoclysis has the potential to reduce the $1 billion cost of avoidable hospitalization for dehydration (per year, US)*
- AMDA 2009 Clinical Practice Guideline, Dehydration and Fluid Maintenance in the Long Term Care Setting - Recommended for patients with mild to moderate dehydration who are not able to take adequate oral fluids and who are hemodynamically stable and for whom IV access is not desired or difficult to establish

*J. Infusion Nursing 2009; vol 32,1, 40-44 (E. Lybarger)
Infections 10% - 49%

- Respiratory Infection/Pneumonia
- Urinary Tract Infection
- Sepsis
- Post Surgical Wound Infections
Congestive Heart Failure (CHF)

- Heart disease is the leading cause of death in the U.S.
- CHF represents the second most preventable cause of an emergency department visit
- 19% of all emergency room visits are for Heart Failure
IV Push Medication Administration

- Cardiac management
- Diuretics:
  - Management of fluid volume overload
- Corticosteroids:
  - Management of muscular dystrophy, respiratory diseases, other autoimmune diseases
Infusion Related RUGs Categories
Rates for FY-2014

Skilled Medicare Infusion Therapy
RUGs-IV Categories

- TPN-Special Care High (HC, HD, HE)
  • Federal Urban Rates- $346-469 depending on end splits for depression and ADLs

- IV Medications- Clinically Complex (CB, CC, CD, CE)
  • Federal Urban Rates-$270-379 depending end splits for depression and ADLs
Example #2
Your facility receives a referral for a patient with MRSA (post-op wound). MD orders Vancomycin 1 gram IV every 24 hours x 14 days via PICC. The resident’s ADL score is 11 and the resident exhibits s/s of depression. The RUGs category is Clinically Complex in the CD2 group. The resident remains skilled for 16 days.

- **Approximate CD2 per diem rate** = $360
  - $360 X 16 days = $5,760 Medicare payment

- **Approximate Costs**
  - $180 per day plus IV med at $70 per day
  - (Days 1-14) $250 X 14 days = $3,500 Cost of care
  - (Days 15-16) $180 X 2 days = $360 Cost of care

- **Total Medicare Payment** = $5,760
- **Total Estimated Cost** = $3,860
- $5,760 - $3,860 = **$1,900 reimbursement less cost due to IV antibiotic**

Disclaimer: The above is provided as an example using Federal urban rates. Please refer to Federal Register, August 2013 for applicable rates for your MSA.
Importance of Infusion Therapy to Skilled Facilities

- Some SNFs may not consider admitting infusion residents due to:
  - drug cost
  - clinical patient care required

- Let’s review two case studies to determine how admitting a resident with infusion therapy may affect your facility
SNF Perceptions about TPN

- Many LTC facility leaders remember the days when the cost of TPN was $400, $500, up to $800 per day
  - Most common TPN formulas are well below $150 per day
  - Depending on additives they range from $100 - $150

- Many nurses believe that caring for a resident receiving TPN is very complicated
  - Keep in mind that TPN is food; it is never a life-saving medication that must be delivered STAT
  - Given the proper education, clinical nursing policies, clinical tools, and a good Infusion Pharmacy for support: a TPN resident is no more difficult to care for than a resident receiving Vancomycin
Example # 1
Your facility receives a referral to admit a resident with a history of ETOH abuse, cirrhosis, depression, diabetes, and pancreatitis.

The resident requires skilled care for 3-4 weeks of TPN therapy to “rest the gut”. The RUGs category is Special Care High HD2 due to symptoms of depression and an ADL score of 11. The resident receives TPN for 21 days but remains skilled for 30 days.

- **Approximate HD2 per diem rate** = $439
  - $439 X 30 days = $13,170 Medicare payment

- **Approximate Costs**
  - $200 per day plus TPN at $170 per day
  - (Days 1-21) $370 X 21 days = $7,770 Cost of care
  - (Days 22-30) $200 X 9 days = $1,800 Cost of care

- **Total Medicare Payment** = $13,170
- **Total Estimated Cost** = $9,570
- **$13,170 - $9,570 = $3600 reimbursement less cost due to IV nutrition**

Disclaimer: The above is provided as an example using Federal urban rates. Please refer to Federal Register, August 2013 for applicable rates for your MSA.
Inotropic Therapy

- Many hospital patients receiving inotropic infusions require rehab before discharge to home

- Treatment is often life-long and may be daily to weekly therefore decreasing IV drug costs

- Hospitals often have difficulty referring these patients to LTC facilities due to misperceptions about the therapy and potential nursing monitoring costs

- Drugs are primarily used to increase cardiac output in treating heart failure
Example #3

- Your facility receives a referral for a resident with end stage CHF & deconditioning. MD orders Primacor 0.5 mcg/kg/min X 8 hours Mon-Wed-Friday. The resident’s weight is 70kg. The resident’s ADL score is 11 and the resident exhibits s/s of depression. The RUGs category is Clinically Complex in the CD2 group. The resident remains skilled for 30 days.

- **Approximate CD2 per diem rate** = $360
  - $360 X 30 days = $10,800 Medicare payment

- **Approximate Costs**
  - $180 per day plus IV med at $75 per day
  - ($175 per infusion 3 times per week = $525 ÷ 7 = $75)
  - (Days 1-30) $255 X 30 days = $7,650 Cost of care

- **Total Medicare Payment** = $10,800
- **Total Estimated Cost** = $7,650
- **$10,800- $7,650 = $3,150 reimbursement less cost due to IV antibiotic**

Disclaimer: The above is provided as an example using Federal urban rates. Please refer to Federal Register, August 2013 for applicable rates for your MSA..
Goals of Infusion Program

- Provide Safe, Clinically Appropriate, Cost Effective Infusion Therapy
- Prevent Rehospitalization
- Improve Census
- Increase Facility Reimbursement
- Increase Your Value to the Community and to Referral Sources by Providing Another Level of Service
- Enhance Staff Satisfaction and Staff Retention
Components of a Successful Infusion Program

- Medical Director Support
- Policies & Procedures
- Nursing Education
- Skills Validation
- POS/MARs
- Clinical Pharmacy Support
- IV Emergency/Contingency Kits
- Clinical Nursing Support
- Marketing Plan
- Pre-Admission Tools
- VAD Suitable for the Therapy to be Administered
- Appropriate Documentation From Discharging Facility
Policies and Procedures
Specific to Infusion in LTC Facilities

• Designed to guide staff through the process of managing a clinically complex resident with infusion needs
• Must be accessible to ALL staff
• Based on current Standards of Practice
  – Infusion Nurses Society (INS)
  – Oncology Nurses Society (ONS)
  – The Joint Commission (TJC)
  – Center for Disease Control (CDC)
  – Institute for Safe Medicine Practice (ISMP)
Skills Validation Tools

- Assist the facility in identifying further education needs
- Meets expectations of state surveyors to demonstrate appropriate education and competencies
- May be completed in the classroom or care setting
Comprehensive Infusion Education and

- Didactic, demonstration and practicum component
- Basic Infusion Therapy - covers all aspects of infusion therapy including
  - legal implications
  - fluid and electrolytes
  - insertion of peripheral vascular access devices
  - management of central vascular access devices
  - infection control
  - complications of infusion therapy and documentation

Therapy Specific Programs

- Total Parenteral Nutrition
- Clearing Thrombotic Occlusions in CVADs
- Patient Controlled Analgesia
- Inotropics
- IV Push Medication Administration
- Central Vascular Access Devices
- Hypodermoclysis
- CVAD Removal
Education Needs Assessment

- Allows you to assess educational needs
- Assists with prioritizing & scheduling of education program
- Assists in survey preparation
## Infusion Care Plans

### Resident Care Plan: Peripherally Inserted Central Catheter (PICC) Vascular Access Device

<table>
<thead>
<tr>
<th>Date</th>
<th>Problem/Needs</th>
<th>Goal/Expected Outcome</th>
<th>Approaches/Interventions</th>
<th>Responsible</th>
<th>Routine Date</th>
<th>Complete Date</th>
</tr>
</thead>
</table>
|      | Resident has Peripherally Inserted Central Catheter (PICC) | Resident will not develop hyperthermia, swelling, pain, drainage, or elevated temperature for duration of time PICC is in place. The PICC vascular access device will remain patent. | 1. Maintain asepsis during PICC care, maintenance and infusion.  
2. Vigorously cleanse needleless connector and/or Y-site ports with alcohol. Allow to air dry prior to accessing.  
3. Change dressing on admission, weekly, and prior to blood draws, blood transfusions, and every 24 hours with parenteral nutrition.  
4. Measure external catheter length on admission, weekly, and before and after each intermittent use, and at least every shift when not in use.  
5. Verity patency prior to administering any fluid or medication.  
6. Flush before and after each infusion with 10 ml NS. If non-valved, follow with 5 ml heparin 10 units/ml.  
7. When not in use: Valved flush with 10 ml NS weekly. Non-valved, flush with 10 ml NS every 12 hrs followed by 5 ml heparin 10 units/ml.  
8. For routine blood draws: flush with 10 ml NS, withdraw 5 ml blood and discard, draw Site, flush with 20 ml NS. If non-valved, follow NS post flush with 5 ml heparin 10 units/ml.  
9. Notify physician/licensed independent practitioner if redness, swelling, pain, drainage, elevated temperature develops or if catheter occlusion is suspected. |          |              |              |              |              |

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**Note:** The table above details the care plan for a resident requiring a PICC vascular access device. It outlines the necessary interventions to maintain the device's functionality and safety, including regular monitoring, careful handling, and appropriate flushing practices.
Infusion Specific POS/MAR

- Tools for guiding the nurse through the process of transcribing orders for the management of the resident receiving Infusion Therapy
- Supports documentation for treatments that are necessary to manage a patient with Infusion needs
Improve Your Outcomes

Ensure that on-site clinical nursing support is available to augment your staff capabilities and increase your facility's reputation for quality care

- Peripheral Catheter Insertion
- Midline Catheter Insertion
- PICC Insertion
- Catheter Removal
- Catheter Repair
- Catheter Clearance
Preadmission Assessment

Economic Considerations:

• RUG Classification Information:
  – Will the resident receive IV Hydration, TPN or PPN? RUGs rate?
  – Will the resident receive IV medications? RUGs rate?

• What is the approximate cost of drug/solution?

• What is the approximate cost of infusion supplies?

• Are there other diagnostic/monitoring associated costs that should be considered?
Preadmission Assessment

Clinical Considerations

• Has the nursing staff administered this therapy in the past?
• Is the route and method of administration approved for use?
• Is the IV therapy ordered a vein irritant or vesicant?
• Does the resident have the appropriate vascular access device (VAD) in place prior to admission to the SNF?
• Will the referring facility place an appropriate VAD prior to resident transfer?
• Does the resident have restrictions on where the access may be placed (e.g., dialysis fistula/catheter, mastectomy, stroke, etc.)?
Pre-Admission Assessment

- Demographics
- Supporting diagnosis
- Type of therapy
- Vascular access device information
- Labs
- Nutrition services
- Most recent orders
- H&P

Vascular Access

- Type of device
  - Short peripheral
  - Midline
  - PICC (peripherally inserted central catheter)
  - Non-tunneled
  - Tunneled
  - Implanted port
- Date of insertion
- Insertion site
- Gauge and Size
- Brand and lot number
- Number of lumens
- All Central Vascular Access Devices
  - Written verification of tip placement
Admitting the Infusion Resident

The expert management of your residents’ infusion needs during the admission process is critical to successful outcomes.
How can this affect your facility’s bottom line?

Let’s take a look at Mr. Jones:
Mr. Jones (Demographics)

Mr. Jones is a 93 year-old admitted to acute care from home where he was living with Mrs. Jones, his 91 year old wife and caretaker.
History

- Mr. Jones has a diagnosis of middle stage dementia. The admission note states he is pleasantly confused and forgetful. He was in a quiet private room at the end of the hallway in acute care. He was also on Ativan during his hospital stay because of his diagnosis of dementia. He is being admitted to your facility because he cultured positive for MRSA and needs 3 more weeks of IV ABX.
He arrives at 5:30pm on Friday evening. His admission paperwork states he has an IV but does not clarify the type of line. His next dose of Vancomycin is due at 6:00pm. He has not received any of his other meds since 8am (including his Ativan, which was d/c’d anyway because we don’t use anxiolytics in LTC).
The nurse, who is in the middle of her 5pm med pass, quickly assesses Mr. Jones and notes he has an IV catheter above his left antecubital fossa.
Because there is no documentation regarding the IV, the nurse must call the hospital to get more information. At 5:30 on Friday night she is told the chart is in route to medical records. The other nurses on duty at the hospital did not care for Mr. Jones and are unable to help with the IV catheter information.
The impact on the facility:

• The nurse must call the MD for an order for a CXR to verify line placement
• The nurse must start a short peripheral IV catheter to administer the 6pm dose
• Once the CXR is read the nurse may safely use the line
But the plot thickens…

Mr. Jones is put in a room with a resident who is noisy and bangs on his bedside table throughout the night. Mr. Jones has not received his Ativan since 8am that morning. He is in a new, strange environment and is becoming increasingly agitated with all the noise. He pulls out his VAD and hands it to the nurse the next time she enters the room.
The impact on the resident:

Because there is no documentation regarding the length of the catheter, the nurse is not certain that Mr. Jones has not left a piece of the catheter in him. Mr. Jones must be sent back to the hospital to determine if he has a catheter embolism.
Impact on Facility:

- Failed admission
- Poor outcome for the resident
- If resident is readmitted, facility must pay for new catheter placement
- Negative feedback from referral source
- Nursing time cost $$$
Gather Information BEFORE the Resident is Discharged!

- Reduce negative economic impact
- Improve quality of care
- Decrease unnecessary rehospitalization
- Stabilize census
Clinical Liaison Education/Support

- Admission/Marketing associates need infusion education
  - General knowledge of infusion therapies
  - Appropriate IV catheters for the therapies
- IV assessment should be included in preadmission process
IF YOU BUILD IT THEY WILL COME (OR WILL THEY?)
Assess Your Current Market

• What skilled services are already offered?

• Are you currently accepting residents with different types of Infusion Therapy?

• What type of patients do your referral sources have difficulty placing?
  – TPN
  – Pain Management
  – Cardiac
Don’t Forget Your Competition!

- What is their census?
- How aggressive are their marketing efforts?
- What specialty services do they offer?
- What are their weaknesses?
  - Quality Ratings
  - Location
  - Staffing
- What are your strengths? Specialties?
Marketing Tools

• Announcement Letter
• Co-marketing with Infusion Pharmacy provider may lend credibility to your Infusion program
• Admission Liaisons must have the tools they need to price drugs
• Admission Liaisons must have the ability to accept admissions on the spot
• Other opportunities for census building
  – Emergency rooms
  – Home Health Agencies
  – Community physicians
Marketing Collaterals

- Directed at referral sources demonstrates your commitment to ease the discharge process for clinically complex infusion patients
- Features your low Rehospitalization Rates
- Describes your relationship with your Pharmacy and Pharmacy Infusion Services provider
Marketing Pharmaceutical Care to Facilitate Admissions

• Types of pharmacy services
  – Infusion, high tech, specialty products
  – Palliative care
  – Pain management

• Quality of pharmacy services
  – Extended hours
  – Emergency services, response
  – Facility accuracy rates!
  – Full Medicare Part D coverage ensure continuum of pharmaceutical care
  – Joint Commission Accreditation
  – Consultant Pharmacist Services
Who You Should Target When Marketing Your Infusion Therapy Capabilities

• Discharge planners, Case Managers, Social Workers
• Hospitalist Groups (all therapies)
• Internal Medicine/Family Practice physicians (all therapies)
• Infectious Disease physicians (antibiotics, antivirals, antifungals)
• Surgeons (antibiotics, pain management, TPN)
• Bariatric surgeons (TPN, hydration)
• Cardiologists (inotropic therapy, i.e., Dobutamine, Milrinone-meds for chronic CHF patients)
• Gastroenterologists (TPN, hydration, antibiotics)
• Orthopedic surgeons (antibiotics, TPN)
• LTACs (all therapies)
• Oncologists (chemotherapy, hydration, pain management)
Advantages of Accepting Residents with Infusion Needs

- IV therapy RUG rates are favorable for infusion related therapies
- May reduce costly unplanned hospital transfers
- Higher census with fewer empty beds
- Can provide opportunities to build relationships with key referral sources
- May put you in a better position to partner with hospitals for ACO & Bundled Payment
- Allows you to re-admit your own residents versus transferring the resident to a competitor
- Allows you to admit the higher acuity infusion resident that your competition refuses to take
QUESTIONS ?