Clinical Pharmacy Services

An Introduction to 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 known 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
Health Plans

Health Maintenance

Disease State Management

Formulary

Health Plan Administration
Health Plans

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

Brieana Buckley, PharmD. teaching technicians about a new pharmacy benefit.
22 Hospitals

Urban
- UNR: Urban North Region
- UCR: Urban Central Region
- USR: Urban South Region
- SWR: South West Region
- PCMC: Primary Children’s Medical Center

Rural
- Park City
- Riverton
- IMC

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

- 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

Discussing Patient issue with RN

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

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

Vance Loertscher, RPh
Data Manager
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)