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Regional Preceptor Development Network

The Layered Learning Practice Model

Jim Sarigianis, BS Pharm
Clinical Pharmacist
Yale New Haven Hospital
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Disclosure

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

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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.

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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"

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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

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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
    - Allows for two perspectives: Resident and lead pharmacist
    - Promotes student interest in clinical pharmacy (residency)

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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

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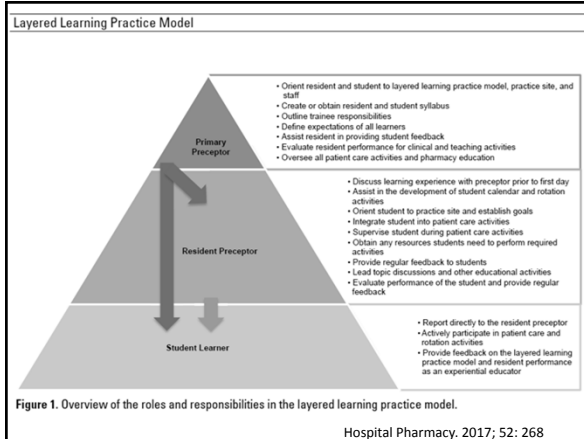
Role of each Layer- Resident

- 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

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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

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Figure 1. Overview of the roles and responsibilities in the layered learning practice model.

Hospital Pharmacy. 2017; 52: 268

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

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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)

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The YNHH Medicine Experience- _Fitkin Service_

- 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

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The YNHH Medicine Experience- _Fitkin_ (cont.)

- 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

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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

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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

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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

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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

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References

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james.sarigianis@ynhh.org