Optimizing Patient Outcomes at the Transition of Care: From Inpatient to Skilled Nursing Facility

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Disclosure

- Neither speaker has any relevant conflicts of interest to disclose
Learning Objectives

- Describe the difference in care transition needs from acute care to skilled nursing versus acute care to home
- List elements of best practice models demonstrated to improve transitions from acute care to skilled nursing facilities (SNF)
- Discuss potential medication safety risks with poor transition planning between acute and skilled nursing
Today’s Agenda

- Transitions of care: background and challenges
- Acute to Post-acute toolkits
- Acute to Post-acute care practice models
Riverside Health System Overview
Riverside Health System

- Integrated Health Delivery Network
  - Located in Southeastern Virginia
3 divisions

**Acute Care Services**
- 5 acute care hospitals
- 754 beds
- 3 specialty hospitals
- 222 beds

**Riverside Medical Group**
- Medical home model
  - 110 practices
  - 565+ providers
  - 35 specialties

**Lifelong Health**
- 10 nursing homes
- 943 beds
- 4 PACE centers
  - Helping 650 nursing-home eligible participants stay in their homes
- In-home health
  - Home Health
  - Home-enabling technology
  - House calls
Practice Reflection Question

In your organization, how does the readmission rate from skilled nursing facilities compare with that of those discharged home?

A. Higher
B. Lower
C. Not sure
Why are care transitions important?

Adverse events and avoidable complications can occur due to “poor communication and coordination among caregivers, health care professional, and the patient during care transitions”¹

“The quality of communication between the hospital and the nursing home is horrendous”²

1. American Medical Directors Association. Transitions of Care in the Long-Term Care Continuum Clinical Practice Guideline. Columbia, MD: AMDA 2010
Challenges

- Frail, elderly population
  - Increasing patient acuity in SNF
- Specialization of physician roles
  - PCP
  - Hospitalist/Specialist
  - SNFist/LTC Medical Director
- Failure to understand needs of transitions partner
- Lack of integrated electronic health record between care settings
Background

- More than 5M individuals transition from hospitals to skilled nursing facilities annually
- Nurses in SNFs play primary role in receiving and initiating care
- Little work has been done on transitions from acute to SNF
- The primary processes at the receiving end must be better understood

Background

- SNF nurses rely heavily on written hospital discharge communication
- Inadequacies include:
  - Problems with medication orders
  - Lack of opioid prescriptions for pain
  - Little psychosocial or functional history
  - Inaccurate information on current health status

Poor Quality Hospital Discharge Info

- Missing/incomplete
- Conflicting
- Inaccurate

Development of Plan of Care

- Patient care delays
- Staff stress, frustration
- Increased workload
- Increased risk of readmission
- Increased risk of negative patient outcome
- Increased resident/family dissatisfaction
- Negative SNF facility image/STAR rating

Implementation of Plan of Care

- Working blindly
- Using caution
- Discovering inaccurate information

Seeking, Reviewing, Gathering, Reconciling
Key Elements to Ensure a Safe Care Transition

- Patient-centered care
- Effective communication
- Consistent discussion and documentation of end-of-life care preferences
- Education of patient and family about the reasons for transfer
- Consideration of the patient’s individual preferences
- Prompt and consistent medication reconciliation

AMDA. Improving Care Transitions Between the Nursing Facility and the Acute-Care Hospital Settings. 
Communication at Transition of Care

- Recent literature has noted
  - Inadequacies of hospital discharge summaries not mentioning\(^1\)
    - Outstanding lab tests
    - Post-discharge testing
  - Failure to identify a PCP or receiving physician\(^2\)
    - 11% of discharge letters and 25% of discharge summaries never reaching PCP

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Medication Reconciliation

- Medication changes from hospital admission to hospital discharge
  - Approx. $\frac{1}{2}$ of regularly used home medications were discontinued\(^1\)
    - Over $\frac{1}{3}$ of omissions were considered to have the potential to cause moderate or severe discomfort or clinical deterioration
  - Adverse drug events attributable to medication changes occurred in 20% of transfers between nursing homes and acute care hospitals\(^2,3\)

Care Transition Models:
Acute to Post-Acute
SHM Post-Acute Care Transitions Toolkit

- Resources to help optimize transitions of care process between acute care and post-acute care
- Based on principles of quality improvement
- Interventions derived from
  - Evidence-based medicine
  - Experiences of institutional experts
- Includes
  - Resources
  - Innovations

SHM Post-Acute Care Transitions Toolkit

- Acquire cross-setting, institutional support for project
- Understand local post-acute care environment
- Development of cross-setting multidisciplinary team
  - Focus on improved quality of care transitions at their organization
- Development of specific aims or goals (measurable, achievable)
- Standardize intervention pathway and protocols across settings
- Engaging patients and families
- Development of comprehensive education programs
SHM Post-Acute Care Transitions Toolkit

- Measure and Analyze
  - Problem Identification Tools
  - Tracking Performance
    - Case and clinical level data
    - Process and Outcome metrics
      - Compliance with initiative protocols
      - Readmission rates, including disease specific
      - ED visit rates
      - Mortality rates
      - General nursing home quality measures
      - ACO measures

SHM Post-Acute Care Transitions Toolkit

- Developing Interventions
  - Discharge Documentation
  - Post-discharge follow-up
  - Medication Reconciliation
    - SHM MARQUIS initiative
  - Nursing Warm Handoff
  - Physician Warm Handoff

SHM Post-Acute Care Transitions Toolkit

- Discharge Documentation
  - Discharge checklist
  - Medical records
  - Transfer instructions/orders for next setting
    - Including disease specific order sets
  - Universal transfer forms/data sheets
  - Contact information
  - Schedule II-V prescriptions and hard to obtain specialty medications
  - Health care directives (POLST)
  - Transfer/discharge summary

Practice Model: Vanderbilt University

- CMS IMPACT grant (Improved Post-Acute Care Transitions)
- Transition intervention for Medicare patients transferring to 1 of 23 PAC in Nashville area
- Interdisciplinary
  - Nurse transitions advocate meeting
    - Includes patient, family, acute care and PAC
  - Transfer-oriented medication reconciliation by clinical pharmacist

Practice Model: Vanderbilt University

- Clinical Pharmacist Role
  - Reconcile transfer orders at discharge
  - Create a medication management plan (MMP) for PAC providers. Includes
    - Pre-hospital medications
    - Medications to be ordered at the PAC facility
    - Indications for each medications
    - Over age 65, review of age inappropriate medications (Beers, high ACB risk)
    - Last administration time for medications in acute care
    - Side-by-side comparison allows for quick review of medications throughout the continuum of care

Practice Model: Vanderbilt University

- Focus on high risk medications
  - Warfarin orders include:
    - Indication for therapy and INR goal
    - at least 3 days of INR history and plan for follow-up
    - dosage history

<table>
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<th>Therapy: indefinite</th>
<th>Duration of</th>
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<tr>
<td>INR</td>
<td>2 days before discharge</td>
<td>Day before discharge</td>
</tr>
<tr>
<td>Warfarin given (mg)</td>
<td>Held</td>
<td>Held</td>
</tr>
</tbody>
</table>

INR 4.0 3.3 2.7
Warfarin given (mg) Held Held 2mg

Practice Model: Vanderbilt University

- Focus on high risk medications
  - Insulin
    - Include blood glucose readings
    - All scheduled and correction insulin administered
  - Diuretics
    - Daily serum creatinine
    - Daily weight
- Prospective medication plan for other drugs as needed
  - Titration schedules, monitoring plans, stop dates, warnings for patient specific problems

Practice Model: Cedars-Sinai

- Enhanced Care Program
  - Cedars-Sinai delivers care transitions services to 8 SNFs in their market
  - Resulted in 25% reduction in 30-day readmissions
- Includes
  - Nurse-practitioner led transitions
  - Medication reconciliation

Practice Model: Cedars-Sinai

- Nurse-practitioner led transitions
  - Acts as lead liaison, communicating with
    - SNF attending physician
    - Inpatient care team
  - Visit to patient in SNF within 24 hours of transition, then 1-2 times/week as needed
- Inter-Facility Transfer Report
  - Inpatient notes and key pieces of hand-off information

Practice Model: Cedars-Sinai

- Don’t underestimate the value of medication reconciliation
  - “One of the largest problems was that there wasn’t a single, clean medication list. [The SNFs] sometimes received multiple lists with different medication on them, and the SNF nurses had to try and reconcile them.”

  Rita Shane, PharmD, FASHP, FSCHP  
  Chief Pharmacy Officer  
  Cedars-Sinai Medical Center
Practice Model: Cedars-Sinai

- Medication Reconciliation
  - Within 24-72 hours of SNF admission, SNF admission medication list sent to Cedars-Sinai pharmacy department
  - Pharmacist
    - Reconciles SNF med list with acute discharge med list
    - Clinically evaluates reconciled list
    - Communicates issues to NP liaison
- Identification and correction of drug errors in 50% of participating patients

Practice Model: Riverside

- **Resident Pilot**
  - Establish the model
  - Define program metrics

- **ToC Pharmacist**
  - Sustain resident program
  - Expand to additional clinical area

- **RRMC Expansion**
  - Add ToC to all facility clinical areas
  - Include all RHS post-acute facilities
Riverside: Phase I

- Transitions of Care Pharmacist Pilot
  - Initial focus on Riverside acute care to Riverside SNF
  - Engagement of multidisciplinary team from sending and receiving facilities
    - Providers
    - Care Management
    - Nursing
    - Pharmacy
Riverside: Phase I

- Development of standardized checklist
  - Prior to day of discharge
    - Home medication list validated
    - IV to PO conversions
    - Auto-substitutions identified
    - Discuss anticipated discharge medications with provider
      - Obtain hard copy prescriptions CII-V
      - Compare anticipated medications to SNF “stat” box contents
    - Initiate discharge medication reconciliation in “pending” status
Riverside: Phase 1

- Development of standardized checklist
  - Day of discharge
    - Review/validate discharge med rec
    - Coordinate with discharging nurse to administer any medications needed within 2 hours post transfer
      - Focus on pain medication and antimicrobials
    - Ensure any medications needed within 4 hours of transition located in facility “stat” box
    - Completion of transition of care note/warm handoff
    - Entry of PAC orders into SNF EHR as pending for receiving provider
Riverside: Phase 1

- Transition of Care Note
  - Pain Management (Document PSR and pain regimen administration over past 24 hours)
  - Diabetes Mellitus (Document BG, SSI requirements and basal insulin regimen over past 24 hours)
  - Duration of Therapy & Indication (Antibiotics, anticoagulants)
  - Warfarin INR Trend (Document last 3 INR and corresponding doses)
  - Initial Supply (Document if any unit of use items have been sent with patient)
Riverside: Phase 1

- Pilot design
  - Focus on patients identified for transition from largest RHS acute to largest RHS SNF
    - List provided through e-discharge portal
  - Staffed M-F
  - First 4 weeks: entire hospital focus
    - Only focused on care transitions
  - Week 5 forward: focus on single unit
    - Role includes all pharmaceutical care functions plus care transitions
Riverside: Phase 1

% of pilot patients with pharmacist intervention by type (n=52)

- DC MedRec-DDI
- DC MedRec-auto sub
- DC MedRec-written RX
- DC MedRec-range...
- DC MedRec-LOT
- Med Hx-other variation
- Med Hx-omission
- Med Hx-duplication
- At least one...

0% 20% 40% 60% 80%
Riverside: Phase 1

Interventions per patient

- At least one...
- Med Hx-duplication
- Med Hx-omission
- Med Hx-other...
- DC MedRec-LOT
- DC MedRec-Range
- DC MedRec...
- DC MedRec-autosub
- DCMR-DDI

colors: red (high), green (low), black (avg)
Riverside: Phase 1

Time Spent Per Patient (min)

- Time spent per patient-whole house
- Time spent per patient-unit based

△ high  ● low  □ avg
Riverside: Phase 1

- Additional results
  - Enhanced provider and staff satisfaction at SNF
  - Decreased time to availability of medications
  - 14.6% readmission rate pilot versus 16.3% all patients (pilot hospital to pilot SNF)

- Lessons learned
  - Need better method to identify patients for intervention
  - Education of providers may remove workload some from pharmacist
  - Incorporating into workflow of clinical teams more efficient than dedicated TOC pharmacist
  - Activity peaks on Friday, so may need additional resources
Riverside: Phase 2

- Established the Transitions of Care pharmacist as a permanent position
  - Assigned one unit of clinical coverage
  - Responsible for ToC activities for other units to one SNF
- Pharmacists gained efficiency over time
  - ToC pharmacist added 15 more patients to clinical load
  - Added ToC activities to another established clinical team
Riverside: Phase 3

- Challenged to expand transitions of care service to all RHS post-acute facilities with no additional staff
- Critically evaluated each clinical team
  - Average daily patient load
  - Patient length of stay
  - Medical Complexity
  - Consult volume (TPNs, kinetics, etc)
  - Number of daily RHS post-acute transitions
- Renamed Transitions of Care pharmacist to Medical/Surgical Team
  - Emphasized that ToC responsibilities belong to everyone
Riverside: Phase 3

- Changed the patient coverage map to balance clinical and transitions workload
- Created a “buddy system” to help with high volumes or timing issues
  - Paired pharmacists are never in rounds at the same time
- Leverage relationship with pilot SNF physician champion
  - Helped establish contacts at other facilities
- Spoke at RRMC provider committees to promote the transitions program and educate on transfer needs
Riverside: Phase 3

- Next Steps
  - Maintain program through electronic medical record (EMR) transition
  - Use efficiencies gained through common EMR to add transition services to non-RHS facilities
  - Improve tracking of pharmacist time and intervention impact using tools in new EMR
Key Takeaways

- Resident projects are a great way to pilot new clinical services
  - Utilize data to determine what model works for your organization
- Create a mechanism to support pharmacists
  - Balance ToC with other clinical activities
- Post-acute provider champion is key
  - Helps to educate and create demand
- Tell your story, share your success
Post-Acute Care Transition Resources

- Society of Hospital Medicine: Post-Acute Care Transitions Toolkit [www.hospitalmedicine.org](http://www.hospitalmedicine.org)
- State Action on Avoidable Rehospitalizations (STARR) Program [http://www.ihi.org/offerings/Initiatives/PastStrategicInitiatives/STAAR/Pages/default.aspx](http://www.ihi.org/offerings/Initiatives/PastStrategicInitiatives/STAAR/Pages/default.aspx)
- Interventions to Reduce Acute Care Transitions (INTERACT) [http://interact.fau.edu/](http://interact.fau.edu/)
- Minnesota Reducing Avoidable Readmissions Effectively (RARE) [http://www.rarereadmissions.org/](http://www.rarereadmissions.org/)
- National Transitions of Care Coalition [http://www.ntocc.org](http://www.ntocc.org)
Questions/Comments