Pharmacy Practice Model Initiative
Maximizing Student Experiential Training
to Grow Pharmacy Services

Douglas L. Furmanek, PharmD BCP
Supervisor, Clinical Pharmacy Services
Clinical Specialist, Pulmonary Critical Care
Greenville Health System
South Carolina Society of Health System Pharmacists
March 8th 2014

Disclosure

• I do not have a vested interest in or affiliation with any corporate organization offering financial support or grant monies for this continuing education activity, or any affiliation with an organization whose philosophy could potentially bias my presentation

Objectives

• Review the Pharmacy Practice Model Initiative (PPMI) as it relates to expansion of direct patient care activities conducted by pharmacists
• Understand the current and future pharmacy practice models at Greenville Health System (GHS)
• Analyze opportunities to support expansion of PPMI
• Explain how GHS has maximized student experiential training to grow clinical pharmacy services

PPMI

• Invitational summit meeting (150 participants)
  • Emerging pharmacy leaders with a balance of experience, expertise, geography, and practice type
• 2010 Summit Goals:
  • Significantly advance health and well being of patients
  • Create passion, commitment, and action among hospital and health system pharmacy practice leaders
  • Develop and disseminate a futuristic practice model
  • Supports pharmacists as direct patient care providers

GHS Pharmacy Summit Results

<table>
<thead>
<tr>
<th>GHS PPMI Survey Results</th>
<th>Agree/Strongly Agree</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREE/STRONGLY AGREE</td>
<td>≥80%</td>
<td>73%</td>
</tr>
<tr>
<td>AGREE/STRONGLY AGREE 70-79%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>AGREE/STRONGLY AGREE &lt;70%</td>
<td>9%</td>
<td></td>
</tr>
</tbody>
</table>

• Unanimous agreement on the following:
  • All patients have the right to a pharmacist
  • Medication reconciliation
  • Drug therapy management
  • Monitoring for efficacy and safety
  • Need for continuity of care

Four Models of Practice

• American Society of Health System Pharmacists (ASHP) and University HealthSystem Consortium (UHC) define four pharmacy models:
  • Drug distribution–centered model
  • Clinical pharmacist–centered model
  • Patient-centered integrated model
  • Comprehensive model
• Models discuss the role of pharmacists as they pertain to drug distribution and clinical activities
Current Practice Model

- Satellite Pharmacist
  - Order entry
  - Product verification
  - Formulary restrictions
  - Medication reconciliation
  - Interdisciplinary care rounds
  - Pharmacokinetics consults
  - Anticoagulation education
  - IV/PO conversion
  - Code response

- Clinical Specialist
  - Student rotations
  - SCCP 3rd year responsibilities
  - Academic service rounds
  - Direct patient care
  - Residency program
  - Protocol development
  - Antibiotic stewardship
  - Committees

Four Practice Models

- Drug distribution–centered model
  - Operational and distribution focused

- Clinical pharmacist–centered model
  - “Service-based” direct patient care
  - Dichotomy between operational and clinical services

- Patient-centered integrated model
  - Unit-based model – focusing mainly on distribution

Comprehensive model

- Hybrid unit-based model with clinical services
- Clinical specialist oversight and coordination of services

Four Practice Models

- Drug distribution–centered model
- Operational and distribution focused

Clinical pharmacist–centered model
- “Service-based” direct patient care
- Dichotomy between operational and clinical services

Patient-centered integrated model
- Unit-based model – focusing mainly on distribution

Comprehensive model
- Hybrid unit-based model with clinical services
- Clinical specialist oversight and coordination of services

Unit Based Model

- Unit Based Pharmacist
  - Medication reconciliation
  - Discharge education
  - Nursing support
  - Direct patient care
  - Student rotations
  - SCCP 3rd year responsibilities
  - Academic service rounds
  - Pharmacokinetics consults
  - Anticoagulation education
  - IV/PO & renal dosing
  - Code response
  - Antibiotic stewardship

Clinical Specialist
- Student rotations
  - SCCP 3rd year responsibilities
  - Academic service rounds
  - Antibiotic stewardship
  - Transitions of care
  - Residency program
  - Student rotations

Paradigm Shifts

- Operational staff pharmacist
- Clinical staff pharmacist
- Clinical Pharmacists Academic Service Based Practice Model
- Disease Management Transitions of Care Model
- Pharmacy Silos Inpatient & Outpatient
- Coordinated Discharge
- Students (schools) as an obligation
- Students (schools) as a resource

Look How Far We’ve Come...

- Medication use policy
- Medication safety
- Formulary management
- Optimized med distribution
- Utilize technology (BCMA)
- Medication reconciliation
- Anticoagulant education
- Clinical pharmacy practice
- Interdisciplinary team
- Evidence-based practice
- Antibiotic stewardship
- Committee involvement
- Academic involvement
- Provide residency training

How can Pharmacy expand PPMI services?
How can Pharmacy improve its VALUE to GHS?
GHS Pillar Goals

<table>
<thead>
<tr>
<th>People</th>
<th>Staff satisfaction: functioning at a higher level of practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>Nursing satisfaction: face to face interaction, accountability, support</td>
</tr>
<tr>
<td>Quality</td>
<td>Improved HCAHPS, Core measures, Value-based purchasing scores</td>
</tr>
<tr>
<td>Financial</td>
<td>Reduction in drug waste (cost), improved reimbursement</td>
</tr>
<tr>
<td>Growth</td>
<td>Transitional care model expands outpatient pharmacies and clinics</td>
</tr>
<tr>
<td>Academics</td>
<td>More students (resources) to consistently support clinical initiatives</td>
</tr>
</tbody>
</table>

Students as a Resource

- Development of Acute Care Medicine Rotation
  - APPE rotation for SCCP and PCCP students
    - Accommodates 6 – 8 APPE students per month
    - Provides a broad exposure of inpatient medicine services
    - Develop fundamental clinical pharmacy skills
    - Standardized (2) day orientation program
    - Standardized monthly calendar
  - "Shared responsibility” rotation
    - Facilitator model
      - Students work closely with unit based pharmacists
      - Clinical specialists provide disease state discussions, rounding experiences, and support unit based clinical processes

Needs Assessment

- Colleges of Pharmacy
  - Expand number of student experiential rotations available
    - Community
    - Non-residency track
    - Residency track
- Greenville Health System
  - Support College of Pharmacy goals
  - Identify FTE-neutral strategies to expand PPMI services
    - Ensure consistent student numbers every month
    - Develop a pipeline for future pharmacist candidates

Acute Care Medicine Rotation

- Rotation activities:
  - Implementing targeted interventions
  - Medication reconciliation
  - Pharmacokinetics and antibiotic stewardship
  - Anticoagulation education
  - Topic discussions of common disease states
    - Standardized primary literature provided ahead of time
    - Rounding service exposure (IM/ICU, Peds, Am Care)
    - Formal written case write-ups
    - Drug information question
    - Clinical pearl presentation

Needs Assessment

- Students
  - Rotation which exposed students to a broad spectrum of inpatient pharmacy services
    - Perform the real world functions of a pharmacist
  - Provides an experience in which they can apply didactic learning to clinical practice
  - Student participating in PPMI processes
    - Involvement in developing the future roles of pharmacists
      - Medication reconciliation
      - Discharge education
    - Understand Pharmacy’s impact on CMS measures, quality indicators (HCAHPS), and 30-day readmission rates

Orientation Day #1
Orientation Day #2

Student Benefits
- Student to practitioner transition
- Develop critical thinking skills
- Establish a basic clinical skill set
- Learn to navigate patient's chart and medical record
- Develop problem lists with associated interventions
- Improve time management
- Reinforce professionalism
  - Patient – Pharmacist – Nurse – Physician interactions
- Improve verbal and written communication skills

Pharmacy Benefits
- FTE-neutral expansion of pharmacy services
  - Will provide medication reconciliation for >90% units at GMMC including the Emergency Department
  - CMS performance measures (CHF & STROKE)
  - Attain consistent >90% compliance with Joint Commission anticoagulation education standards
- Allows future implementation of pharmacy services
  - Med-to-Bed liaison service
  - Discharge education process
  - Improves Pharmacist job satisfaction
  - Gets staff more engaged with academic training
  - ↑ Recruitment, retention, and commitment of staff

Future Plans
- Expand the number of students in the Acute care rotation at GMMC campus
  - Goal: support 8-12 students per month
- Utilize our unit-based pharmacists for new direct patient care services
  - Med-to-Bed liaison service and discharge education
- Identify opportunities for GHS residents to participate in the Acute care rotation
- Determine pharmacy impact on CMS, Joint Commission, and value-based purchasing measures

Conclusion
- Pharmacy departments are expected to implement PPMI strategies despite financial and FTE related challenges
- Pharmacy departments may need to review their current practice model to maximize direct patient care services
- Pharmacy students should be identified as a valuable resource for expansion of clinical pharmacy services
- Development of an APPE rotation which integrates students into Pharmacist-driven clinical services can provide significant benefit for students, pharmacy, and patients
Pharmacy Practice Model Initiative
Maximizing Student Experiential Training
to Grow Pharmacy Services

Douglas L Furmanek, PharmD BCPS
Supervisor, Clinical Pharmacy Services
Clinical Specialist, Pulmonary Critical Care
Greenville Health System
South Carolina Society of Health Systems Pharmacists
March 8th 2014