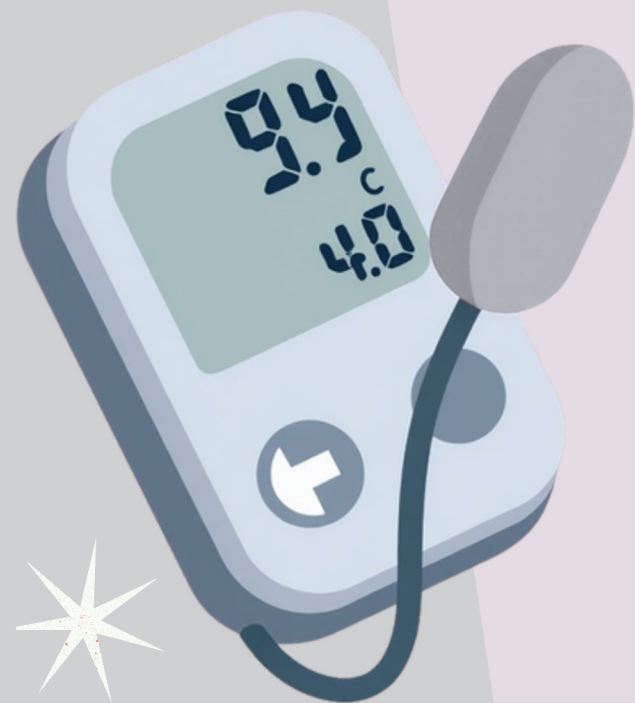
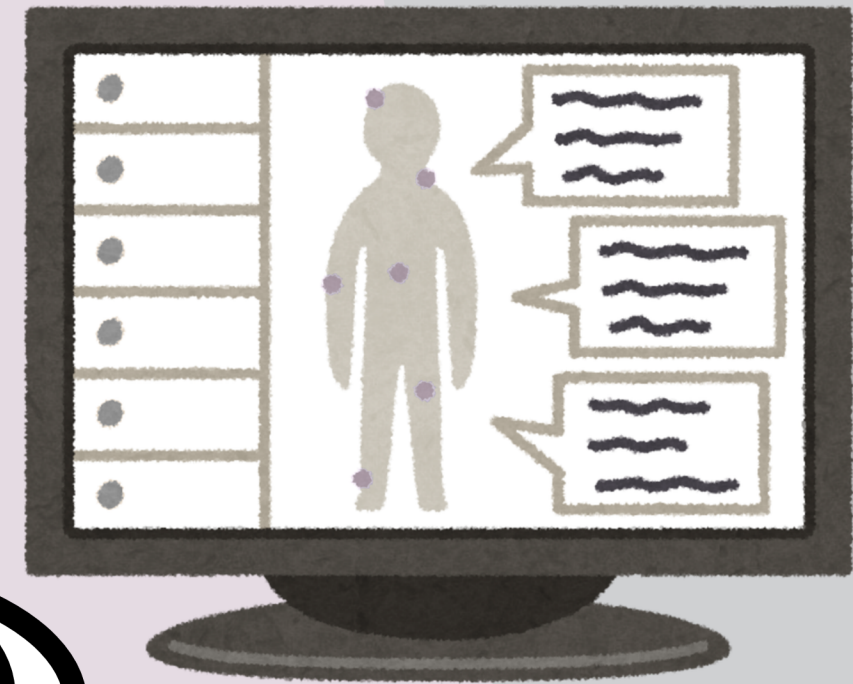


TECHNOLOGIES AND SYSTEMS

Pharmacology in Nursing

NUR4146-2263-5946

04/16/2026



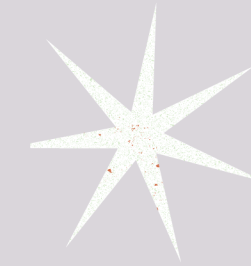


OVERVIEW OF HEALTHCARE FACILITY

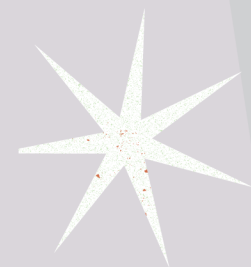
- Baptist Hospital of Miami
- Part of Baptist Health South Florida
- Founded in 1960
- Not-for-profit, faith-based organization
- Large acute care hospital with specialized services



MISSION & VALUES



- Mission:
 - Improve health and well-being of individuals
- Patient-centered, compassionate care
- Core values:
 - Compassion
 - Excellence
 - Integrity
 - Respect
 - Faith-based care



PATIENT POPULATION

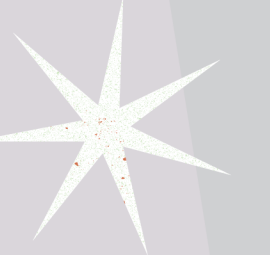
- Serves diverse population in South Florida
- Includes:
 - Adults & elderly patients
 - Chronic and acute conditions
 - International patients
- Focus on culturally diverse care





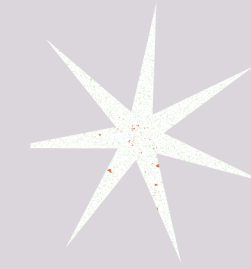
INTERVIEW INTRODUCTION

- Interview conducted with nurse leader
- Focus:
 - Medication administration systems
 - Technology use
 - Patient safety
- Goal: Evaluate effectiveness and safety

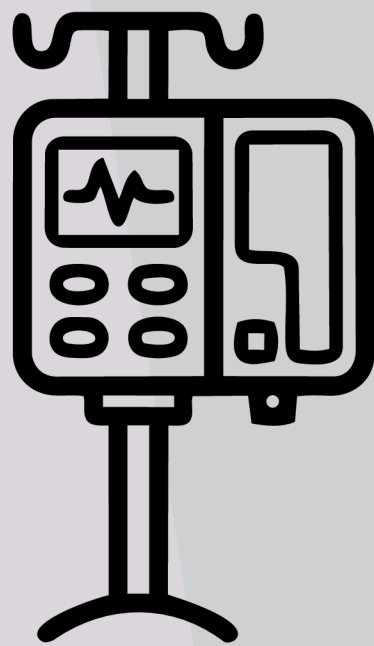
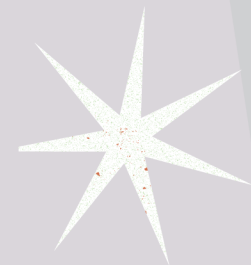




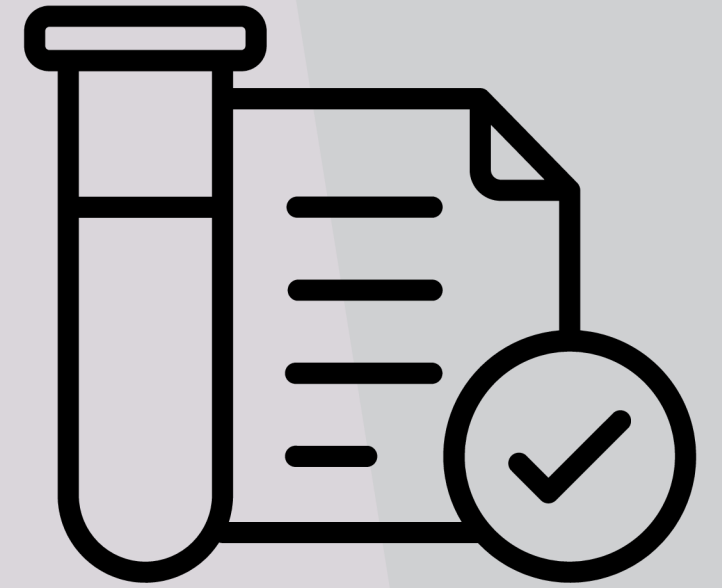
TECHNOLOGY USED



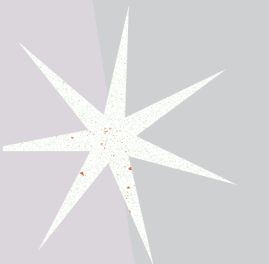
- Electronic Health Record (Cerner)
- Barcode Medication Administration (BCMA)
- Smart IV pumps
- Automated dispensing systems (Omniceil)
- Secure communication systems



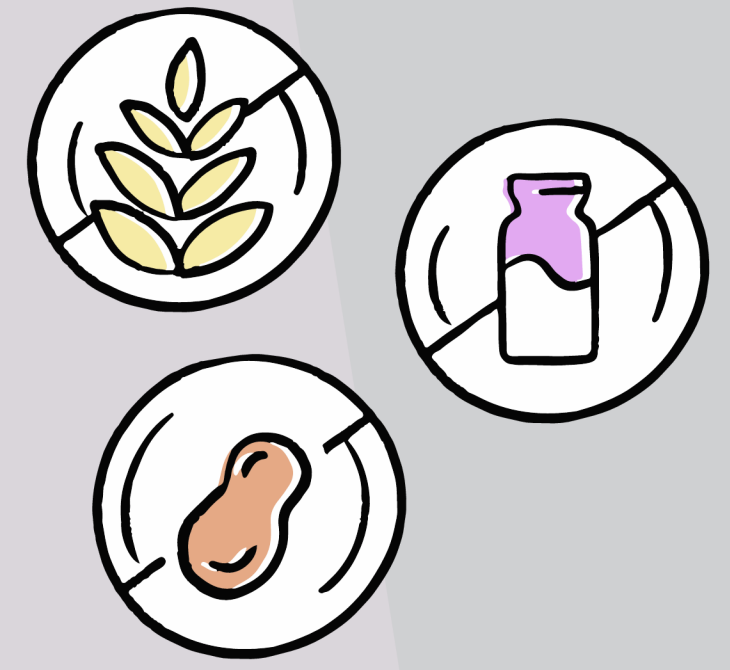
ELECTRONIC HEALTH RECORD (CERNER)



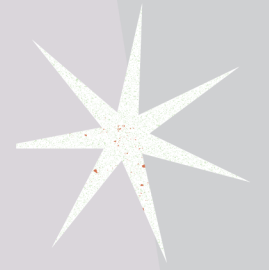
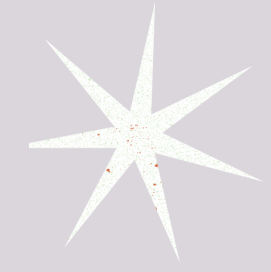
- Digital patient charting system
- Real-time access to:
 - Labs
 - Orders
 - Medications
- Improves communication among providers



MEDICATION ORDERS

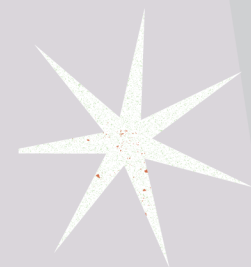
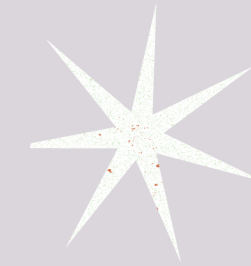


- Provider enters orders electronically
- Reduces transcription errors
- Includes:
 - Dose
 - Route
 - Frequency
- Alerts for allergies/interactions

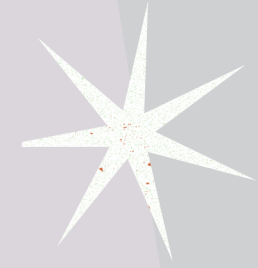


DOCUMENTATION

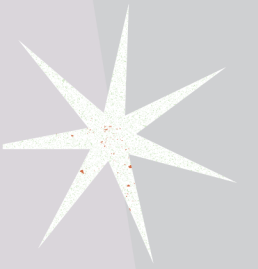
- Real-time medication documentation
- Tracks:
 - Time
 - Dose
 - Patient response
- Legal record of care
- Improves team communication



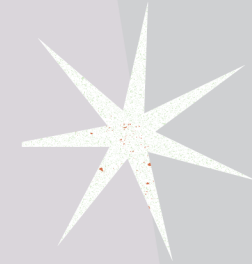
WHY TECHNOLOGY IS USED



- Reduces medication errors
- Improves accuracy
- Enhances communication
- Supports clinical decisions
- Increases efficiency



IMPORTANCE FOR SAFETY



- Right Patient
- Right Medication
- Right Dose
- Right Route
- Right Time

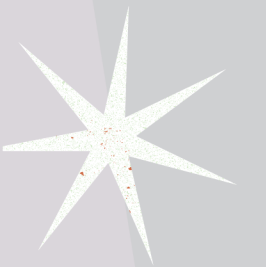


- Supports 5 Rights of medication administration
- Barcode scanning prevents errors
- Smart pumps control IV dosing
- Alerts for drug interactions
- Improves accountability

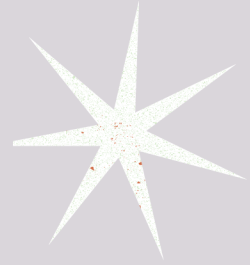


EVALUATION OF SAFETY

- Strengths:
 - Reduces human error
 - Improves patient safety
 - Enhances workflow
- Challenges:
 - Alert fatigue
 - System downtime
 - Over-reliance on technology



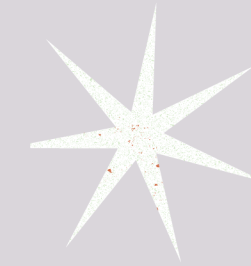
CRITICAL EVALUATION



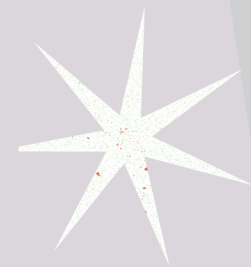
- Technology improves safety but is not foolproof
- Requires:
 - Proper training
 - Clinical judgment
 - Nurse accountability
- Balance between technology and critical thinking



RECOMMENDATIONS

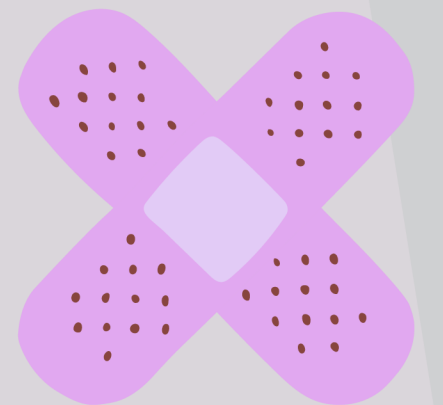
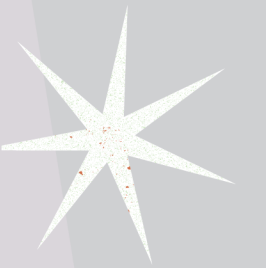
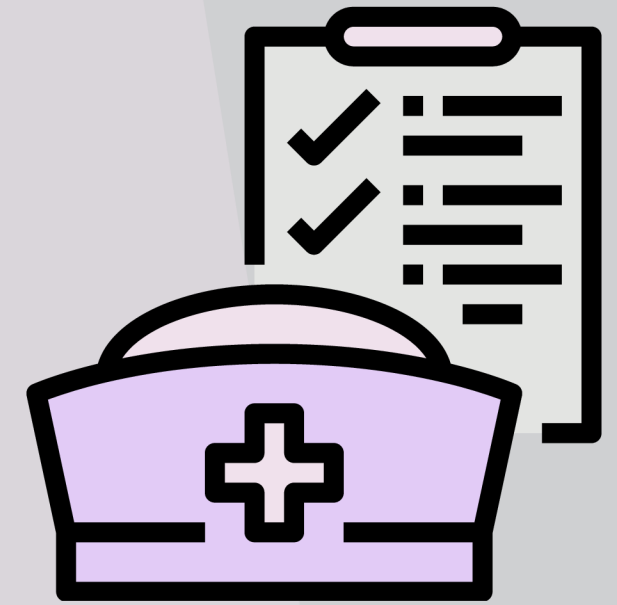
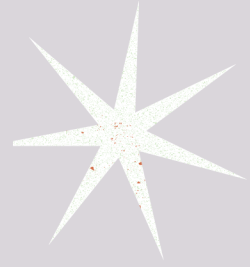


- Ongoing staff education
- Improve system usability
- Reduce alert fatigue
- Encourage double-check practices
- Maintain patient-centered care

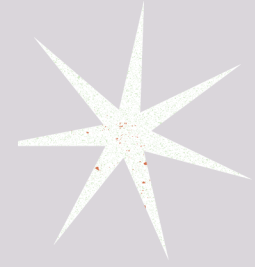


CONCLUSION

- Technology enhances medication safety
- Supports accurate and efficient care
- Nurses play a key role in safe use
- Continuous evaluation is necessary



REFERENCES



Baptist Health South Florida. (2024).

