Transitioning to a New Era: The Role of Pharmacy in Transitions of Care

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The speakers have nothing to disclose; no off-label discussion of medications

OBJECTIVES for Pharmacists

- Describe the role and impact of a Transitions of Care (TOC) Pharmacist
- Evaluate the successes & limitations of a TOC discharge program
- Apply TOC principles to real-life patient case
- Review barriers to appropriately transitioning the care of patients with infectious diseases in various settings
- Illustrate communication & systems strategies that can be used to maintain optimal continuity of care of patients with infectious diseases across healthcare settings

OBJECTIVES for Pharmacy Technicians

- Describe the role and impact of a Transitions of Care (TOC) Discharge Technician
- List best practices for management of a bedside delivery services
- Review the steps of prior authorization approval

WHAT IS TOC?

- According to The Joint Commission (JC) Transitions of Care Initiative: “movement of patients between health care practitioners, settings, and home as their condition and care needs change”
- Ineffective care transitions lead to ↑ adverse events, ↑ readmission rates & related costs

Term | Abbreviation
--- | ---
Accountable Care Organization | ACO
Discharge | DC
General medicine | Gen Med
Medications bedside delivery | Meds to beds
Medication Reconciliation | Med Rec
Mt Sinai Hospital | MSH
Outpatient (pharmacy) | OP
Patient(s) | Pt(s)
Pharmacokinetic | PK
Primary care physician | PCP
Prior Authorization | PA
Transitions of Care | TOC
KEY TOC INTERVENTIONS

• Medication Reconciliation (Institute for Healthcare Improvement): “Process of creating the most accurate list possible of all medications a patient is taking — including drug name, dosage, frequency, and route — and comparing that list against the physician's admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points within the hospital”

• Medication Bedside Delivery: discharge prescription filling and delivering to the bedside

PHARMACIST INTERVENTION & CLINICALLY IMPORTANT MED ERRORS AFTER DISCHARGE

• Brigham and Women’s & Vanderbilt University

• 851 patients (Pts) hospitalized for heart disease, post DC clinically significant errors:
  • 1+ med error(s): 50%
  • Serious: 23%
  • Life threatening 2%

• PharmD* led visits(2) w/ 1 DC counseling session → no ↓ in errors

• PharmD phone call w/in 1‐4 days post DC intervention: ↓32% errors in Pts w/ low med literacy

*Health literacy sensitive

LITERATURE VERDICT?

• Med errors at discharge affect ~36-50% of patients

• Most studies demonstrate PharmD led med rec alone does not ↓ readmissions or ED visits

• Phone follow up combined w/ interdisciplinary clinic visit post DC→effective

• Conclusion→DC med rec possibly more effective when bundled w/ additional interventions

ANALYSIS FROM AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHQR) FOUND THE FOLLOWING READMISSION RATES FOR CHF, COPD, PNEUMONIA, AND MI:

- Reduced by 7.9% Medicare
- Reduced by 5.8% Privately insured
- Reduced by 4% Uninsured
- Increased by 3.5% Medicaid

MEDICARE RELATED COSTS FY17

2,597 hospitals nationwide facing penalties

↓ $528 million reimbursements

HOSPITAL READMISSION REDUCTION PROGRAM

Hospital Penalty Measures

- Readmission for any diagnosis w/in 30 days of DC to same or another Medicare qualified hospital

- Additional readmission measures* for COPD, acute MI, HF, PNA, total hip & knee arthroplasty

*HF: Heart Failure
PNA: Pneumonia
MI: Myocardial Infarction
COPD: Chronic Obstructive Pulmonary Disorder

49 hospitals max 3% penalty
Mount Sinai Hospital (MSH) Chicago

- Location: North Lawndale Community of Chicago, IL
- 320 bed hospital, 16,400 admissions & 48,100 ER/yr
- Insurance: Managed Medicaid, Medicare, or are uninsured

PAYOR MIX AT MSH

Type of Insurance
- 65% Medicaid
- 20% Medicare
- 10% Self Pay
- 5% Commercial Insurance

WHAT ARE THE MOST COMMON INSURANCE PLANS AT YOUR SITE?

A. Commercial/Private
B. Medicare
C. Managed Medicaid
D. I have no idea

WHO, WHAT, WHERE?

<table>
<thead>
<tr>
<th>TOC Member</th>
<th>Amina Ghalayoun, PharmD</th>
<th>Amulya Murthy, PharmD, BCACP</th>
<th>Meliton Sedano, CPhT</th>
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</thead>
<tbody>
<tr>
<td>Training</td>
<td>PGY1 General &amp; PGY2</td>
<td>PGY1, OTC</td>
<td>Lead Tech: 8 years</td>
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<tr>
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<td>Pharmacy IV Tech: 2</td>
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<tr>
<td>Skills</td>
<td>Chronic disease state</td>
<td>Insurance resolution</td>
<td>Community pharmacy</td>
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<tr>
<td></td>
<td>management</td>
<td>Outpatient dispensing</td>
<td>workflow</td>
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<tr>
<td></td>
<td>Underserved populations</td>
<td>practices</td>
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<td>Outpatient services</td>
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MSH TOC Service Initiated September 2016

TOC GOALS

- Preventable readmissions
- Medication related errors at DC
- Med adherence, access, & affordability
- Chronic disease state management
- Pt experience & clinical outcomes
**Joint Commission: TOC Initiative Recommendations**

- Multidisciplinary communication, collaboration, coordination
- Clinical involvement & shared accountability
- Comprehensive planning and risk assessment
- Standardized transition plans and standardized testing
- Timely care & support w/in 48 hours post DC
- If readmission w/in 30 days, assessment warranted

**Existing Models**

- Agency for Healthcare Research and Quality
- The Care Transitions Program
- Care Transitions.org
- EvidenceBasedPrograms.org
- ValleyTransitionalCare.com

**Floor Setup**

- Gen Surg Floor 2
- Gen Med Floor 3
- Cardiology/Tele Floor 5
- Oncology/Gen Med Floor 6
- TOC PharmD Floor 2, 3, & 6
- TOC PharmD Floor 5
- DC Tech delivers to Floors 2 – 6, Mother/Baby, Oncology, Schwab

**TOC Team Functions**

- Med Rec at D/C
- Counsel
- Admin Projects
- Insurance Barriers
- Prior Auths
- Phone f/u w/in 72 Hours
- TOC PharmD
- Meds to Beds Delivery
- Pharmacy

**Comparison of Gen Med & TOC PharmD Roles**

- **AM:**
  - Gen Med: Rounds w/ medical team, conducts medication history, streamlines formulary
  - TOC: Interviews pts, reviews insurance formularies, completes follow up calls
- **Before Noon:**
  - Gen Med: Verifies order in queue, provides pt education
  - TOC: Coordinates Meds to Beds, reviews prescriptions
- **Afternoon:**
  - Gen Med: Verifies admission orders, monitors drug levels, antibiotic stewardship, assists nurses with Omnicell® and coordinates med arrival from pharmacy
  - TOC: Counsels, reviews discharges, resolves Meds to Beds issues, submits PAs

**Communication**

- Gen Med PharmDs about DCs after rounds
- MD resident, NP or PA
- Specialist
- Retail pharmacy
- PCP
- Social work for self-pay status
- Pt or family
DISCHARGE MEDICATION RECONCILIATION PROCESS

TOC PharmD identifies discharges through physician, Gen Med PharmD or via queue

- Med regimens assessed for order entry error, omission, duplication, indication, co-mission
- Disease state optimization includes ensuring evidence based med therapies are on board
- Ensure prescriptions are transcribed appropriately

SELECTION CRITERIA FOR TOC INTERVENTIONS:
COUNSELING, MEDS TO BEDS, PHONE CALLS

- ≥7 home meds
- Asthma
- COPD/HF
- DKA or A1c > 9%
- CABG/ACS
- AF/VTE
- PNA
- Readmitted w/in 30 days
- Non-adherence & or struggle to manage disease state
- Changes in medication regimen or cost issues

Discharge Counseling

Comprehension
- Are you excited to go home?
- How do you feel about your stay? Regarding your DM, COPD, HF, etc? Tell me about your condition.

Mutual goal sharing
- What do you think about your MD’s plan?
- What are your goals and barriers? How will you achieve these goals?

Goal setting
- How do you take your meds?
- How do you remain organized?
- What do you think would help you most?

Information
- General counseling & information sharing
- Provide patient friendly tools & materials
- Summarize goals, provide written instructions

Meds to Beds Workflow

- Checks floors & handles requests for delivery
- Delivers paper RXs & billing info to OP
- Resolve insurance issues & PAs w/ PharmD assistance
- Collaborate w/ social work for self pay status
- Delivers meds to bedside & documents

BEST PRACTICES FOR SUCCESS

- ORGANIZES & MANAGES list of Pts needing delivery
- PROVIDES required documents for filling & dispensing
- ALERTS pharmacist with RX dispensing concerns (i.e not in stock, wrong formulation, CII transcribing errors, affordability)
- SOLVES insurance issues
- PROCESSES prior auths
- COMMUNICATES OP, TOC, Med Team & Pt ensuring smooth transitions

The medication requires a PA. What do I do?
Prior Authorization Steps

1. Check with PharmD if therapeutic alternative appropriate or if PA necessary
2. Check the website of the specific plan-locate drug prior approval form
3. Complete the form with Pt specific name & MD information
4. Print the most recent clinical documentation from the chart
5. Specialist notes are preferred
6. MSH practice \( \rightarrow \) initial specialist consult & their final note OR primary MD final note with recommendation

*Submitted progress notes do not need to be from prescribing MD

Phone Calls

- How are you feeling since your stay? Any issues/complaints?
- Assess signs/symptoms related to condition or ADE
- Review med self-administration, may focus on pertinent agents if med list extensive
- Evaluate progress towards goals
- Follow up appointments set up? if MD seen-results of the visit
- Assist with access & affordability, rectify med discrepancies, counsel

DOCUMENTATION OF TOC INTERVENTIONS

<table>
<thead>
<tr>
<th>Med Rec</th>
<th>Counseling</th>
<th>RX Services</th>
<th>Phone Call</th>
<th>Prior Auth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviated SOAP note fashion</td>
<td>Pt-PharmD discussion</td>
<td>Meds to beds OR Rx sent to outside pharmacy</td>
<td>3 day follow up phone call</td>
<td>PA initiation &amp; approval</td>
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Results

Monthly Activities

- Number of Clinical interventions: 626
- Med Rec: 430, 52%
- Meds to Beds: 207, 14%
- Calls: 119, 6%
- Counseling: 51, 3%
- Operational: 4.1%

Patients Receiving Discharge Medication Reconciliation

- Patients Receiving Discharge Medication Reconciliation
### TYPE AND FREQUENCY OF DISCHARGE ERRORS

**N=209 Patients**

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Example</th>
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<tbody>
<tr>
<td>Order Entry Error</td>
<td>• Xarelto® dosed BID for Afib</td>
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<tr>
<td></td>
<td>• Prednisone 40mg PO x 30 days instead of short bursts in Pts w/ DM</td>
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<tr>
<td></td>
<td>• Levofloxacin 750 mg daily with QTc of 591</td>
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<tr>
<td></td>
<td>• Resident desires to renew Humulin® 70/30 but prescribes Humalog®</td>
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<tr>
<td>Medication Duplication</td>
<td>• Pt on warfarin at home and discharged home on Eliquis®</td>
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<tr>
<td></td>
<td>• Rouxusartatin and atorvastatin prescribed at discharge</td>
</tr>
<tr>
<td></td>
<td>• Humulin® 70/30 at home but discharged home on Lantus® &amp; Humalog®</td>
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<tr>
<td>Medication Omission</td>
<td>• Maintenance or rescue inhaler post COPD/Asthma exacerbations</td>
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<tr>
<td></td>
<td>• Diabetic testing supplies, pen needles &amp; syringes</td>
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<tr>
<td></td>
<td>• No P2Y12 agent at DC &amp; Pt stented in hospital</td>
</tr>
<tr>
<td></td>
<td>• K level is 3.0 on new furosemide dose, no K+ Rx at DC</td>
</tr>
<tr>
<td>Commission</td>
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<tr>
<td>Medication w/o Indication</td>
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<td>Other</td>
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### PGY-2 ADMINISTRATIVE RESIDENT PROJECT

**Purpose:**

- To determine if post discharge phone calls at 3 and 14 days reduce readmission rates

**Method:**

- Retrospective chart review, pts excluded if unreachable

**Results:**

- 33% relative reduction in readmission from 3 day call
- 30% relative reduction in readmission from 14 day call

### INITIAL STRUGGLES

- Recommendations not accepted by physicians
- Clarification of roles & responsibilities between TOC & OP
- Providers differentiating between TOC & Med
to Beds service
- Unable to reach MD for med changes
- Standardizing workflow

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ONE OF THE LARGEST SUCCESSES...

Administrative Buy-in

Improved workflow & ↓ of medication errors

Multi-disciplinary Buy-in

SITE SPECIFIC LIMITATIONS

- EMR not connected from inpatient to outpatient setting
- Difficulty reaching patients post-discharge
- Merger of Medicaid plans—PAs more difficult to navigate
- Polysubstance abuse leading to frequent admissions

TOC TIPS

- Steps to improve adherence
  - Humulin® 70/30
  - Frequent vs. fixed meals
  - Difficult w/ multiple injections
  - OR forgetfulness
  - Basal insulin w/ oral agents
  - Isosorbide mononitrate in HF
  - Prioritize meds
  - Intermittent insulin/statin dosing
  - Change insulin vials to pens
- Steps to improve affordability
  - Formulary MMIT App
  - Free app and website that searches thousands of formularies
  - http://info.mmiinet.co.com/formulary-search
  - Wal Mart
  - GoodRx App
  - Discount cards

PATIENT CASE CB

48 y/o AAF

PMH: HTN, DM, asthma

Social Hx:

(−) smoker
(−) drinker
(−) illicits

NextLevel Insurance (Managed Medicaid)

ROS & Vitals

- HT: 5'10" & Wt: 160 kg
- BP: 158/79 mmHg & P: 70
- 1+ pitting edema
- Pain, redness in left lower extremity (LLE)

Pertinent lab values & Information:

- CMP & CBC trends = within normal limits
- LDL: 150, A1c: 12.1%
- ASCVD risk ~26.2%
- ECHO (EF: 30-35%)
- Venous Doppler (+) LLE DVT

HOME MEDICATIONS

CHF & HTN

- Nifedipine ER 60mg PO daily
- Enalapril 10mg PO BID
- Furosemide 40mg PO daily

T2DM

- Glipizide 5mg PO BIDAC
- Simvastatin 20mg PO QHS

DVT

- Xarelto® 15mg PO BID x 21 days

MEDICATIONS ON DISCHARGE

- Nifedipine ER 60mg PO daily
- Enalapril 10mg PO BID
- Furosemide 40mg PO daily
- Metoprolol XL 25mg PO daily

- Lantus® 15 units
- Atorvastatin 40mg PO daily
- Aspirin 81mg

- Xarelto® 15mg PO BID x 21 days

BRIEF HOSPITAL OVERVIEW

- SOB & PND due to newly diagnosed HF
- LLE DVT → started on a heparin drip
- DM: A1c 12.1% → glargine & lispro for blood glucose (BG) control
- Pt mentions she is worried about blood glucose (BG) control at home, willing to work at improving but apprehensive of injections
WHAT MED INTERVENTIONS WOULD BE RECOMMENDED AT DC?
A. Stop Xarelto® & recommend warfarin w/ enoxaparin bridge instead
B. Verify Xarelto® insurance coverage, add insulin lispro, & stop glipizide
C. Verify Xarelto® insurance coverage, prescribe testing supplies & insulin syringes, & ↑ glipizide to 10mg BID AC
D. No interventions necessary

XARELTO® & NIFEDIPINE EACH REQUIRE A PA. OF THE OPTIONS, WHICH IS MOST IN LINE WITH BRIDGING CB TO A PCP?
A. Stop Xarelto® & recommend warfarin w/ enoxaparin bridge instead
B. Alert team & patient, begin Xarelto® PA process, bill 21 day Rx to a free trial coupon card, and switch nifedipine to amlodipine
C. Process PAs for both Xarelto® and nifedipine, use free trial coupon card for initial fill of Xarelto®, request social work assistance for nifedipine payment
D. Defer to PCP

YOU F/U W/ CB IN 3 DAYS & FIND SHE IS WELL, ADHERENT, W/ SOB RESOLVED & BG IMPROVED. HOWEVER, SHE CALLS A FEW WEEKS LATER FROM MD OFFICE, CRYING, REPORTING MD REFUSING TO SEE HER. HER INSURANCE ASSIGNED THIS MD TO HER. WHAT IS THE BEST OPTION TO ASSIST?
A. There is nothing you can do. Advise CB to call her insurance.
B. Ask her to go to a clinic that is affiliated w/ MSH, you know they accept types of managed Medicaid insurance.
C. Speak to the MD and inquire why he is refusing to see her. If he continues to do so, request discharging MD provide additional refills.

FUTURE DIRECTIONS
↑ E-prescribing rates
Implement validated tools for service enhancement
Formally evaluate medical resident’s TOC skills at discharge
Initiate population health program for patients of MSH ACO

ACKNOWLEDGEMENTS
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• Zahra Khudeira, PharmD, MA, BCPs, CPs
• Matthew Dandino, PharmD, BCPs
• Thomas Yu, PharmD

Managing Infectious Diseases During Transitions of Care
Milena McLaughlin, PharmD, MSc, BCPs-AQ ID, AAHIVP
Assistant Professor of Pharmacy Practice
Midwestern University, Chicago College of Pharmacy
HIV/ID Clinical Pharmacist
Northwestern Memorial Hospital
Which of the following statements is correct regarding health literacy?

A. Literacy level does not affect disease progression
B. Poor literacy primarily affects the elderly population
C. The average adult reading level is between 5th and 8th grade
D. Very few patients have low health literacy in the US

Which of the following patients is most likely to benefit from targeted discharge counseling?

A. 25 y/o male, 2 discharge medications, no medication changes
B. 48 y/o female, 3 discharge medications, 1 medication change
C. 63 y/o male, 7 discharge medications, 4 medication changes
D. 77 y/o female, 4 discharge medications, 2 medication changes

A 79 y/o women with functional urinary incontinence is being treated for CAP and discharged to an assisted living facility. Which of the following issues needs to be addressed before this patient is discharged?

A. Issues with medication storage
B. Mobility issues and access to medications
C. Potential drug shortage of CAP medication
D. Transportation to clinic visits

Which of the following interventions is the most likely to reduce medication errors upon admission to an acute care institution?

A. Patient is admitted from Long Term Care Facility
B. Patient is directly admitted from clinic
C. Patient provides a medication list
D. Patient provides medication bottles

A 57 y/o male fills his prescriptions at several different pharmacies. He was recently changed from pravastatin to rosuvastatin for his high cholesterol. He presents to your clinic for a routine follow-up visit. During the medication history process, you discover that he is still taking his pravastatin. Which of the following is a potential contributing factor for the patient continuing both statins?

A. Accurate medication list
B. Automatic refills from retail pharmacy
C. Discharge counseling intervention
D. High level of health literacy

What is an important factor to consider when encouraging a patient to take a larger role in his/her healthcare?

A. Encouraging patient to organize unused medications
B. Patient should independently manage medications
C. Provide only a medication list to the patient
D. Providing instructions specific to your institution
**Transitions of Care – Continuous Loop**

- Inpatient
- Outpatient
- Emergency Room
- Long-term Care

**Pharmacist Interventions – Meta-analysis**

- 13 randomized trials examining 3503 patients
- 10 studies evaluating pharmacists’ intervention on the incidence of medication errors during transitions of care
  - Pharmacist favored over control OR 0.44 (95% CI 0.31-0.63)
- 4 studies evaluating pharmacists’ intervention on the incidence of emergency room visits
  - Pharmacist intervention favored over control OR 0.42 (95% CI 0.22-0.78)
  - Number needed to treat 6.2 (95% CI 3.4-31.4)

**Review barriers**

- Objective #4

**Barrier – Communication**

- Inadequate communication
  - Inpatient and outpatient providers (direct communication)
  - Discharge instructions
  - Available home care services
- Insufficient care coordination
  - Transitions between ambulatory providers
  - Community pharmacies (supply of medications)
  - Scheduling of outpatient appointments
  - Shorter length of stays with higher patient acuity

**Barrier – Medication List**

- Accurate medication list
  - Recent changes
  - Adverse effects
  - Held medications upon admission
- Transferred information may be inaccurate
  - “Copy and paste” in progress notes

**Barrier – Health Literacy**

- Barrier to patient empowerment
- Incorporate health literacy enhancement in the transition
- Is the message we think that we are communicating, the message that the patient is receiving?
Barrier – Logistics

- Patients transitioning out must be able to obtain medications and store medications properly
- Insurance? Free care?
- Ability to find and pay for transportation
- Functionally able to get to medications
- Drug shortage?

Barrier – Outpatient Antimicrobial Therapy

- Stability issues
  - Continuous/extended infusions
  - Room temperature or fridge?
- Number of infusions needed per day
- Post-dialysis dosing

Barrier – Access to Antiretroviral Therapy

- Unique medications
  - Error for a short time period may confer resistance
  - May limit lifetime treatment options
- Formulary
  - All medications?
  - "Therapeutic interchange?"
  - Combination medications?
    - Reconciled at discharge
  - Patient’s own medication
    - Bypasses drug interaction checker
    - Not included on reports

Case #1

A 49 y/o male patient has transitioned home from an inpatient stay s/p CAP. His PMH includes diabetes and asthma. A week later he presents to the emergency room with a blood glucose of 59 mg/dL and difficulty breathing. He has not filled prescriptions for his new medications.

What transitions of care breakdowns may have occurred in this patient?

Patient/Caregiver Participation

- Patient is their own advocate
- Involve other caregivers (family, friends)
- Empower the patient to take charge of their healthcare
  - How?
    - Directions specific to your institution
- Personal Health Record
  - Patient information, medical history, medication list, intervention activities checklist

Describe communication and systems strategies

Objective #5
The Medication List

- Mean time for review of chart, patient/caregiver interview, reconciliation, and interventions was 21.2 min (SD 13.2)
- Risk factors for errors rated as potentially requiring monitoring or intervention or causing harm
  - Patient has medication list OR 0.35 (0.19-0.63)
  - Patient has medication bottles OR 0.55 (0.27-1.10)

Antiretroviral Therapy Review

- Daily review of all patients on antiretrovirals
  - Medications (dose, frequency, timing)
  - Drug-drug interactions
  - Opportunistic infection prophylaxis
  - Holding medications due to adverse effects or lack of oral access
    - Differing half lives
  - Communication via Theradoc®
    - Floor pharmacist paged for urgent issues
    - Regimen, dosing, OI prophylaxis, and drug-drug interactions addressed in note
    - Include name of Infectious Diseases provider
  - List also provided to social work and advanced practice nurse

Discharge Planning

- Begins when patient is admitted!
- Anticipate patient needs at discharge
- Schedule follow-up appointments
  - Link to primary care physician
  - Long term care facility may need to order medications
- When is the first home care visit?
  - Dose of antibiotic given before patient goes home?

Outpatient Antimicrobial Therapy (OPAT)

- Assess patient for appropriateness
  - Clinical status
  - Psychosocial factors
  - Reimbursement
- De-escalate therapy or IV to PO therapy
  - No switch if not appropriate!
- Ensure patient knows when to return to care
  - Follow-up or emergency needs

OPAT – Monitoring

- Vancomycin troughs
  - Changes in monitoring parameters
  - Holding doses
  - True trough?
- Weight changes
- IV to PO conversion when appropriate
- Continually address duration of therapy

Post-Discharge Education

- Follow-up phone call
  - Patients may not retain information from hospital admission
  - Need for re-education
  - Assess for any issues
  - Patients with low health literacy benefit more
  - Separate old medications from new medications
  - Instructions on “take-back” programs
Post-Discharge – Antibiotic/Organism Mismatch

- All positive cultures after discharge are screened
- Follow-up education for clinicians
- Ensure patient returns to care if needed

Medication Access

- Prior authorization
  - Start process in the hospital
  - If medication cannot be approved, switch to formulary agent to stabilize patient prior to discharge
- Drug Shortages
  - Hospital may have supply, however, homecare pharmacy may not
  - Facilitate procurement of a full course of therapy for patient

Engage Community Pharmacists

- Upon admission
  - Clarify potential discrepancies between new medications and home medication regimen
- Upon discharge
  - Cancel any discontinued prescriptions
  - Review automatic refill program

Case #2 (Discussion)

- You have volunteered to pilot a new pharmacy program reviewing all patients transitioning to OPAT. What are potential initiatives for this program?
  - Standard template for discharge summary
  - IV to PO conversion
  - Involve pharmacy trainees

Case #3 (Discussion)

- A 74 y/o female is being discharged to your LTCF continuing vancomycin treatment for a MRSA bloodstream infection. Her PMH includes diabetes, depression, and high cholesterol. She is scheduled to arrive at 5pm this Friday. What are important considerations for this patient?
  - Current renal function?
  - When will the last dose of vancomycin be administered in the hospital?
  - How many days of therapy are left?
  - Diabetes treatment? Insulin?

Which of the following statements is correct regarding health literacy?

A. Literacy level does not affect disease progression
B. Poor literacy primarily affects the elderly population
C. The average adult reading level is between 5th and 8th grade
D. Very few patients have low health literacy in the US
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C. Discharge counseling intervention  
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A. Encouraging patient to organize unused medications  
B. Patient should independently manage medications  
C. Provide only a medication list to the patient  
D. Providing instructions specific to your institution

Take Home Points

• Transitions of care are a continuous loop  
• Main barriers include communication and accuracy of information  
• Pharmacists play a key role in facilitating appropriate medication orders upon admission and discharge from healthcare settings
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   a. Literacy level does not affect disease progression
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   c. The average adult reading level is between 5th and 8th grade
   d. Very few patients have low health literacy in the US

2. Which of the following patients is most likely to benefit from targeted discharge counseling?
   a. 25 y/o male, 2 discharge medications, no medication changes
   b. 48 y/o female, 3 discharge medications, 1 medication change
   c. 63 y/o male, 7 discharge medications, 4 medication changes
   d. 77 y/o female, 4 discharge medications, 2 medication changes

3. A 79 y/o women with functional urinary incontinence is being treated for CAP and discharged to an assisted living facility. Which of the following issues needs to be addressed before this patient is discharged?
   a. Issues with medication storage
   b. Mobility issues and getting to medications
   c. Potential drug shortage of CAP medication
   d. Transportation to clinic visits

4. Which of the following interventions is the most likely to reduce medication errors upon admission to an acute care institution?
   a. Patient is admitted from LTCF
   b. Patient is directly admitted from clinic
   c. Patient provides a medication list
   d. Patient provides medication bottles

5. A 57 y/o male fills his prescriptions at several different pharmacies. He was recently changed from pravastatin to rosuvastatin for his high cholesterol. He presents to your clinic for a routine follow-up visit. During the medication history process, you discover that he is still taking his pravastatin. Which of the following is a potential contributing factor for the patient continuing both statins?
   a. Accurate medication list
   b. Automatic refills from retail pharmacy
   c. Discharge counseling intervention
   d. High level of health literacy

6. What is an important factor to consider when encouraging a patient to take a larger role in his/her healthcare?
   a. Encouraging patient to organize unused medications
   b. Patient should independently manage medications
   c. Provide only a medication list to the patient
   d. Providing instructions specific to your institution

Answer Key: 1. c 2. c 3. b 4. c 5. b 6. d
In addition to Meds to Beds, what are discharge technician actions that can positively impact a TOC service?

1) Actively work with patients to resolve insurance needs
2) Communicate barriers of obtaining medications with the TOC pharmacist
3) Resolve prior authorizations when it has been determined by the pharmacist that no therapeutic alternative exists
4) All the above

Notes from whom are most preferred when completing a prior authorization?

1) Attending physician
2) TOC PharmD
3) Specialist
4) Resident physician

Which of the following is NOT a best practice for managing a Meds to Beds service?

1) Keep an organized list of patients requiring Meds to Beds
2) Work in the OP pharmacy to fill and deliver medications faster
3) Inform the nurse of a Meds to Beds delivery prior to discharge to ensure the patient receives his/her medication
4) Consolidate Meds to Beds deliveries by floor to improve efficiency

Answer Key: 4), 3), 2)