

Pharmaceutical Care Assessment

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Background

Collection of S & O Information

- Data:
 - CC, HPI, PMH, PSHx, Demographics
 - Medication history including compliance etc.
 - VS, ROS, Lab, other diagnostics
- Sources:
 - Patient, family
 - Other healthcare providers
 - Medical records / computer

Key questions

- Is each medication:
 - Indicated?
 - Effective?
 - Safe?
 - One the patient will be compliant with?

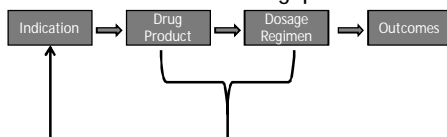
Start with:

The problem (diagnosis) list

- Includes diagnosis and other problems
 - First is the most important diagnosis to explain the chief complaint
 - Usually determined by the physician, and may change as more information becomes available
 - Include current medical problems
 - From patient or those identified by physician
 - Add other problems you identify
 - Compliance, Allergies, Contraindications etc.

Indicated?

- Match each medication with the (problem / diagnosis / indication) for which it is prescribed
- Look for miss-matches & gaps



Indication?

Problem List

- **Urinary Tract Infection**
- Fever
- Pain
- *Penicillin Allergy*
- *Renal dysfunction*

Medication List

- Ceftazidime
 - 2 grams IV every 8 hours
- Promethazine
 - 25 mg IV every 6 hours as needed for fever

Indication?

Problem List

1. **Urinary Tract Infection** →
2. Fever ↔
3. Pain ↔
4. *Penicillin Allergy*
5. *Renal dysfunction*

Medication List

1. Cefazidime
– 2 grams IV every 8 hours
2. Promethazine
– 25 mg IV every 6 hours as needed for fever

Indication

Problem List

- Hypertension
- Diabetes
 - Hyperglycemia
 - Nephropathy
 - Metabolic syndrome

Medication List

- Lisinopril
 - 10 mg PO once daily
- Metformin
 - 500 mg PO twice daily

Indication

Problem List

- Hypertension ↔
- Diabetes
 - Hyperglycemia ↔
 - Nephropathy ↔
 - Metabolic syndrome ↔

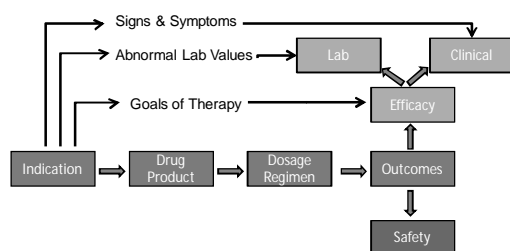
Medication List

- Lisinopril
 - 10 mg PO once daily
- Metformin
 - 500 mg PO twice daily

Effective?

- What parameters (subjective & objective) measure?
 - Lab values (WBC, A1C)
 - Clinical data (BP, HR)
- What are the patient-specific goals
 - Absolute value (<10 WBC, A1C < 7; BP < 130/80...)
 - Time frame

Efficacy



Efficacy?

Problem List

- Urinary Tract Infection
- Fever
- Pain
- Penicillin Allergy
- Renal dysfunction

S & O parameters

- VS: T max
- ROS: Urinary symptoms
 - Dysuria, frequency
- Lab:
 - Urine analysis
 - WBC, Nitrites, LE
 - Bacteria
 - Culture results
 - Organism
 - Susceptibility

Efficacy?

Problem List

- Urinary Tract Infection
- Fever
- Pain
- Penicillin Allergy
- Renal dysfunction

S & O parameters

- VS: T max
- ROS: Urinary symptoms
 - Dysuria, frequency
- Lab:
 - Complete Blood Count (WBC)
 - Metabolic Profile
 - Urine analysis
 - WBC, Nitrites, LE
 - Bacteria
 - Culture results
 - Organism
 - Susceptibility

Efficacy - Regimen?

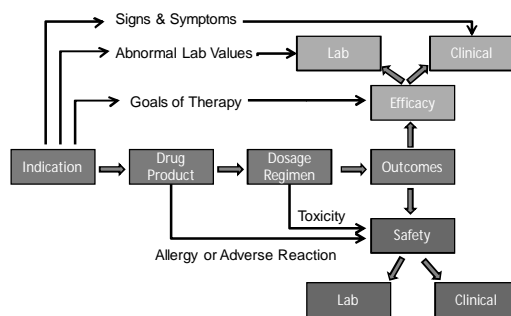
Medication List

1. Ceftazidime
 - 2 grams IV every 8 hours

Efficacy

1. Drug?
 1. Is organism likely or known to be susceptible
2. Dose
 1. Adequate for
 1. Site
 2. Severity
 3. Weight
3. Route (IV vs PO)
4. Frequency...

Safety



Safety

Medication List

1. Ceftazidime
 - 2 grams IV every 8 hours

Safety

1. Drug?
 1. Allergy / hypersensitivity
 2. Interactions
2. Dose
 1. Correct for
 1. Site, Severity, Weight
3. Route (IV vs PO)
4. Frequency
 1. Adjusted for renal dysfunction

Compliance

Medication List

1. Ceftazidime
 - 2 grams IV every 8 hours

Compliance

1. Able to
 1. Tolerate?
 2. Remember?
 3. IV access?
 4. Be floor to get it?
 5. Afford?

Putting it together

Indication	Drug	Regimen	Efficacy	Safety	Compliance
UTI	Ceftazidime	2 grams IV Q 8h for 14 days	Signs & Symptoms T max, WBC Culture Results	Rash, allergy Seizure Diarrhea	MAR
Hypertension & diabetic nephropathy	Lisinopril	20 mg PO Daily	Blood Pressure Renal Function Protein in urine	Cough Potassium Creatinine	Pill counts etc.
Diabetes & Metabolic Syndrome	Metformin	500 mg PO BID	Glucose Levels Hb A1c Weight	Glucose levels GI effects Lactic acidosis	Pill counts etc.