

Getting into the (Work) Flow — Extending the Role of Students to Help Them Help You

Kathleen Vest, PharmD, BCACP, CDE
Radhika S. Polisetty PharmD, BCPS-AQ ID, AAHIVP
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Learning Objectives for Pharmacists

1. Describe inpatient and outpatient models of integration of pharmacy students on an interdisciplinary team.
2. Identify challenges of precepting students on your service.
3. Identify strategies for managing barriers related to incorporating students into your service.
4. Develop a workflow document for your institution that will help with planning roles for APPE students and technicians.



Learning Objectives for Technicians

1. Describe inpatient and outpatient models of integration of pharmacy students and technicians on an interdisciplinary team.
2. Discuss the ways pharmacy students and technicians can assist the pharmacist in taking care of patients.
3. Identify potential roles for technicians and pharmacy students in a workflow document when pharmacists at your service are planning for APPE students.



How many members of the audience practice in:

- An acute care setting?
- An academic teaching hospital?
- An ambulatory care clinic?
- A community pharmacy setting?
- Other setting?



Audience Response Question

How many students do you precept at your site per academic year?

- A. 0-5
- B. 6-15
- C. >15



Question #1

It is challenging to have students at my site because:

- A. Students are not licensed healthcare providers and I not sure how they can help
- B. There is no space for them
- C. The service is too busy and I have no time
- D. All the above



Presentation Overview

- Description of Clinical Sites
- Ambulatory Care Student Extenders
- Inpatient Student Extenders
- Clinical Site and Student Specific Barriers
- Incorporating Students into your Workflow

DESCRIPTION OF CLINICAL SITES

Dr. Vest- Clinical Site

- Current Site: Advocate Dreyer Medical Clinic in Oswego, IL
- Recent transition from an Integrated Care Team within 3 sites of a physician owned medical group in the Chicago suburbs
 - focused on the care of high-risk Medicare patients
- Pharmacist's role: comprehensive medication management
 - Common disease states: Diabetes, dyslipidemia, hypertension, heart failure, anticoagulation

Dr. Vest - Preceptorship

- Shared precepting
 - 18 APPE students total at the site/year; 2-3 students per block
 - 1-3 PGY-2 ambulatory residents per year
 - Both pharmacists co-precept, but alternate role of primary preceptor
- Students initially observe and then are gradually incorporated into the pharmacist's daily functions
- New site: in development
 - Shared precepting with pharmacy manager/clinic administrator

Dr. Vest - Workflow

- Patients are asked to bring their medication bottles
- Comprehensive medication review
 - Identify drug related problems and provide recommendations
 - Coordinate with team members and implement plan
 - Create medication list and written action plan with follow-up instructions
- Phone management: e.g. diabetes, anticoagulation
- Adherence: patient assistance, pillbox fills
- Education: patients, caregivers, other providers

Northwestern Medicine Central DuPage Hospital Winfield, IL



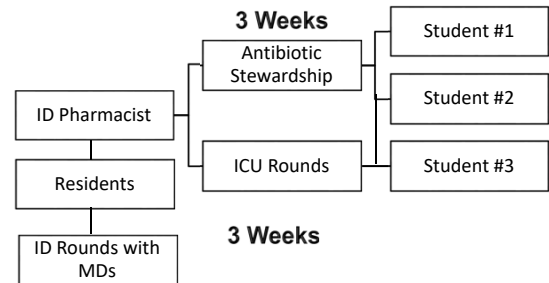
- 390 Bed Non-teaching Community hospital 30 miles west of Chicago, IL
- 1,040 physicians on the medical staff in 90 specialties
- Regional destination for Neurology, Orthopedic and Cardiac Surgery and Pediatrics

Dr. Polisetty - Preceptorship

- 12 APPE students per year
 - 3 students per block in Spring and Fall
- 4 IPPE-3 students per year
- Residents
 - 1 PGY2 ID Resident full time
 - 2 PGY2 ID Residents/year from NMH and Rush Medical Center (RUMC), Chicago
- Acute care rotation site



Workflow



6 Weeks total with Weekly Rotation



Getting Students into the Work Flow: General Concepts

- The first week
 - Get to know student(s) and assess knowledge and experiences
 - Provide thorough orientation, tour, and review of rotation expectations (syllabus and calendar)
 - Introduce student(s) (by name) to all staff and patients
- Throughout the rotation
 - Topic/disease state discussions
 - Consistently provide feedback
- Apply the preceptor roles
 - Direct instruction, modeling, coaching, facilitating¹

1. Witzel KM, Walters EA, Taylor J. Teaching clinical problem solving: a preceptor's guide Am J Health Syst Pharm. 2012 Sep 15;69(18):1588-90.



If you want students to contribute as a team member, treat them like one!

- Ensure all employees that you regularly work with know your students!
- Treat them as you would a pharmacist colleague!
 - However, do not hesitate to step in for interventions as needed.
- Take interest in your students' goals, strengths, and weaknesses



Question #2

Precepting Scenario: Sally

Sally is a 4th year APPE student. It is her first day of rotation at your clinical site. The first patient on the schedule today is seeing you for a comprehensive medication review. Which of the following would be an appropriate way to include Sally in the visit?

- Ask her to lead the visit independently.
- Have her shadow the visit without interacting with the patient.
- Ask Sally to introduce herself to the patient and explain her role, then observe the visit.
- Ask Sally to sit out as it is only her first day at the clinic.



AMBULATORY CARE STUDENT EXTENDERS



Expansion of Clinical Model: Pharmacist Extender

- Simply put → more patients have access to a pharmacist
 - Students can “follow” a patient through their clinic visit
 - Medication history
 - Drug information questions
 - Adherence
 - Counseling
 - Medication access issues (prior authorizations, patient assistance)
- Do not make role “too defined”
 - “Other duties as assigned”

Where does precepting fit in?

- Students and residents can be actively incorporated into the team
- Hierarchy and Roles
 - Pharmacist: “Traffic director” who oversees all patient care activities
 - Resident: Lead patient appointments, assist with precepting students
 - Student: Lead patient appointments
- With appropriate direction, students can help with nearly all of the pharmacist’s roles!

Preparing Pharmacy Students in Ambulatory Care

- 6 week rotation block, 4-5 days/week in clinic
- Engage the student in all of your activities!

Week 1	Week 2: Additional roles	Weeks 3-6: Additional roles
<ul style="list-style-type: none"> • Shadowing (you and other providers) • Topic discussions • Review how to work up and interview a patient in this setting • Practice physical assessment • Documentation 	<ul style="list-style-type: none"> • Student leads visits with supervising preceptor/resident • Add more activities as students gain confidence and abilities • Topic discussions • Feedback to student 	<ul style="list-style-type: none"> • Topic discussions • Feedback to student • Increased autonomy as student progresses • By week 6, student leads most of visits on their own • Drug information responses, in-services to staff

What do students do when they are not with a patient?

- What are the things YOU do when not with a patient?
 - Prepare for subsequent patients/work-up
 - Prior authorization/patient assistance programs
 - Phone calls to pharmacies/insurance regarding coverage of medications
 - Drug information questions or literature searches
 - Discussions with health care team
 - Prepare in-services for team huddles
 - Pill box fills

Example Case

- 76 y/o male on multiple medications
- Confusion regarding reasons for medications, literacy issues
- Conditions: uncontrolled DM, HTN, dyslipidemia, diabetic neuropathy
- Social issues: Patient is unable to afford medications
- MD requesting regular pharmacist follow-up to fill pill boxes, assess adherence, and manage DM

What are some potential roles for the pharmacy student?

- Ensure drug therapy regimen is optimal
- Pill box fills
- Checking the patient's blood pressure
- Education
- All are potential roles for the student

INPATIENT STUDENT EXTENDERS

Inpatient Pharmacist Responsibilities

Rounds with MDs for ID consult patients

Antimicrobial Stewardship for all adult patients

Education/Guidelines and Protocols/Hospital Committees

Pharmacist Workflow

- Antibiotic Stewardship: service covers all adult patients on active antimicrobial agents
 - 72 Hour Time-out
 - Targeted drug reports for certain broad spectrum antibiotics
 - Drug Bug Mismatch List
 - IV to PO List
 - Automatic protocols for IV to PO, renal dose adjustments, formulary substitutions
- Guideline and protocol development
- Pharmacokinetic and Drug Information consults
- AM Rounds with ID MDs for consult patients

Training

- Detailed syllabus
- Site map and parking instructions
- Involve past students if possible
- Checklist
- Tour with introductions to staff
- ID Badges/access to EPIC computer system
- Space to work: library or computers on floor

Student as extenders

Independent functions

- Generate reports/Identify problems
- IV To PO conversion
- Renal dose adjustment
- Identify dosing errors and duration based on guidelines
- Obtain medication histories
- Literature search
- Formulary review/DUE/MUE

Need supervision

- Knowing how and when to prioritize
- Medication reconciliation
- Clinical judgement in cases which are not clear cut
- Calling physicians with recommendations
- Knowing place in therapy of new agents
- Clinically significant drug interactions, adverse events

Student as extenders

- Students can follow P&T approved guidelines and protocols to identify problems and make recommendations
- Order sets and disease pathways outlining preferred and alternate agents
- Help with literature review, monographs and protocol development
- Dosing charts and tables can help students calculate doses

Delegating Tasks

- Medication profiles
- Drug Information Questions
- Medication Therapy Management
 - Doses
 - Interactions
 - Duration
- Other projects as needed

Audience Response Question

- What activities have you linked to student grades?
 - Student actively participates in topic discussions
 - Student makes recommendations on rounds
 - Student performs nurse/patient education
 - Provides accurate, concise, and coherent response to DI questions
 - Speaks professionally to healthcare providers

Example Case

An ID Physician calls from the floor. She wants to use cefepime for a healthcare associated pneumonia but received a call from the main pharmacy that it is on backorder. She requests alternative treatments and wants to know when this shortage will resolve. How can your students help you?

- Check IDSA guidelines or perform literature searches for alternate agents
- Check for allergies, drug interactions, and calculate doses
- Communicate with clinical Pharm.D., MD, and/or nurses
- Check ASHP and FDA websites for drug shortages updates

CLINICAL SITE AND STUDENT SPECIFIC BARRIERS

Clinical Site Barriers

Barrier

- Access to computer program/patient records
- Preceptor not present (due to vacation, etc)
- Training for electronic medical record

Solution

- Temporary access for length of rotation
- “Group” precepting: buy-in from all pharmacists
- Create training manual or centralize training if multiple students/rotations

Clinical Site Barriers

Barrier

- Space
- Time

Solution

- Be creative!
 - Mobile workstations
 - Sharing
- The students are the solution!

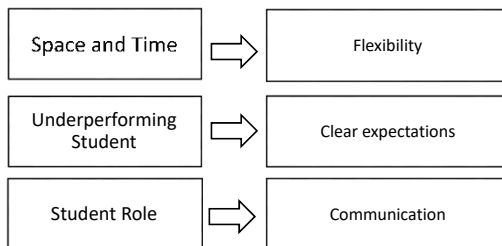
Student Specific Barriers

Barrier	Solution
<ul style="list-style-type: none"> Underperforming student 	<ul style="list-style-type: none"> Detailed syllabus! <ul style="list-style-type: none"> Set clear expectations Incorporate changes based upon feedback and issues specific to your site Use Experiential Education department as a resource
<ul style="list-style-type: none"> Patient/Physician/Staff understanding of student role 	<ul style="list-style-type: none"> Involve clinicians in communication and student role

Strategies for Success

- Flexibility
 - “You never know what’s going to come through the door.”
- Perspective
 - Students will perceive issues the same way as the preceptor.
- Plan ahead for success!
 - Send syllabus and other pertinent documents with first email communication.

Strategies for Success - Summary



Think/Pair/Share

- What is the biggest barrier that you have encountered at your clinical site?
- How did you overcome this barrier?

INCORPORATING STUDENTS INTO YOUR WORKFLOW

Incorporating Students into your Workflow

- Start low and go slow!
 - That is, start small and have the student help you!
- “Licensed” activities vs “non-licensed” activities
 - Medication refills
 - Student cannot enter refill in medical record
 - Student can assess appropriateness of refill or troubleshoot issues at community pharmacy with prescription

Getting into the (Work) Flow — Extending the Role of Students to Help Them Help You	
<p>List your daily workflow.</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<p>How can students contribute to any part of the workflow that you listed to the left?</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>

Getting into the (Work) Flow — Extending the Role of Students to Help Them Help You					
<p>What are some of the benefits and barriers to students participating in your workflow?</p> <table border="1"> <thead> <tr> <th>Benefits</th> <th>Barriers</th> </tr> </thead> <tbody> <tr> <td style="height: 100px;"></td> <td style="height: 100px;"></td> </tr> </tbody> </table>	Benefits	Barriers			<p>What tools or training would be required for students to participate in your workflow?</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>
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Ambulatory Care Example	
<p>List your daily workflow.</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> • Medication therapy Management visits • Patient education • Medication refills • Precept students and residents • Phone messages • Prior authorizations and appeals • Patient education • Patient assistance programs • Medication histories </div>	<p>How can students contribute to any part of the workflow that you listed to the left?</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> • Lead MTM visits • Medication histories • Patient education • Medication refills • Phone messages • Prior authorizations and appeals • Patient assistance programs </div>

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Inpatient Example	
<p>List your daily workflow.</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> • Patient Assessment <ul style="list-style-type: none"> • Antimicrobial stewardship • 72 Hour Time-out, IV to PO, renal adjustment, drug bug mismatches • PK consults • Patient Rounds <ul style="list-style-type: none"> • With ID team • Recommending doses, literature searches • Drug Information/Education <ul style="list-style-type: none"> • For pharmacists and physicians • New drug updates, DUE/MUE </div>	<p>How can students contribute to any part of the workflow that you listed to the left?</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> • Students can follow P&T approved guidelines and protocols to identify problems and make recommendations • Order sets and disease pathways outlining preferred and alternate agents • Help with literature review, monographs and protocol development • Dosing charts and tables can help students calculate doses • Follow up (notes, verbal, documentation) • Use assigned presentations for in-services </div>

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Post-Question #1

It is challenging to have students at my site because:

- A. Students are not licensed healthcare providers and I am not sure how they can help
- B. There is no space for them
- C. The service is too busy and I have no time
- D. All the above



Post-Question #2

Which of the following tools can assist with avoiding or addressing the majority of student specific barriers to integrating students into your workflow?

- A. Detailed rotation syllabus
- B. Point based "demerit" system
- C. Training prior to start of rotation
- D. Utilizing small student roles



Post-Question #3

Sally is a 4th year APPE student. It is her first day of rotation at your clinical site. The first patient on the schedule today is seeing you for a comprehensive medication review. Which of the following would be an appropriate way to include Sally in the visit?

- A. Ask her to lead the visit independently.
- B. Have her shadow the visit without interacting with the patient.
- C. Ask Sally to introduce herself to the patient and explain her role, then observe the visit.
- D. Ask Sally to sit out as it is only her first day at the clinic.



Post-Question #4

At a rotation site, students can help with:

- A. Medication histories and refills
- B. Phone messages
- C. Prior authorizations and appeals
- D. PK consults
- E. All the above



Key Takeaways

- Key Takeaway #1
 - The correct perspective is needed to incorporate students into your clinical model.
- Key Takeaway #2
 - Careful preparation is needed to appropriately delegate tasks to students.
- Key Takeaway #3
 - Consider your daily tasks when determining student responsibilities for clinical rotations.



ICHP Continuing Pharmacy Education (CPE) Instructions to Process Credit

For NISHP / UIC / PAPAs members

CPE Program: Getting into the (Work) Flow: Extending the Role of Students to Help Them Help You
(available to both pharmacists and technicians for credit)

Program Date: March 9, 2017

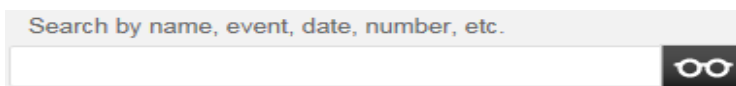
CPE Processing Deadline: by end of day April 22, 2017.

Access Code: _____
Announced at the session. You will need this to process your credit.

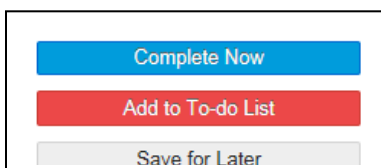
Detailed Instructions to process CPE credit

Participants in this CPE program - You will need to have your own account on CESally.com in order to access the CPE program, do the evaluation, and submit for credit. *(Please note: Participants must attend the program and complete an evaluation to receive credit per ACPE and ICHP policy. Attendance lists will be submitted.)*

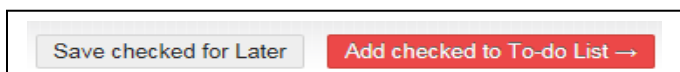
1. Go to www.CESally.com and click on "Sign Up!" Or log in with your existing CESally.com account. For HELP at any point, click on the HELP tab or go to: <https://www.cesally.com/help/>.
2. If creating a NEW account - Select a username and password and complete the Sign Up process.
 - Enter your NABP eProfile ID and birth day as MMDD when prompted. CESally.com will check with NABP/CPE Monitor in real time, to confirm the NABP eProfile and birth day are a valid account.
3. Once you have created your account, or logged in to your existing account, use the Search Box in the upper right corner to find your activity by typing in the title. You have several options for completing or saving for later.



4. Identify the program attended and choose between the following options:
 - a) Click on that Activity title to open the information page, and you will see your options in the right hand column on the information page.



- b) OR Click on the checkbox inside the small information box, then go to the bottom of the page and see your options there.



5. Choose from either a) or b) above, to **Complete Now**, **Save for Later**, OR **ADD to To-do List**.
 - a) If you choose **Complete Now**, follow the directions on the webpage: verify your attendance, provide the session ACCESS code that was given to you during the program, and complete an evaluation of the activity and the speaker(s). The status box indicates where you are in the process.
 - b) If you **Save for Later** or **Add to To-do List**, when you are ready to complete, please go to **To Do List**, click on **Start To-do List**. Follow the directions on the webpage: verify your attendance, provide the session ACCESS code, and complete an evaluation of the activity and the speaker(s). The status box indicates where you are in the process.
6. Click **Go To Next Step** at the bottom of the page, as you finalize each step in the process.
7. Click on **Report CE**. Your CPE credit will be uploaded to CPE Monitor automatically upon **successful** completion and **submission** of your evaluation. *Please watch for confirmation of your submissions.*
8. Go to www.NABP.net and CLICK on the CPE Monitor link to log into your personal CPE Monitor account to download an official copy of your statement of credit or full transcript.

Please honor the ICHP CPE processing deadline! For any questions, contact us at members@ichpnet.org.