Emerging Roles for Registered Pharmacy Technicians in NYS Hospitals – Training, Oversight and Organizational Structure

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Disclosures

- No conflicts of interest to disclose for all speakers

Objectives

1. Review the training requirements for pharmacy technicians and understand the impact of an accredited training program on pharmacy practice
2. Review the process for accreditation of a Pharmacy Technician Training Program
3. Discuss how to implement a modernized career ladder and job descriptions for technicians

Technician Training Programs

Example at NYU Langone Health

NYU Langone Health

- Six inpatient locations across Manhattan, Brooklyn, and Long Island
  - Flagships of NYU Tisch/Kimmel, NYU Brooklyn, NYU Long Island
  - Hassenfeld Children's Hospital
  - Langone Orthopedic Hospital
  - Perlmutter Cancer Center Network
  - Ambulatory clinic locations

NYU Langone Health
Pharmacy Technician Training Program (PTTP)

- Founded in 2016
- Jointly accredited by ASHP/ACPE in 2019 as an entry-level program
- 12 faculty members
- 5 practice sites
- 10 NYULH PTTP student graduates currently employed at NYULH

Training Program Requirements

- PTCB requirement updates January 2020:
  - To be eligible to register for PTCE:
    1. **Pathway 1:** Must have successfully completed a PTCB recognized / Accredited program, or will be completing within 60 days.
    2. **Pathway 2:** Must have equivalent work experience as a pharmacy technician for a minimum of 500 hours.

- Requirements to become a CPhT:
  - Attain a high school diploma or the equivalent
  - Graduate from an accredited pharmacy technician training program
  - Get certified
  - Maintain active certification

Training Program Requirements

- Based on ASHP/ACPE model

PROGRAM TYPE	HOURS IN PROGRAM	LEARNING MODALITY	MINIMUM HOURS		PROGRAM TYPE	HOURS IN PROGRAM	LEARNING MODALITY	MINIMUM HOURS
ENTRY-LEVEL		Didactic	120		ADVANCED-LEVEL		Didactic	160
		Simulated	50				Simulated	100
		Experiential	130				Experiential	200
TOTAL:		Minimum Total:	400		TOTAL:		Minimum Total:	600

Program Requirements- Didactic

- **Learn → Practice → See in Live Environment**

- **Didactic Sessions (120 hours): Learning**
  - First step to complete in a training program
  - Managers throughout our department teach / review required subjects
  - Packets / homework assignments / worksheets

Program Requirements- Didactic

- **The curriculum is categorized into the following areas:**
  - Personal and interpersonal knowledge and skills
  - Foundational professional knowledge and skills
  - Patient care, quality of care, and safety knowledge and skills
  - Regulatory and compliance knowledge and skills
  - Processing and handling of medications and medication orders:
    - Inpatient pharmacy
    - Outpatient pharmacy
    - Clinical Cancer Center
    - Orthopedic Pharmacy
    - Investigational Studies pharmacy
    - Transition of Care
    - Purchasing and Inventory Management

Program Requirements- Simulation

- **Simulation Labs (50 hours) : Practice**
  - **Should occur after didactic sessions are complete**
  - **Simulation include practice in:**
    - Active and Engaged Listening
    - Proper Garbing and Finger Glove Testing
    - Locating LASA / High Alert meds in Pharmacy Inventory
    - Proper Disposal Of medications
    - Medication Errors
    - Inpatient and Outpatient problem solving
    - Patient Confidentiality
    - Customer Service and Conflict Resolution
    - Non Sterile Compounding
    - Prescription Filling
    - Introduction to Ampules and Vials

Program Requirements- Experiential

- **Experiential (130 hours + 100 extra): See what you have learned and practiced in a Live Environment**
  - **Should occur after Didactic and Simulation components have been completed**
  - **Experientials include students shadowing Pharmacy Techs in:**
    - Main Pharmacy → Robotics, Manual order filling, applications, tray filling, IV Room, purchasing and receiving, pneumatic tubing, repackaging, Command Center
    - Decentralized → Pharmacy Automation restocking, Decentralized Pharm Tech roles, Pediatrics, medication distribution, 24 hour cart fill exchange
    - Ambulatory Care Pharmacy – Outpatient / Retail environment workflows / Transition of Care
    - Clinical Cancer Center
    - Investigational Studies
    - Orthopedic Hospital
    - Expansion into Specialty Pharmacy / Off Site Ambulatory Care Settings

Impact of Accredited Programs on Pharmacy Practice

- Pharmacy technician students should receive quality education to be valuable members of their teams once they gain employment
- Accreditation is the external review that shows that a Pharmacy Technician Program is meeting regulations and standards set by an external accreditation organizations
- Students acquire knowledge, skills, behaviors, and abilities needed for Pharmacy Practice
- Standardization in training
- Specific Guidelines to enhance the pharmacy technicians role
- Standards / Guidelines change based on changing roles and functions of Pharmacy Technicians
- Promotes better work performance
- Employees are better prepared for challenges and adapting to change / additional roles
- From an employers view, hiring a trained Technician and attracting quality talent are the two main advantages
- Promotes Quality and Consistency

Technician Training Program Accreditation

What Is Accreditation?

- Program or institution meets established quality standards
- Provide assurance and confidence to the public
- The American Society of Health-System Pharmacists (ASHP)/Accreditation Council for Pharmacy Education (ACPE)
  - The only nationally-recognized, non-governmental, non-profit pharmacy association that accredits pharmacy residencies and pharmacy technician training programs in the United States
- Pharmacy Technician Accreditation Commission (PTAC)
  - Representation by experienced pharmacy leaders
  - Appointed by ASHP and ACPE

Why Accreditation?

- Advantages to student, employer/institution, and program
- Technician role expanding
  - New technologies
  - Roles and responsibilities
  - Medication safety
- BOP requirement completion of an accredited training program to practice
- Resources
  - Updated standards and curriculum
  - Networking opportunities with ASHP
  - Listing in Pharmacy Technician Training Program Directory

Preparing for Accreditation Survey

- R-U-Ready? Pharmacy Technician Education & Training Program Tool
  - Online
  - Educational and self-assessment
- Application
  - Can be submitted as soon as a student has started training with your program
  - If accredited, accreditation date will be retroactive to date of application file
- Pharmacy Technician Education and Training Programs Curriculum Crosswalk Template
  - Based on *Model Curriculum for Pharmacy Technician Education and Training Programs*, developed by ASHP/ACPE

STANDARD CATEGORIES:

1. **Personal/Interpersonal Knowledge and Skills**
2. **Foundational Professional Knowledge and Skills**
3. **Processing and Handling of Medications and Medication Orders**
4. **Patient Care, Quality and Safety Knowledge and Skills**
5. **Regulatory and Compliance Knowledge and Skills**
6. **Authority and Responsibility provided to Program Director**
7. **Strategic Plan**
8. **Advisory Committee**
9. **Curricular Length**
10. **Curricular Composition and Delivery**
11. **Student Recruitment, Acceptance, Enrollment, and Representation**
12. **Faculty/Instructors**
13. **Documentation**
14. **Assessment of Competency Expectations**
15. **Assessments of Structure and Process**

ASHP/ACPE Accreditation Standards for Pharmacy Technician Education and Training Programs:

- 15 standards
- Standards 1-5 contain Key Elements
  - 54 Entry-level
  - 77 Advanced-level

Standard 1: Personal/Interpersonal Knowledge and Skills

ENTRY-LEVEL

1.1 Demonstrate ethical conduct.
1.2 Present an image appropriate for the profession of pharmacy in appearance and behavior.
1.3 Demonstrate active and engaged listening skills.
1.4 Communicate clearly and effectively, both verbally and in writing.
1.5 Demonstrate a respectful and professional attitude when interacting with diverse patient populations, colleagues, and professionals.
1.6 Apply self-management skills, including time, stress, and change management.
1.7 Apply interpersonal skills, including negotiation skills, conflict resolution, customer service, and teamwork.
1.8 Demonstrate problem solving skills.

ADVANCED-LEVEL

1.9 Demonstrate capability to manage or supervise pharmacy technicians in matters such as conflict resolution, teamwork, and customer service.
1.10 Apply critical thinking skills, creativity, and innovation.
1.11 Apply supervisory skills related to human resource policies and procedures.
1.12 Demonstrate the ability to effectively and professionally communicate with other healthcare professionals, payors and other individuals necessary to serve the needs of patients and practice.

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Column 1: Standard Key Element	Column 2: Didactic Content and Topics	Column 3: Sample Simulation Activities	Column 4: Sample Experiential Activities
Key Elements are descriptions of what learners must be able to do, to achieve the associated aspects and competencies to meet the Standard.	Didactic content and topic examples to teach learners, so they may obtain the knowledge and ability to meet the Key Elements.	Sample activities for the simulated (lab) portion of the program that teach learners, so they may obtain the knowledge and ability to meet the Key Elements.	Sample activities for the experiential portion of the program that teach learners, so they may obtain the knowledge and ability to meet the Key Elements.

STANDARD 1: Personal/Interpersonal Knowledge and Skills

ENTRY-LEVEL	LEARNING MODALITIES		
KEY ELEMENT	Didactic	Simulated (Lab)	Experiential
1.1 Demonstrate ethical conduct.	Explain, define, and review material regarding ethical conduct (i.e definition of ethics).		Demonstrates ethical conduct (i.e uses appropriate conduct during ethical challenges).
HOUR(S):	0.5 hours	N/A	4.0 hours
COURSE(S):	Role of The Pharmacy Technician 0100-19-D	N/A	

Survey Overview

- In person vs. remote
- Our survey at NYULH
  - One day - July 30, 2019
  - Two ASHP surveyors onsite
  - 5 hours
    - Tour of program spaces
    - Meet with graduates in group setting
    - Meet with current students in group setting
    - Meet with program leadership / advisory committee in group setting
    - Report out presentation to program leadership and hospital administration

Document Review During Survey

- Pre-survey questionnaire
- Completed affiliation agreements for all training sites
- Complete student files for three program graduates
- Three on-going student files for current class
- Supporting course materials/ lesson plans
- Books, references, online products used for training in the program
- Copies of membership certificates of program director and faculty for pharmacy association and/or education associations at the national and state level
- Advisory Committee meeting minutes for three years
- Simulated component assessment activity checklists
- All completed experiential site inspections
- All contracts
- Academic and Professional Records for all experiential site coordinators
- Completed time sheets for all time spent by students at experiential sites
- Documentation of how hours are calculated

Post-survey

- Survey report with findings arrived 10 days after survey
- Written response to findings report
  - 60 days
  - Respond to all statements of noncompliance or partial compliance
  - Response considered by Pharmacy Technician Accreditation Committee at their next meeting
- Accreditation retroactive to application file date

Technician Career Ladder and Opportunities

Example at the University of Rochester Medical Center

UR Overview - Medical Center

Rochester, New York

Strong Memorial Hospital

- **886 Licensed beds**
- **>100% Occupancy**
- **Quaternary Care**
- **Level 1 Trauma**
- **Pediatric Hospital**
- **Oncology Hospital/Infusion Centers (on and off-site)**
- **Off-site Emergency Services Center**
- **Off-site Ambulatory Surgery Center**
- **340B Eligible**

Highland Hospital

- **261 Licensed beds**
- **>100% Occupancy**
- **Acute Care**
- **Active Emergency Department**
- **Known for:**
  - **Nationally Ranked Geriatrics Program**
  - **Orthopedic Surgery**
  - **Region's Leading Gastric Bypass Program**
  - **Comprehensive Women's Services**
- **340B (Rural Referral Center)**

Regional Community Hospitals

- FF Thompson (125 beds)
- Noyes Memorial Hospital (67 beds)
- Jones Memorial Hospital (49 beds)
- St. James Hospital (15 beds)
- Several contractual relationships

Ambulatory Sites

- Medical clinics/primary careSpecialty Pharmacy Services
- Contract Pharmacy Services
- 10 licensed ambulatory pharmacies
- Home Infusion Pharmacy Services

Engaging your Technician Workforce

Salary Structure

Benefits

Compensation

Training

Education Opportunities

Engaged Workforce

Promotion

Career Ladders

Opportunity for Advancement

Skills and Teaching

Pharmacy Technicians – Define the Scope

Current Status: *Draft* PolicyStat ID: *5516184*

UR MEDICINE

STRONG MEMORIAL HOSPITAL

Origination:	*N/A*
Last Approved:	*N/A*
Last Revised:	*N/A*
Next Review:	*N/A*
Owner:	*Dave Webster*
Policy Area:	*SMH Pharmacy Policy*
References:	
Applicability:	*University of Rochester - Strong Memorial Hospital*

Pharmacy Technicians (and Unlicensed Persons) Scope of Duties

POLICY

Laws, rules and regulations governing the practice of pharmacy in New York State are defined in NYS Education Law Article 137, 137-A and Rules of the Board of Regents Part 29 (29.7a21). Although most reference is to retail pharmacy operations, institutional practice (hospital pharmacy) is governed under these sections. Pharmacy technicians are categorized as "unlicensed persons" in New York State for the purposes of this policy, with the exception of licensed Pharmacy Technicians registered in New York State for compounding activities. The scope of practice of pharmacy technicians is therefore regulated and limited as unlicensed persons and the following policy provides guidance for compliance with these laws, rules and regulations.

DESCRIPTION

A pharmacy technician may assist a pharmacist in the process of dispensing medications pursuant to the following criteria:

A. All pharmacy technicians must be certified through PTCB (Pharmacy Technician Certification Board) to enable the most effective support of pharmacists to advance patient safety and quality assurance. Certification must be obtained within one year of hiring (See Pharmacy Policy: Technician Certification).

B. All pharmacy technicians will complete training and initial competency assessments required for the area(s) that they will be providing support.

C. No more than 4 pharmacy technicians may assist a licensed pharmacist at a given point in time for support of dispensing functions, with the exception of compounding processes. For compounding processes, no more than 2 pharmacy technicians may assist a licensed pharmacist at any given point in time. The pharmacist provides oversight/supervision to the degree necessary to ensure compliance, whether located directly in the main pharmacy or supporting dispensing from other locations in the hospital.

D. Pharmacy technicians may assist in dispensing functions including (4:1 ratio technicians to pharmacist):

1. Obtaining medications for patient order fulfillment pursuant to a request (e.g., dispensing label)
2. Processing requests for additional doses (i.e. "missing doses") from patient care areas for existing orders
3. Re-packaging of medications into unit dose form, including oral liquids (not manipulating concentrations or diluting).

E. Pharmacy technicians may assist in compounding of medications (mixing, measuring, weighing ingredients) as long as the following conditions are met (2:1 ratio technicians to pharmacist):

1. A batch produced (regardless of quantity) requires a specific formula (commonly referred to as a "recipe") and detailed records including the following information at a minimum:
   a. Name and strength of medication ingredients
   b. Name of manufacturer and lot number
   c. Quantity of of each unit (dose) and number of units prepared
   d. The date of preparation
   e. Expiration date of the manufacturer for each ingredient
   f. Beyond use date of the product produced
   g. Signature or initials or the person producing the batch
   h. Signature or initials of the pharmacist conducting the final check of the product
   i. Other signature or initials of persons involved in the process as required (e.g. a "pre-check")
2. A pharmacy technician will not be required to perform calculations or provide interpretation or judgment on the amount of a product to add or manipulate as this will be defined in the "recipe" for the dose.
3. Technician is licensed as a registered technician in New York State which requires, in addition to minimum requirements for a pharmacy technician position:
   a. Application and Fee associated with registration in NYS
   b. Completion of formal compounding training as determined by the Department of Pharmacy, including documentation of successful training completion
   c. PTCB Certification

F. Activities that pharmacy technicians may perform but are exempt from the ratio of technicians to pharmacists include:

1. Activities that are not defined as the act of dispensing medications, including:
   a. Answering and triaging telephone calls from other staff in the hospital
   b. Delivery of medications to units or stock areas
   c. Inventory management and medication procurement activities (e.g. purchasing)
   d. Collecting patient information from patients or other electronic sources of profiles
   e. Maintenance and support of robotic and software systems
   f. Any custodial duties or environmental maintenance tasks (e.g. cleaning)
2. Technicians engaged in any unit dose cart filling activities

G. A pharmacy technician may not *independently* execute activities that require clinical judgment or direct patient assessment.

H. A pharmacy technician may not *independently* measure, weigh, or compound medications unless following batch production defined as manufacturing in section 3 above.

I. A licensed pharmacists will check all manual processes performed by technicians that are directly related to dispensing medications to specific patients.

J. Pharmacy Interns are not included in the ratios above.

REFERENCES

New York State Education Law Article 137 and 137-A http://www.op.nysed.gov/prof/pharm/article137.htm; https://www.nysenate.gov/legislation/laws/EDN/A137-A

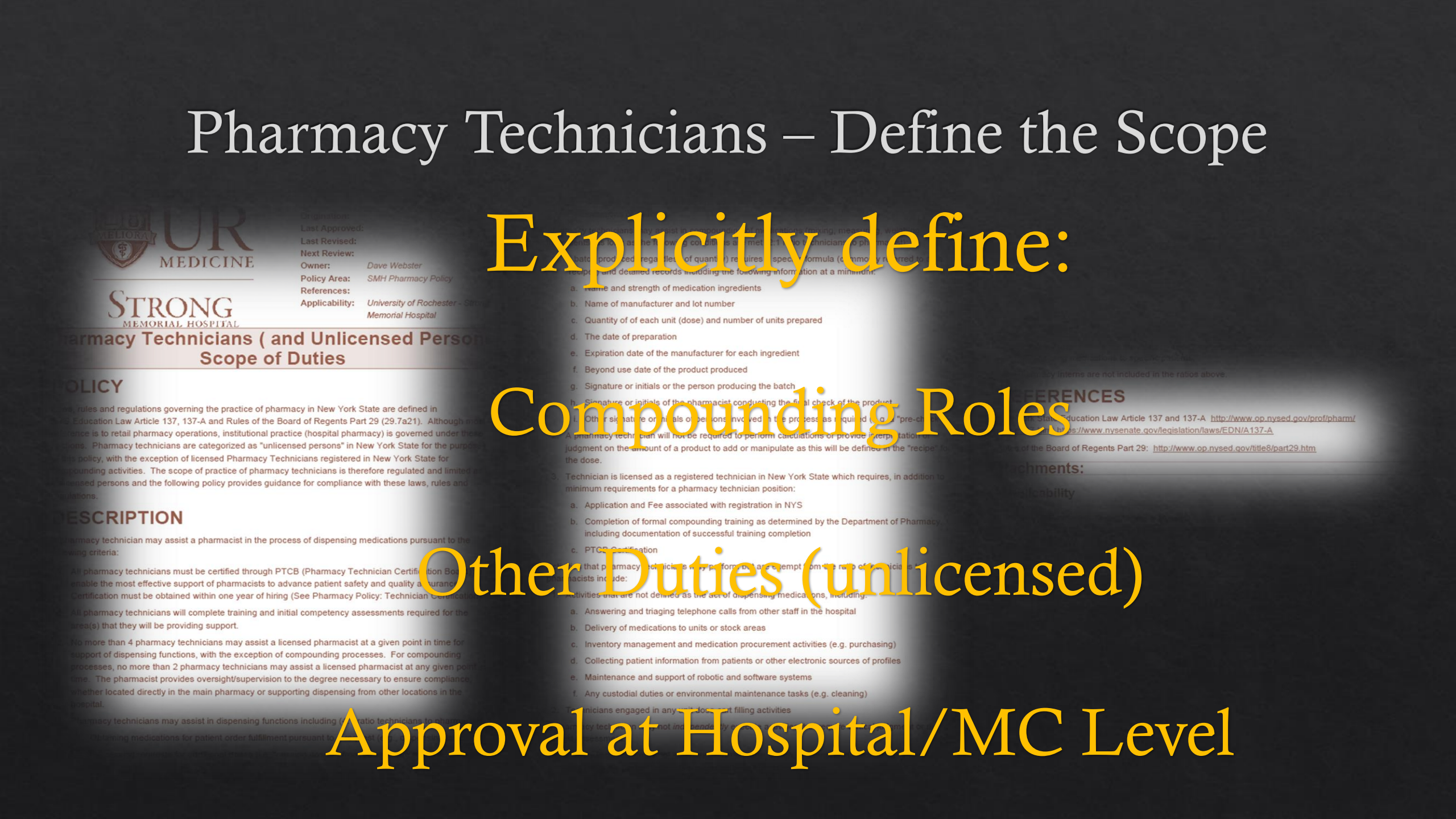
Rules of the Board of Regents Part 29: http://www.op.nysed.gov/title8/part29.htm

Attachments:

Applicability

University of Rochester - Strong Memorial Hospital

Pharmacy Technicians – Define the Scope



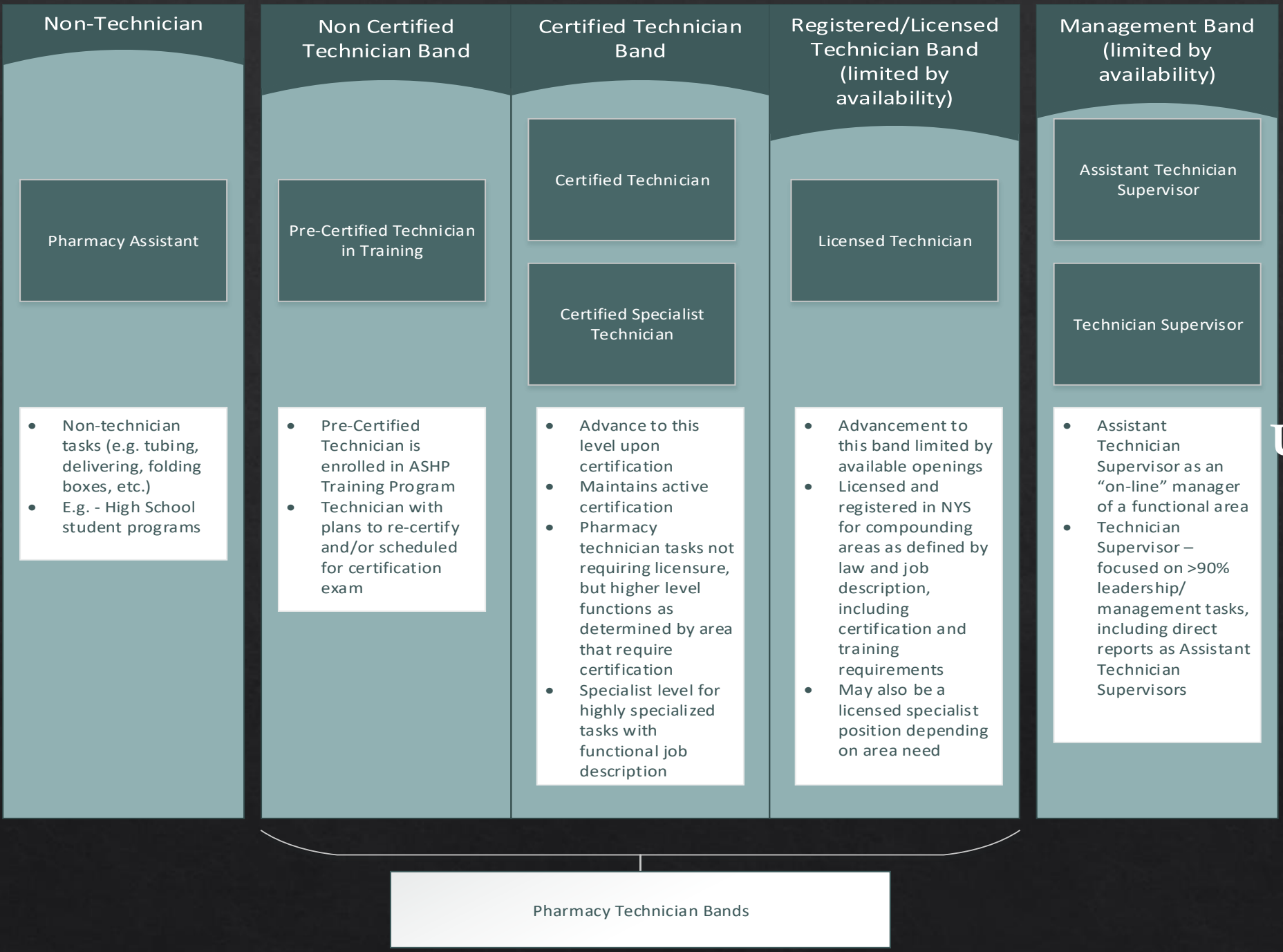
Explicitly define:

Compounding Roles

Other Duties (unlicensed)

Approval at Hospital/MC Level

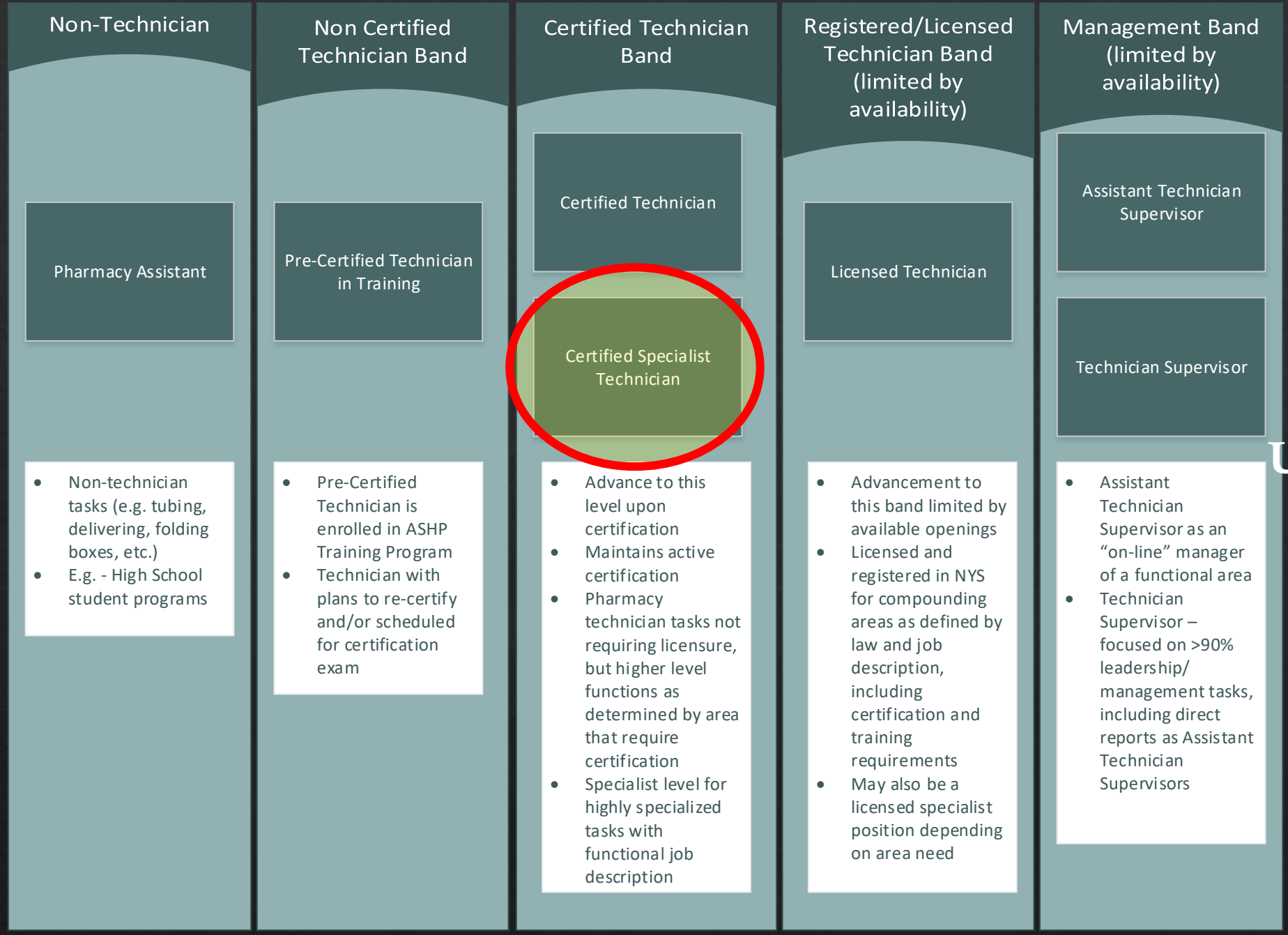
UR Pharmacy Technician Career Ladder



UR Pharmacy Technician Career Ladder

Non-Technician	Non Certified Technician Band	Certified Technician Band	Registered/Licensed Technician Band (limited by availability)	Management Band (limited by availability)
Pharmacy Assistant	Pre-Certified Technician in Training	Certified Technician Certified Specialist Technician	Licensed Technician	Assistant Technician Supervisor Technician Supervisor
• Non-technician tasks (e.g. tubing, delivering, folding boxes, etc.) • E.g. - High School student programs	• Pre-Certified Technician is enrolled in ASHP Training Program • Technician with plans to re-certify and/or scheduled for certification exam	• Advance to this level upon certification • Maintains active certification • Pharmacy technician tasks not requiring licensure, but higher level functions as determined by area that require certification • Specialist level for highly specialized tasks with functional job description	• Advancement to this band limited by available openings • Licensed and registered in NYS for compounding areas as defined by law and job description, including certification and training requirements • May also be a licensed specialist position depending on area need	• Assistant Technician Supervisor as an “on-line” manager of a functional area • Technician Supervisor – focused on >90% leadership/ management tasks, including direct reports as Assistant Technician Supervisors

UR Pharmacy Technician Career Ladder



UR Career Path – Technician Specialists

- Animal Research Lab Controlled Substance Coordinator
- Education/Quality Specialist (Program Director for Pharmacy Technician University)
- Medication History Technician Specialists [3]
- Neonatal Donor Milk Lab Specialists [2]
- Dispensing Robot Specialists [3]
- Technician Team Lead Specialists [3]
- Technician Training Specialists [5]
- Controlled Substance Vault Specialist
- Medication Shortage Specialist
- Sterile Compounding Technology Specialist [2]

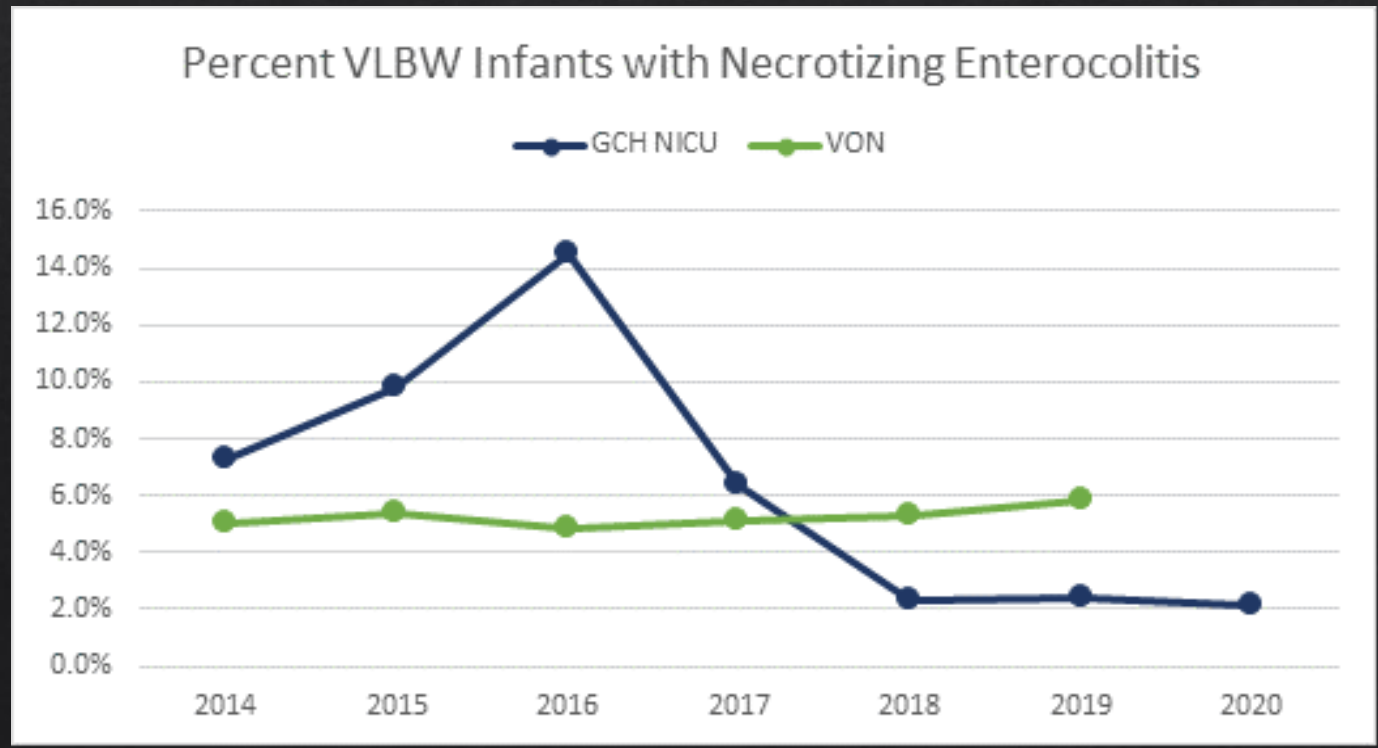
UR Career Path – Technician Specialists

- **Education/Quality Specialist** (Pharmacy Technician University - PTU)
- Oversee - ASHP Accredited (pending) Training Program
  - Non-Certified technicians are hired into the program (paid position)
  - Upon graduation, are scheduled to take PTCB exam for certification
  - Directly tracks progress, assesses performance, direct oversight of simulations, etc.
  - Preparation for ASHP Accreditation

RECENT CHANGE – Position has been upgraded to Administrator and PTU students report directly to this position, providing direct supervision.

UR Career Path – Technician Specialists

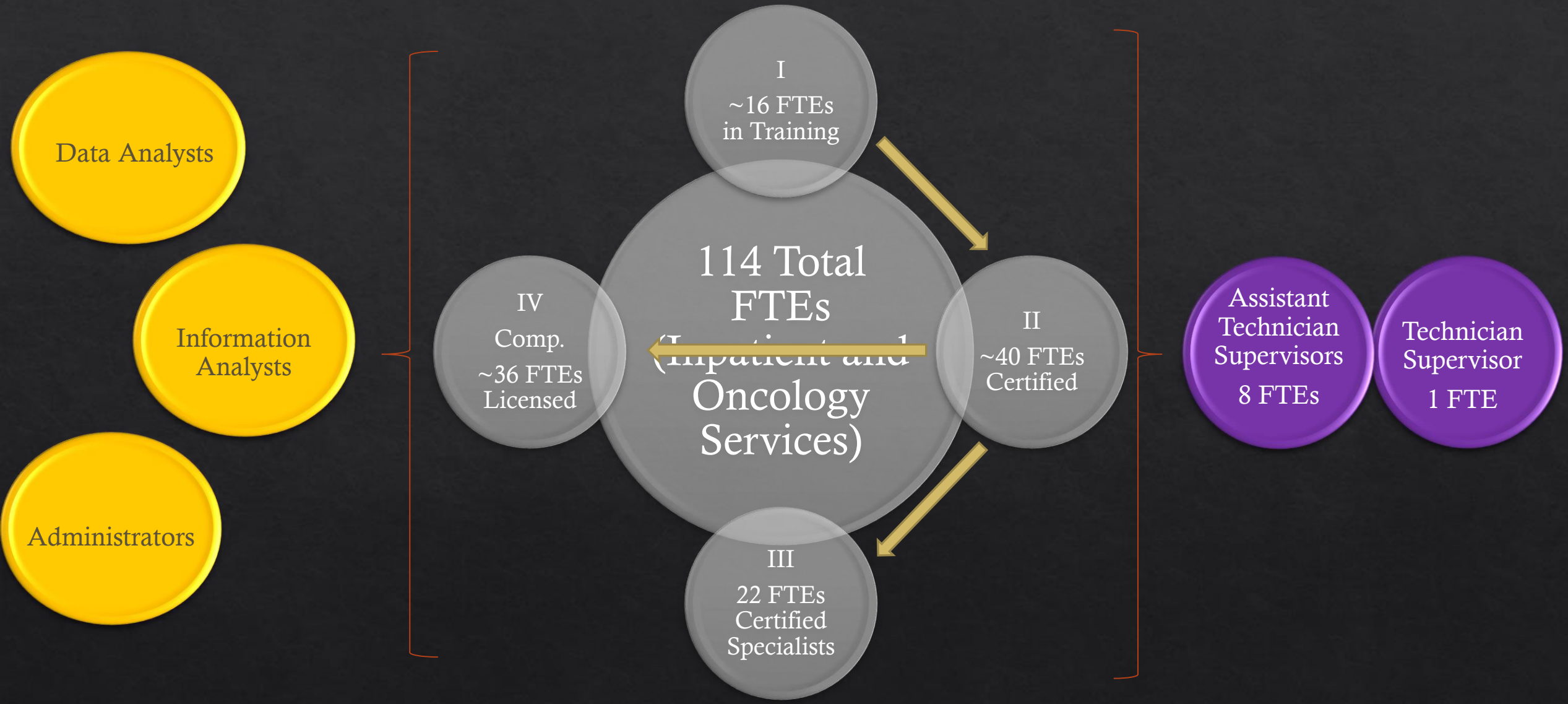
- **Donor Milk Lab Specialist**
  - Although not considered medications (infant nutrition), still a compounding process
  - Decision to leverage skills and training of Pharmacy Technicians
  - Outcomes (Annual Impact)
    - ~1000 fewer TPN days
    - ~700 fewer central line days
    - ~700 fewer patient days
    - 10-15 fewer cases of NEC
      - Estimated preventing 3 deaths per year from NEC)



UR Career Path – Technician Specialists

- **Sterile Compounding Technology Specialist:**
  - **Develop and maintain SOPs** (Standard Operating Procedures) related to operation of the various automated systems
  - **Meet or exceed production goals** as established by department leadership.
    - Maximizing extent of safety technology use
    - Minimizing downtime or alternate strategy use
    - Maximizing successful production throughput (examples: achieve production goals while maintaining Quality Assurance standards with 0% fail rate on Extended Beyond Use Date Sterility Testing, review of user feedback or complaints, etc)
    - **Use analytics tools** in various automation systems to **provide data on robot production, efficiency and functionality (using site records, enterprise utilization data, vendor analytics, etc)** to particular site pharmacist Manager or Supervising Pharmacist and other appropriate managers as identified.
    - Work with site leadership to identify trends and new opportunities to improve and expand automation utilization

UR Technician Career Path – Breakdown by FTEs



UR Technician Career Path – Cascading Goals

Medical Center Strategic Plan

Focus on Quality and Safety Pillar

Department of Pharmacy Strategic Plan

From Guiding Principles:
The well-being and safety of the patient is at the center of all decisions.

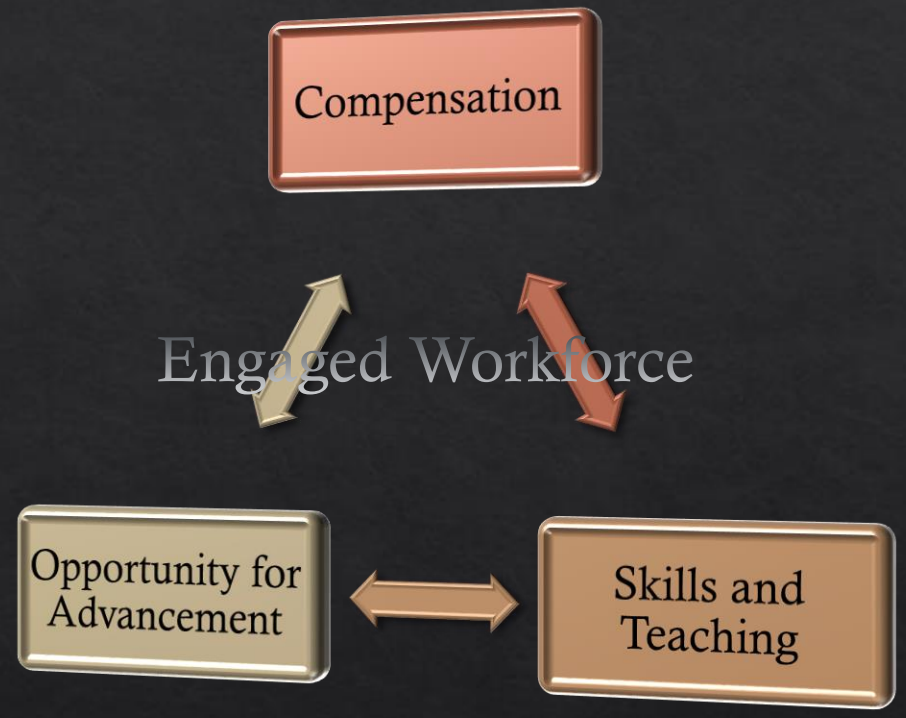
Strategic Direction: Achieve optimal utilization of technology and automation to decrease unwarranted variability in drug preparation and dispensing.

Individual Goals (part of Performance Evaluation)

Improve patient safety around preparation and dispensing of parenteral medications by continuing expansion of technology-driven objective confirmation of content and accuracy, with goal of 100% product under automated review.

Conclusions

- All 3 must be aligned and continuously developed
- Discussed Training (Skills and Teaching) and Career Ladders (Opportunity for Advancement)
- Benchmarking Compensation is challenging, but needs to be part of an overall engagement program



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