Welcome to
Acute Care Preceptors Conference
October 27th 2009

UC San Diego
SKAGGS SCHOOL OF PHARMACY
AND PHARMACEUTICAL SCIENCES
Agenda

• Welcome
• Follow up from last conference
• Online training opportunities via SSPPS website
• Therapeutics
• Best practice in acute care series
• Hospital operations
• Open table discussions
• Wrap Up
Therapeutics
Therapeutics Series

- Three cumulative courses (fall, winter, spring)
- During the third year
- On therapeutic management of disease
- Around 120 lectures
- Around 25 conferences
- Many volunteer faculty are involved
Goal of Therapeutics Series (and other core courses)

• Prepare students for the 4th year

• Students should know:
  – The pathophysiology of major disease states
  – The pharmacology of drugs used to treat these disease states
  – Critically analyze the decision process
  – Create and implement therapeutic plans
    • Individualized plan
    • Therapeutic monitoring
    • Toxic monitoring
Other Core Courses

• Laboratory medicine
  – Second year
• Current topics in pharmacology series
  – Concurrent with therapeutics series
  – Third year (3 quarters)
• Microbiology & infectious disease series
  – Third year (2 quarters)
• Applied pharmacoeconomics
• Etc.
General Principles

- Clinical pharmacokinetics
- Fluid and electrolyte disorders
- Acid-base disorders
- Pain management (acute and chronic)
Cardiovascular Disorders

• Dyslipidemias & coronary heart disease
• Essential hypertension; hypertensive crises
• Ischemic heart disease & myocardial infarction
• Heart failure
• Cardiac arrhythmias & pharmacokinetics
• Stroke
• Anticoagulation (PE; DVT; A-Fib)
Endocrinologic Disorders

- Diabetes Mellitus
- Adrenal gland disorders
- Thyroid disorders
- Contraception
Gastrointestinal Disorders

- Peptic ulcer disease
- Gastro-esophageal reflex disease
- Liver disease
- Drug induced liver disease
- Drug dosing in liver failure
- Parenteral nutrition
Renal Disorders

- Acute renal failure
- Chronic kidney disease
- Renal replacement therapy
  - Intermittent dialysis
  - Continuous dialysis
  - Peritoneal dialysis
- Renal and dialysis drug dosing
Psychiatric Disorders

- Attention deficit hyperactivity disorder
- Alzheimer disease
- Anxiety disorders
- Bipolar disorder & Lithium pharmacokinetics
- Depressive disorders
- Headache
- Schizophrenia
- Sleep disorders
- Substance abuse (including alcohol)
Oncologic Disorders

- Chemotherapeutic principles
- Complications of Chemotherapy
- Breast cancer
- Hodgkin's & non-H Hodgkin's
- Bone marrow transplant
- Cancer pain
Other Disease States

- Anemia
- Asthma and COPD; allergic rhinitis
- BPH, ED
- Convulsive disorders, PK of anticonvulsants
- Dermatology
- Glaucoma
- Menopause
- Parkinson’s disease
- Rheumatoid arthritis & osteoarthritis
- Osteoporosis
- Obesity
- Solid organ transplantation
Therapeutics conferences

• Eight groups (7 or 8 students)
• Student leaders (2 assigned per week)
• Conference facilitators (PGY1 or PGY2 residents)
  – Write two cases, reviewed by lecturer
  – Discussed during preconference
• Two patient cases per week
  – One has seen the case
  – Second case is given during the conference
• SOAP format
SOAP Format for Each Problem

• Subjective and Objectives
  – Current medications

• Assessment:
  – Etiology
  – Evaluate need for therapy, evaluate current therapy or new therapy

• Plan:
  – Recommend drug treatment, drugs to be avoided, further tests if needed
  – Goals and monitoring parameters
  – Patient education
Best Practices in Acute Care Medicine Precepting

Kelli A. Stadalman, Pharm.D.
UCSD Medical Center
October 27, 2009
Outline

• What are best practices?
• Effective clinical preceptors
• The Alice/Kelli model
• What works/why
• Implementation
Best practice?

• A **best practice** is a technique, method, process, activity, incentive or reward that is believed to be more effective at delivering a particular outcome than any other technique, method, process, etc.

• most **efficient** (least amount of effort) and **effective** (best results) way of accomplishing a task

• best-practice is considered by some as a **business buzzword** used to describe the process of developing and following a standard way of doing things that multiple organizations can use

• There is, however, no **practice** that is best for everyone or in every situation, and no best practice remains best for very long as people keep on finding better ways of doing things

http://en.wikipedia.org/wiki/Best_practice
http://www.businessdictionary.com/definition/best-practice.html
The Effective Clinical Preceptor

- Basic needs of adult learners
  - Acknowledgement of past experiences and prior knowledge
  - Active involvement in learning
  - Affiliation

- Environment
  - Friendly, helpful, accepting, caring

The Effective Clinical Preceptor, 2nd edition, 2007 Department of Clinical Pharmacy, UCSF School of Pharmacy
The Effective Clinical Preceptor

• Effective and efficient precepting
  – Plan ahead and plan for the unexpected
  – Integrate teaching into the day
  – Encourage collaborative learning
  – Provide feedback
My Effective Clinical Preceptors

- TIME
- Enthusiasm
- Encouragement
- Challenge
- Intellect
- Consistency
“Alice and Kelli” Practice

• 7 on / 7 off
  – 0800 – 1930
  – Continuity

• A time for everything…
  – 0800-0900 e-mail, PK list, follow up
  – 0900-1300 satellite
  – 1300-1400 lunch
  – 1400-1630 student/clinical time
  – 1630-1930 satellite
Precepting

- 2 students
- Each student is assigned to a medicine team
- Daily responsibilities
  - Pre-rounding, rounding, follow up
  - Pharmacokinetics
  - Warfarin counseling
  - Patient presentations
Responsibilities

• Thursday afternoon presentations
  – Two disease state presentations
  – One patient case presentation (30-45 minutes)
  – One journal club presentation
• Morning Report presentation
• Quizzes/competencies
Competencies

- PK
- Warfarin
- Chemotherapy
- Antibiotics
- Anti-coagulation/digoxin loading
- TPN
- Neuro-psych
The all important calendar

• Pharmacists like structure and consistency
• Students like it even more
• 6 week calendar outlines goals for rotation
  – Quizzes
  – Topic discussions
  – Thursday presentations
• Holds everyone accountable
Why it works

• Team Thornton
  – We are \textit{primary} preceptors, but not \textit{solitary} preceptors
  – Students have their pick of pharmacists...
  – Pharmacists have their pick of students...
Why it works

• Expectations are clearly outlined up front
  – Demanding rotation
  – High expectations

• Flexibility
  – This is healthcare after all
  – Students’ interests
Why it works

• Preceptors’ work hours are conducive to teaching
  – Dedicated afternoon time to students, available by pager rest of day
  – On-site 365 days/year

• Students’ hours are conducive to learning
  – Long days but with minimal down time and waiting around
  – Variety of responsibilities
How we manage

• Dynamic, yet structured
• Yes we get tired…that’s why we take a week off!
• E-mail sign out at least q week
• Dinner meetings at least 2x/rotation to go over student evals together
Implementation

• Make teaching a priority
  – Dedicate time each day
  – Delegate

• Calendar
  – Simple but effective
  – Rough outline

• Competencies/quizzes
  – Consistency each block
  – Ensures everything is covered
Implementation

• Enlist support of co-workers
  – Co-precept and collaborate when possible
  – Encourage students to do the same

• Remember, we lead by example
Hospital Pharmacy Operations
Hospital Practice Rotation

• We only have 5 sites
• 25 available spots this year
• Offered as an elective
• Future expansion
• If we can offer it to all 60 students
  – Can perhaps become a required rotation
Hospital Pharmacy Operations

- Medication management
- Information systems
- Regulatory requirements
  - Safety
  - Effectiveness
- Clinical services
- Quality assurance
- Business administration
  - Inventory control
Medication Management

- Procurement
- Prescribing/order entry
- Dispensing
- Administering
- Monitoring
- Education
- Outcomes
One of APPE Objectives

• Students will be able to understand the hospital pharmacy operations that support clinical services. These operations include but are not limited to pharmacy computer system, automated dispensing system, narcotics monitoring system, quality assurance process, aseptic technique monitoring system, and discharge medication process.
Clerkship Activities

- Students will participate in the hospital pharmacy operations as assigned by their preceptors.
Pilot Project at UCSD sites

• One of weekly conferences
  – Hospital pharmacy operations
• Students are instructed to observe various activities during their rotations
• Preceptors are encouraged to allow students to shadow a Technician/pharmacist for few hours
• We are hoping to expand to other sites
Comments and Recommendations

• Is appreciated
• Is this feasible at your site?
• How can we implement/expand to all sites by next year?
• Please let us know by next preceptors conference
• fjahansouz@ucsd.edu
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Thank You All, We Will See You Next Time!