Regional Preceptor Development Network
The Layered Learning Practice Model

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Disclosure

- Jim Sarigianis has no actual or potential conflict of interest associated with this presentation

Objectives

- Define the layered learning practice model and how it applies to direct patient care rotations for pharmacy students and residents
- Describe the benefits, limitations, and challenges of the layered learning practice model.

Definitions and Terms

- “Layered Learning Model” also referred to as “Attending Model”
- Designated pharmacist concurrently oversees multiple:
  - Pharmacy Residents
  - Pharmacy students
  - Generalist pharmacists
- Designated or overseeing pharmacist:
  - “Lead pharmacist”
  - “Supervising pharmacist”
  - “Attending pharmacist”

Goals of Layered Learning

- Opportunity to expand clinical pharmacy services with existing resources
  - Allows an increased number of patients to receive direct pharmacist care
  - Satisfaction of physician team due to dedicated pharmacist
- Allows for accommodating an increased number of learners
- Improved patient outcomes
  - Decreased pharmacist to patient ratio
  - Greater intervention opportunities
- Improved customer service and satisfaction
  - Nurses
  - Physicians

Potential Benefits of Layered Learning

- Improved satisfaction by all participants
  - Lead pharmacist
    - Greater opportunities for direct patient care
    - Expanded use of time: Projects, committee work
  - Resident
    - Opportunity to precept students
    - Independently & autonomy in caring for patients
    - More competent at graduation ("practice ready")
  - Student
    - Maximizes the overall learning experience of the student
    - More 1 on 1 time with resident than lead pharmacist
    - Promotes student interest in clinical pharmacy (residency)
Role of each Layer- Lead Pharmacist

- Lead pharmacist
  - Oversees clinical activities of resident
  - Follows patients “behind the scenes”
  - Oversees resident as a preceptor
  - Oversees student by participating in student discussions
  - Maintains a constant presence
  - Communicates with team attending physician, housestaff, and nursing to ensure appropriate pharmacy services

Role of each Layer- Resident

- Resident
  - Responsible for medication management of assigned patients
  - Oversees clinical activities of student
  - Rounds with student
  - Responsible for student rotation logistics: Orientation, learning objectives, discussions, rotation schedule
  - Responsible for student rotation feedback and evaluations

Role of each Layer- Student

- Student
  - Expanded / enhanced expectations of student
  - Student can do many tasks a pharmacist can under preceptor supervision
  - “Pharmacist extenders”
  - Student is more accountable and better integrated into direct patient care

Challenges and Limitations of Layered Learning

- Layered learning cannot compromise safety
  - Lack of ideal means of measuring quality of service (clinical impact) of layered learning model

- Lead pharmacist needs to assess the competency of resident
  - Can depend on when in residency year the rotation is
  - Will help determine degree of independence resident will have in managing medications for patients, and in precepting student

- For residents who are deemed not as proficient, requires lead pharmacist to:
  - Work with resident more closely
  - Monitor patients more closely
  - Monitor order verification queue more closely
  - More closely oversee student

Challenges and Limitations (continued)

- Scheduling challenges
  - Coverage when resident has day off
  - Lack of coordination of start and stop dates of resident and student rotations
  - Lead pharmacist days off

- For student, inconsistency between teaching styles of resident and lead pharmacist

- Ensuring lead pharmacists are qualified

- Less practical in smaller institutions
  - Limited staff, residents, students

- Limited in complex patient populations (ICU)
The YNHH Medicine Experience - *Fitkin Service*

- A "resident run" service
- Layered learning provides dedicated pharmacist for this nursing unit and team
- Adds patient responsibility to lead pharmacist
- Expectations of resident
  - Independently rounds daily
  - Electronically verifies new orders all day
  - Manages drug therapy of all patients on the unit
  - Meets / communicates with Lead Pharmacist as needed
  - Documents all interventions
  - Precepts pharmacy student (if one is assigned for that block) - "Teaching Rotation"
  - Handles all nursing and physician issues
    - Includes all phone calls / texts messages

- Expectations of Lead Pharmacist
  - Open and frequent communication with resident
  - Clinical issues
  - Precepting issues
  - Spot checks critical drugs (warfarin; vancomycin) to ensure appropriate management
  - Spot checks order verification queue
  - Reviews intervention documentation of resident
    - Use electronic tools to confirm tasks are complete
  - Meets with resident as needed
  - Evaluation of resident (formal mid-point & final)
    - Patient care responsibilities
    - Precepting responsibilities

The YNHH Medicine Experience - *Peters Service*

- Often PGY-2 internal medicine resident
  - Frees up lead pharmacist
    - Allows for project and committee work
  - Resident assumes responsibility for medicine and CKD patients
    - Similar responsibilities and expectations to the Fitkin service rotation
  - Physical presence of lead pharmacist (office on the nursing unit)
  - Can detract from the resident's experience
  - Providers question lack of presence of lead pharmacist on rounds

Assessment Question #1

- The layered learning practice model can provide which of the following:
  a. An opportunity for expanded clinical pharmacy services
  b. Greater pharmacist intervention opportunities
  c. Greater opportunities for direct patient care
  d. Precepting opportunities for pharmacy residents
  e. All of the above

Assessment Question #2

- Which of the following is NOT a limitation of the layered learning practice model:
  a. The competency of a resident
  b. Lack of standardized tools that measure clinical outcomes
  c. Lack of coordination of start and stop dates of resident and student rotations
  d. Days off taken by a resident
  e. All of the above are limitations of the layered learning model

Summary

- The Layered Learning Practice Model is a means of providing pharmacy services, while
  - Educating students and residents
  - Providing an opportunity for the resident to independently manage the medications of an entire nursing unit
  - Providing precepting experiences to residents
  - Providing lead pharmacist with expanded use of time
References


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