

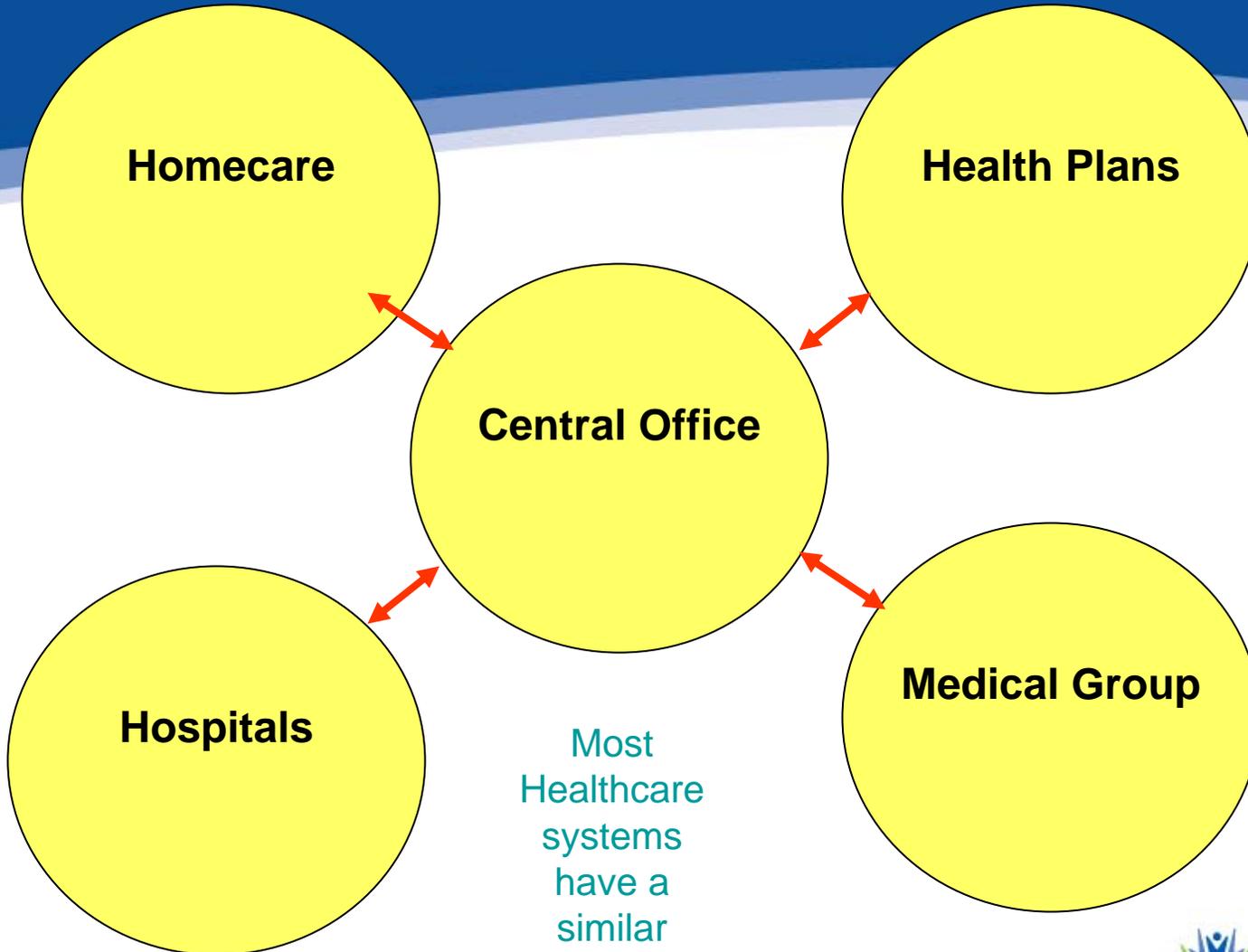


# Clinical Pharmacy Services

An Introduction to the World of Pharmacy



# The World of Pharmacy



Most  
Healthcare  
systems  
have a  
similar  
structure

# Intermountain Medical Group



Retail

20 Retail  
Pharmacies

Clinics

Primary Care  
&  
Specialty Care

# Community Pharmacy



- Patient training for diseases such as:

- Diabetes
- Asthma
- Hypertension



- Consult with:

- Physicians
- Nurses
- Physician Assistant's
- Medical Assistants
- Physical Therapists, etc.



# Community Pharmacy

- Detailed & Private Patient Medication Counseling
- Personal patient help with Medicare D & insurance 3rd parties.
- Physician & Health Plan formulary issues.
- Help Prevent Adverse Drug Events
- Professional & Clinical Practice Setting
- Professional Experience Programs with Schools of Pharmacy



# Community Pharmacy in an Integrated System

- Part of integrated health system = special benefits
  - Increased access to patient information
  - Easier to monitor patients
  - Help transition patients from hospital to home
  - For example, Liver transplant patients who have very complex medication regimens
- Help ensure patients are on optimal therapy
  - For example, all patients post heart attack are on the appropriate medications that are know to improve their outcomes
- Close to prescribers (or pharmacist may be prescribing under approved protocols)
  - Develop excellent relationships
  - Easier access for questions and recommendations

# Ambulatory Pharmacy

- Pharmacist or Physician run
  - ➔ Physical Assessment
  - ➔ Pharmacist/Physician agreements for medication orders
  - ➔ Order lab tests
  - ➔ Patient education
- Some Pharmacists integrate ambulatory clinics with retail
- Disease state certifications
- Billing for services

**Homecare**



Infusion Services

Hospice



## Health Plans

Health Maintenance

Disease State Management

Formulary

Health Plan Administration

# Health Plans



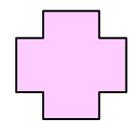
Briana Buckley, PharmD.  
teaching technicians about a  
new pharmacy benefit.

- A typical day.....
- P&T Presentation Preparation
- Team Based Guideline Development
- Physician Detailing
- Drug Expense Trending
- Prior Authorization Review



# Hospitals

22 Hospitals



- Park City
- Riverton
- IMC

Urban

Rural

**UNR**

Urban North Region

**UCR**

Urban Central Region

**USR**

Urban South Region

**SWR**

South West Region

**PCMC**

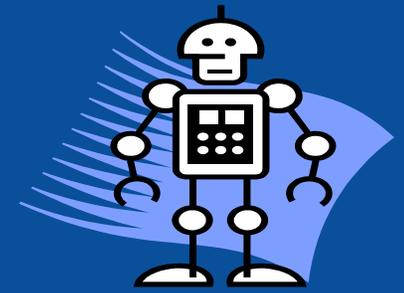
Primary Children's Medical Center

20 – 40 beds

Critical Access



# Hospital Pharmacy



- Distribution of medications
  - High level of technology
    - ➔ Robots
    - ➔ Automatic medication cabinets
    - ➔ Mostly technicians under pharmacist supervision
- Clinical Patient care
- Education
- Drug information

# Adult Critical Care

Discussing  
Patient  
issue with  
RN



- Monitor Patients
  - ➔ Labs & Drug levels
  - ➔ Physical condition (kidney, liver..)
- Protocols & Medication orders
- Safety issues
- Medication effects
- Meeting patient outcome goals
- Rounding with medical teams
- Preventing/treating ADEs
- Assisting with codes
- Drug Information
- Research
- Troubleshooting

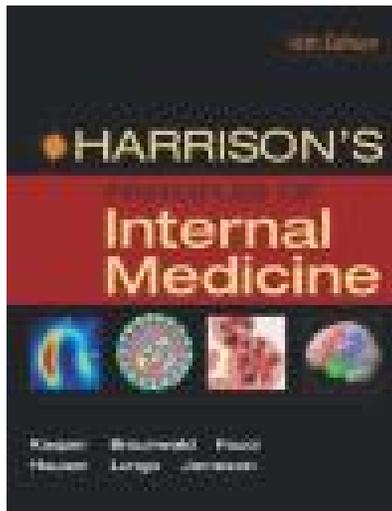


Patient  
Rounds

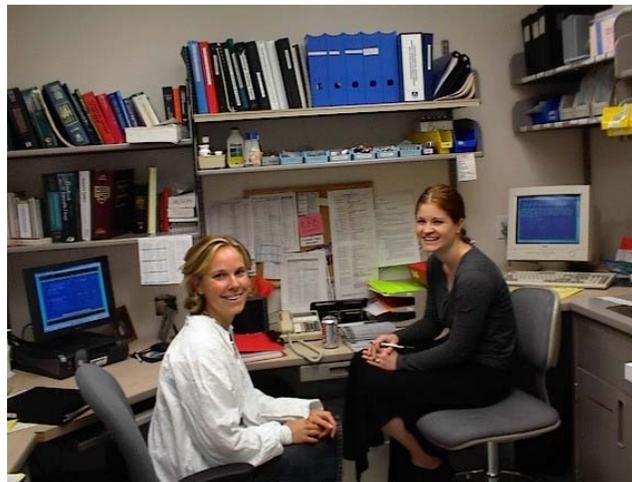
# Cardiovascular Pharmacy



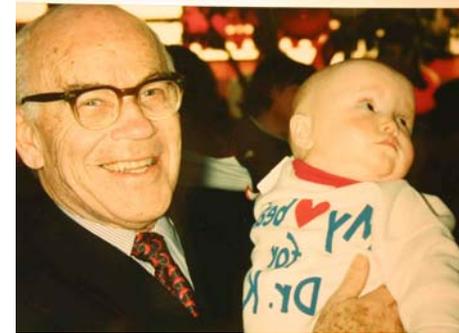
# Internal Medicine



# Pediatric Pharmacy



# Neonatal Pharmacy



# Education



Physician teaches students, residents, & Pharmacists about Acute Respiratory Disease

- Patients
- Medical students
- Pharmacy students
- Physicians
- Pharmacy Technicians
- Nurse Practitioners
- Respiratory Therapists
- Many others!



## Central Office

Administration

System-wide Formulary & Purchasing

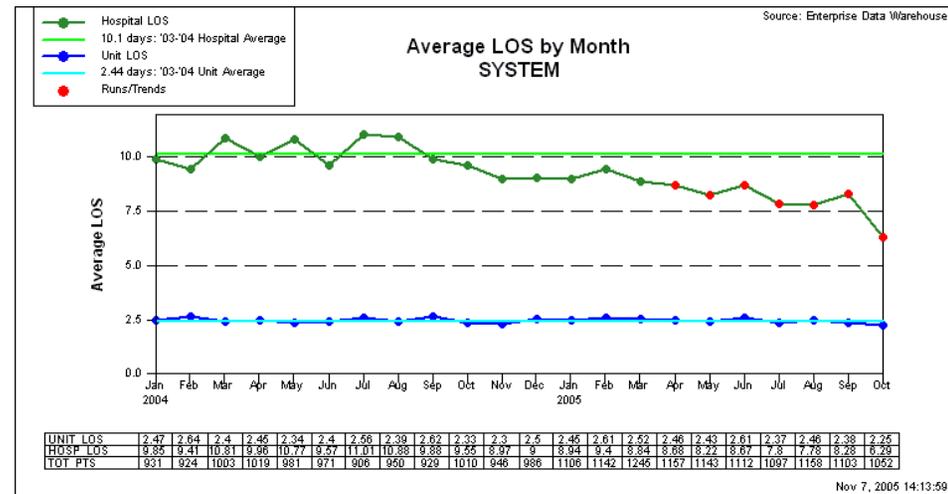
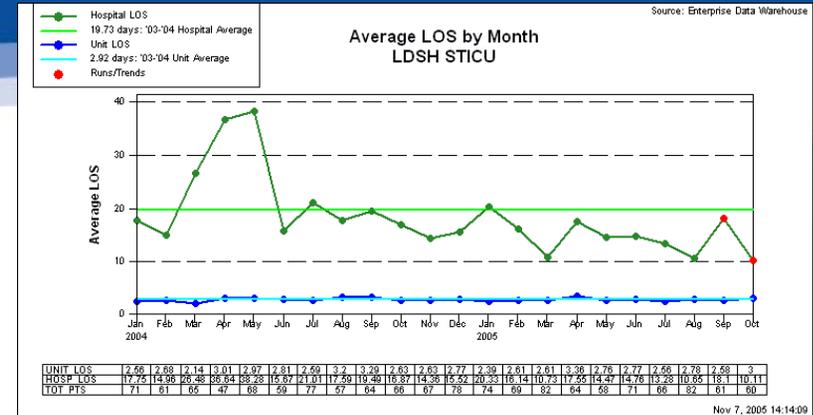
Clinical Support

Operational Support

Information System Development & Support

# Pharmacy Management

- Medication safety
- Clinical Programs
- Formulary
- Education
- New initiatives
- Much more....!



# Data Management



Vance Loertscher, RPh  
Data Manager

- Data reports
- Clinical reports
- Research
- Pharmacy & Therapeutics Committee support
- Automation Strategy & use
  - ➔ Robots
  - ➔ Automatic dispensing cabinets
- Drug Use Evaluation

# System Development & Implementation



- Computer system design
- Clinical decision support tools
- Database design
- Database management
- System testing
- Education & training
- Medication order sets
- Patient care protocols
- Clinical Patient Care tools

# Opportunities

- Shadowing - observe
- Internships - work
- Clerkships - rotation
- Residency – post graduate
- Certification – post graduate



All provide excellent opportunities to experience the different avenues of pharmacy

# Residency

Kelly Terrill, Pharmacy Director

# Back to the Future



- Lifelong Learning
- Residency Training
- Board Certification
  - Pharmacotherapy
  - Nuclear Pharmacy
  - Nutrition Support
  - Oncology
  - Psychiatry
  - Others....

# Getting Ready....



- There's a whole world of different options for Pharmacy Professionals
  - ➔ Explore
  - ➔ Shadow
  - ➔ Network
- Many Exciting Opportunities.....
  - ➔ Be Proactive
  - ➔ Ask Questions!
  - ➔ Let us know how we can help you
  - ➔ Opportunities to get involved with the Utah Society of Health-System Pharmacists - USHP (no charge to students)

