

Conflict of Interest Statement

■ There are no financial disclosures or conflicts of interest regarding the content of this presentation

Learning Objectives

1. Explain how a hospital-based Pharmacy Technician training program can help recruitment efforts and mitigate technician shortages

- 2. Describe the primary skills a technician should obtain through a training program
- 3. Describe how to develop a curriculum that meets Accreditation Standards for Pharmacy Technician Education and Training

4. Provide criteria for the evaluation of program

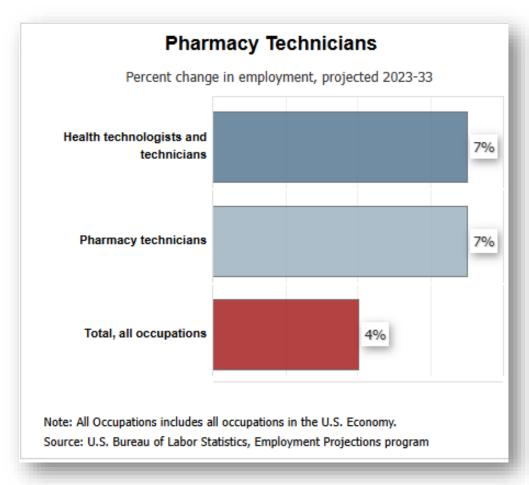
Introduction: Skilled Pharmacy Technician Shortages

- The pharmacy technician shortage is a significant, widespread, and longstanding problem that gained visibility during the COVID-19 pandemic
- American Society of Health-System Pharmacists (ASHP) 2021 surveys found:
 - Hospitals and health systems were experiencing severe shortages of pharmacy technicians, reporting:
 - turnover rates of at least 21%,
 - ~1 in 10 noting they had *lost 41% or more of their technicians*
 - "These shortages, combined with growth in pharmacy services and a need for specialized training, has created a situation in which the demand for pharmacy technicians outweighs the supply of qualified candidates".



Occupational Outlook- Pharmacy Technicians

Employment of pharmacy technicians is projected to grow 7 percent from 2023 to 2033, faster than the average for all occupations.



Pharmacy technicians
will be needed to take
on a greater role in
pharmacy operations
because pharmacists
are increasingly
performing more patient
care activities.

Recruitment Methods

- Recruiting skilled pharmacy technicians is challenging, especially in the Institutional settings.
- Traditional methods like job postings are not sufficient to overcome this shortage and may not yield many candidates with the appropriate competency and skill set.
- Additionally, conventional recruitment efforts may take months adding to staffing challenges, increased overtime and loss of productivity.
- Novel Approach: Implementing a Pharmacy technician training program can expand the recruitment pool and is a growing strategy to mitigate the shortage of highly skilled pharmacy technicians.
- This also helps create a steady stream of qualified applicants for open positions while minimizing time to backfill.

Traditional recruitment methods are not sufficient to address this workforce gap, and this requires innovative solutions



Pharmacy Technician Responsibilities

ASHP's 2021 "Pharmacy Technician Shortage Survey Findings", revealed that Pharmacy administrators reported a range of functions that hospital and health-system pharmacy technicians performed, including:

- sterile compounding (96%)
- inventory management (93%)
- purchasing (84%)
- non-sterile compounding (84%)
- hazardous drug handling (82%)
- controlled substance system management (78%)
- medication order distribution (60%)
- supervisory responsibilities (56%)
- billing and reimbursement (55%)
- technician education and training (53%)



Pharmacy Technician Roles (Entry Level vs Advanced)

Entry-Level Technician Competencies:

- Pharmacology for technicians
- Pharmacy law and regulations
- Compounding (Low-medium risk; nonsterile)
- Basic safe medication practices
- Pharmacy Quality Assurance
- Medication order entry and distribution
- Pharmacy inventory management
- Pharmacy billing and reimbursement
- Medication-use system technology



Advanced Technician Roles:

- Tech-check-Tech medication programs
- Purchasing/fiscal management
- Management/supervision of other pharmacy technicians
- Medication History Assistance (medication reconciliation)
- Medication Therapy Management Assistance
- Quality Improvement (not to be confused with assurance)
- Immunization assistance



Advanced Technician Roles:

- Hazardous drug handling
- Patient assistance programs
- Technician Education and Training
- Community Outreach
- Drug utilization evaluation and/or adverse drug event monitoring
- Industry
- Informatics



Primary Skills a Technician Should Obtain Through a Training Program

- Personal/Interpersonal Knowledge and Skills
- Foundational Professional Knowledge and Skills
- Processing and Handling of Medications & Medication Orders
- Sterile and Non-Sterile Compounding



- Procurement, Billing,
 Reimbursement and Inventory
 Management
- Patient- and Medication-Safety
- Technology and Informatics
- Regulatory Issues
- Quality Assurance

Electives can be added to the training program to prepare for Advanced Technician Roles

Standards for Pharmacy Technician Education and Training Programs



Program Establishment

Strategic Plan

(Purpose/Mission, goals, measurable objectives, evaluation process, measuring progress & outcomes)

Program Director Authority and Responsibility

Advisory Committee (meets at least twice yearly)

Non-Discriminatory Practice

Information about the program

(cost, enrollment, program requirements, policies, etc.,)

Record Maintenance

(min 3 years of records)



Program Faculty

Program Director (Requirements and Role)

Faculty/Instructors

(min of 3 years of expertise in practice area)

Experiential Site Coordinator

(min of 3 years of expertise in practice area)



Education and Training

Curriculum Preparation

(prepares students for a variety of contemporary settings)

Program Currency

(must be current)

Program Length & Composition

(must include didactic, simulation and experiential training)

Education & Training Program Goals

(reflect current & future roles)



Students

Recruitment

(Establish processes with HR, basic reading/math proficiency, background checks)

Acceptance

(Minimum requirements; Assessment Exams)

Enrollment



Evaluations and Assessments

Scope and Appropriateness of Student's Evaluation

(ongoing, systematic, and assesses progress toward meeting the requirements for graduation)

Post Program Preparation

(prepare students for employeraccepted and nationally recognized certification, registration, and/or licensure)

Faculty Evaluation

Program Assessment

(for effectiveness & continuous improvements)



Graduation and Certificate

Conditions for Graduation

Certificate

ABOUT THE NYP TECHNICIAN TRAINING PROGRAM

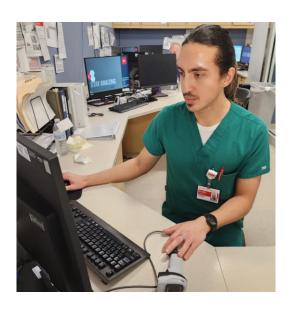
- NYP host a 16 week, paid, full-time learning opportunity to train and develop Pharmacy Technicians.
- This training prepares trainees for certification exams through either National Healthcare Association (NHA) or Pharmacy Technician Certification Board (PTCB)
- Our Departmental Facility members include 18 full-time staff members (from Inpatient, Retail/Specialty, Regulatory, Patient Safety, Finance and Procurement)

Site	NYP-Queens	NYP-WC	
Established	November 2023	January 2024	
Applicants	Over 100/cohort	Over 100/cohort	
# of Students Enrolled	6	6	100%
Graduated Program	4	4	100%
Certification/License	4	3	88%
Employment Status at NYP	4	3	88%

Program Overview

Didactic

NYP has partnered with an external vendor to provide didactic modules through Pharmacy Technician University (PTU) that are done in the onsite.



Simulation

66 robust simulation sessions Includes: Videos, Interactive practice



⊣ NewYork-Presbyter

Experiential Rotation

Hands on opportunities for students to work alongside pharmacists, pharmacy technicians, and other health care professionals and apply their classroom and simulation training to provide best patient

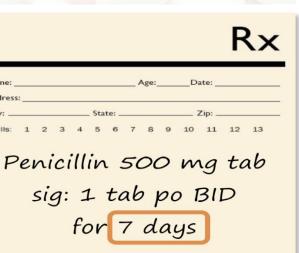


Program Overview: Simulations (Videos, Interactive Challenges, and Hands On Activities)

COMMUNICATION: HIPPA SIMULATION









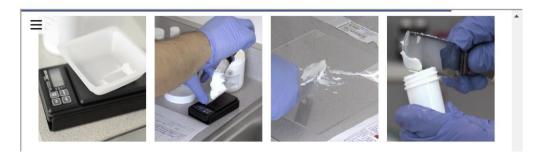
1 tablet χ 2 times per day = 2 tablets per day

2 tablets X 7 days = 14 tablets

Instructional Video: Unit-Dose Packaging



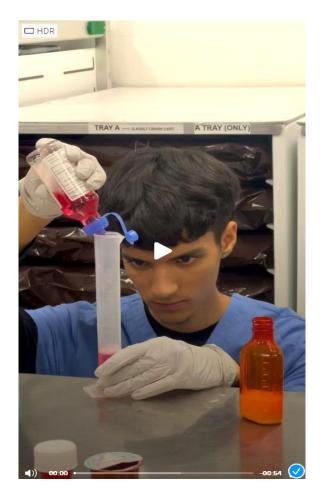
Instructional: Nonsterile Compounding - Cream

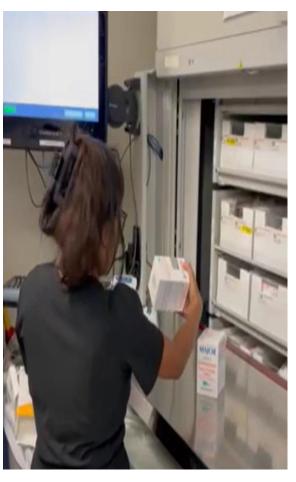


Experiential Training









Student Assessment

Didactic component:

- Scores on module quizzes (scale of 0 100% with a score of 80% or higher required to pass)
- Scores on unit exams (scale of 0-100% with a score of 80% within 3 attempts to pass)
- Score on midterm exam (scale of 0-100% with a score of 80% within 3 attempts to pass)
- Score on final exam (scale of 0 100% with a score of 75% within 3 attempts to pass)

Midpoint Evaluation of Student

 This is an opportunity for preceptors to assess the student at program midpoint and provide criteriabased feedback to students on overall performance and progress.

Simulation component:

- Instructor observation with verbal and written feedback
- Completed rubric with a score of 100% to pass

Experiential component:

- Completed experiential preceptor evaluations (must score a Highly Proficient or Proficient for each goal to pass a rotation)
- Written preceptor feedback on student evaluations



Program Evaluation

- Review of Program Goals
 - Identify data points (graduation rates, national exam passing rate, job placement, etc.,) that will be evaluated
- Review annually and revise every three years, according to ASHP/ACPE Standards
- Evaluate goals for success and/or course correction
- Define new goals to supplement and/or improve the program
- Review feedback from the program and implement changes as possible
- Include continuous improvement in the overall Program Evaluation Process
- Meet with Advisory Committee for discussion and approval before & after change implementation



Our Program Goals

Obtain ASHP/ACPE accreditation

Expand experiential experience by rotating between sites

Maintain 100% enrollment rate

Maintain 90% graduation/completion rate

Maintain 100% Pass Rate on PTCE

Maintain 50% Placement Rate

Expand experiential experience to include Community Involvement and Tele-pharmacy

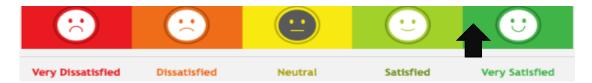
Maintain student satisfaction of 85% on surveys

Student Program Feedback

Overall Program Satisfaction



Prepared you for your current role



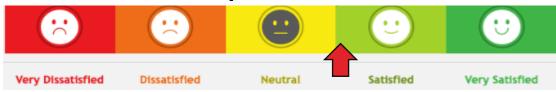
Satisfaction with didactic course content



Satisfaction with simulation



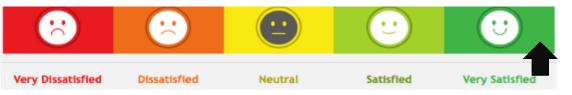
Satisfaction with experiential content



Satisfaction with facilities and resources



Relevance of skills & knowledge to your current job



Student Program Feedback: What Went Well!

"Being able to get advice from other pharmacy staff was a main help in knowing what I would have to look forward to on my certification exam".

"Everything went smoothly and my role in the pharmacy was a great benefit to me learning and adapting to the inpatient pharmacy"

"The pharmacy technician program is a great opportunity to learn skills and techniques required to become a pharmacy technician in a hospital environment. The immersive experience of working alongside other pharmacy technicians and harmacists allows the trainees to use what they learn during their course content in real life situations"

I loved the onsite training and gaining experience as technician through hands on training".

I enjoyed the training in different areas. The IV Training was very helpful".

Hands on simulations to further cement knowledge gained during didactic learning is what I liked most.

"I liked that it was a hands on learning experience and we got to see so many different areas within the Pharmacy "

"I loved every second of it. The length of the program was also good".



Student Program Feedback: Areas of Improvement

"Less shadowing time in areas students are already knowledgeable in and/or pick up very fast"

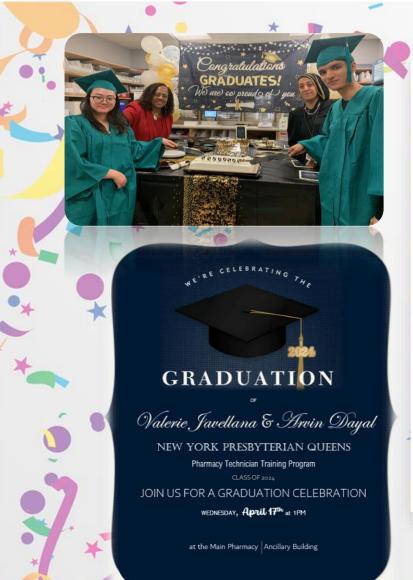
"Having a designated preceptor for students to allow full scope of learning of the technician role outside of shadowing other employees".

"Improve the experiential training... Experiential training can be performed with an intern or senior pharmacy technician that is more knowledgeable in the topics presented during course content. This will ensure that the readings done as the trainee studies are reinforced during the experiential training aspect".

"Another improvement is the need for a clear outline for course content. As studying the course content should be completed by the end of the program, more direction towards completion dates should be clearly stated".

"Once the trainee starts learning more about the cleanroom and sterile techniques it would be helpful to allow them to train and shadow IV technicians".

Graduation and Diplomas!









Lessons Learned

- Program Feedback is vital to the evaluation process and is needed for continuous improvement
- Accreditation allows for an objective review and ensures alignment with National Standards of Quality and Excellence and enhances program credibility
- ■Collaborations with sites that have Technician Training Programs can facilitate initiation of program
- Instituting a Pharmacy Technician Training Program at your site can create a steady recruitment pool and provide a stream of qualified and skilled pharmacy technicians for open positions.