

What's on the Horizon for Pharmacy Technicians? Tech-Check-Tech

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Disclosure

I have nothing to disclose concerning
possible financial or personal relationships
with commercial entities that may have a
direct or indirect interest in the subject
matter of this presentation



Learning Objectives

- Describe the typical components of a Tech-Check-Tech program
- Identify barriers to the development of a Tech-Check-Tech program at your own institution
- Describe the benefits of implementing a Tech-Check-Tech program
- Discuss changes to the pharmacist and technician workflow after implementing a Tech-Check-Tech program



Tech-Check-Tech Program

- Utilize technicians to check certain medications in hospitals
 - Unit dose cassettes
 - Automated Dispensing Cabinet (ADC) refills
- Medications typically exempt from Tech-Check-Tech programs
 - First doses
 - Narcotics
 - Intravenous medications



History of Tech-Check-Tech

- 1980s
 - Tech-Check-Tech in California
- 1989
 - Tech-Check-Tech passed in Minnesota
- 1990s
 - Tech-Check-Tech no longer allowed in California
- 2000s
 - Various states begin to develop and implement Tech-Check-Tech programs



History of Tech-Check-Tech

- Requirements vary by state
 - Written into pharmacy law
 - Minnesota
 - Iowa
 - Allowed with approval of a variance
 - Wisconsin
- Illinois pharmacy law does not include Tech-Check-Tech



Tech-Check-Tech Components

- Technician Qualifications
- Technician Training
- Technician Validation
- Quality Assurance Program
- Tech-Check-Tech Ongoing Standards



Technician Qualifications

- Determined by the institution
 - Minimum years of service
 - Technician trained in certain positions
 - Medication delivery
 - Unit dose filling
 - ADC refills
 - IV room



Technician Training

- Didactic Training
 - Introduction to the Tech-Check-Tech program
 - Qualifications / Validation / Quality Assurance
 - Elements of packaging and product characteristics
 - Medication errors and medication distribution process
 - Checking the cart fill and ADC restock
 - Assessment questions



Technician Training

- Practical Training
 - Pharmacist led
 - Technician reviews all errors with training pharmacist
 - Intentional errors present



Technician Validation

- 99.8% accuracy
 - 500 consecutive doses
 - 1500 consecutive doses, 5 separate audits
 - 3500 consecutive doses, 5 separate audits
- Errors intentionally introduced at a rate of 0.2%



Quality Assurance

- A pharmacist will audit a percentage of all medications checked by the technician prior to delivery
- Any errors found will be recorded and discussed with the technician



Tech-Check-Tech Ongoing Standards

- If the accuracy of the technician is less than 99.8% over the lesser of a 6 month period or for the first 2000 double checked doses, the technician is required to be re-trained and re-validated
- If a technician does not check for more than two months, re-validation should be done
- If the technician does not check for 4 months, they must be re-trained and re-validated



Barriers to the Development of a Tech-Check-Tech Program

- Pharmacy state law determines if a Tech-Check-Tech program can be implemented
- Developing and implementing a Tech-Check-Tech program is time consuming



Benefits of a Tech-Check-Tech Program

- Career opportunities for technicians
- Pharmacists can spend more time on clinical activities
 - Working within a multidisciplinary health care team
 - Spending time with patients
 - Teaching pharmacy students and residents



Case Study: Implementing a Tech-Check-Tech Program

- Assessed checking accuracy of a pharmacist
 - Technician filled, pharmacist checked and auditing pharmacist double checked
- Assessed checking accuracy of a technician
 - Technician filled, technician checked, auditing pharmacist double checked



Case Study: Pharmacist Checking Accuracy

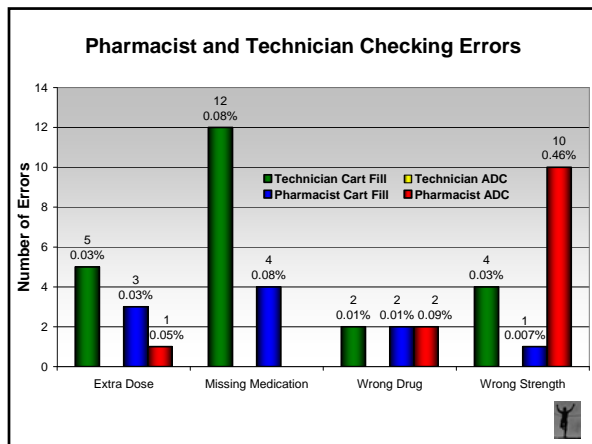
- Cart fill: 99.93%
 - Doses checked = 13,844
- ADC: 99.40%
 - Doses checked = 2,173



Case Study: Technician Checking Accuracy

- Cart fill: 99.85%
 - Doses checked = 15,070
- ADC: 100%
 - Doses checked = 3,793





Case Study: Workflow Impact

- Increase to more frequent delivery of medications
- Pharmacists working in the central pharmacy will have more time to spend on clinical responsibilities

Case Study: Workflow Impact

- Technician staffing model will change to accommodate the expanded role of the technician
- Career advancement for technicians
 - Integrate Tech-Check-Tech into a technician career path

Conclusion

- Various states currently have Tech-Check-Tech Programs
- Regulations differ by state
- Components of a Tech-Check-Tech program are similar between states



Conclusion

- Tech-Check-Tech allows for career advancement for technicians
- Pharmacists are able to focus more on patient care
- Tech-Check-Tech programs are safe and effective for medication delivery



Assessment Questions

1. Typical components of a Tech-Check-Tech program include:
 - a. Technician Training
 - b. Technician Validation
 - c. Quality Assurance
 - d. On-going Standards
 - e. All of the Above



Assessment Questions

2. One benefit from implementing a Tech-Check-Tech program is career opportunities for technicians
 - a. True
 - b. False
3. Pharmacy laws for Tech-Check-Tech are the same in all states
 - a. True
 - b. False



References

1. Ambrose PJ, Saya FG, Lovett LT et al. Evaluating the accuracy of technicians and pharmacists in checking unit dose medication cassettes. *Am J Health-Syst Pharm.* 2002; 59:1183-8.
2. Woller TW, Stuart J, Vrabel R et al. Checking of unit dose cassettes by pharmacy technicians at three Minnesota hospitals. *Am J Hosp Pharm.* 1991; 48:1952-6.



Questions?

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