

Oncology Clinical Pharmacy One Team.....

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Objectives

- Highlight strategies for implementation of an Oncology Clinical Pharmacy model, and the impact the clinical pharmacists can have on patient safety, satisfaction, and overall healthcare costs.
- Elaborate on our Clinical Pharmacy model and show you our daily work flow as a team of healthcare professionals working together.
- Explain the global shift in pharmacy practice over the past few years.

Global shift in the pharmacy practice

- In the last 4 decades the trend in the pharmacy practice moved from medicine supply to more inclusive focus on patient care.
- Pharmacist role evolved from compounder , supplier of pharmaceuticals to services, Info and patient care Provider.

Compounder
supplier

Patient Care
Provider

Multidisciplinary team for cancer patient care



Caring for patient is our first priority

Clinical pharmacists work in collaboration with the other health providers to deliver comprehensive medication management that optimizes patient outcomes.

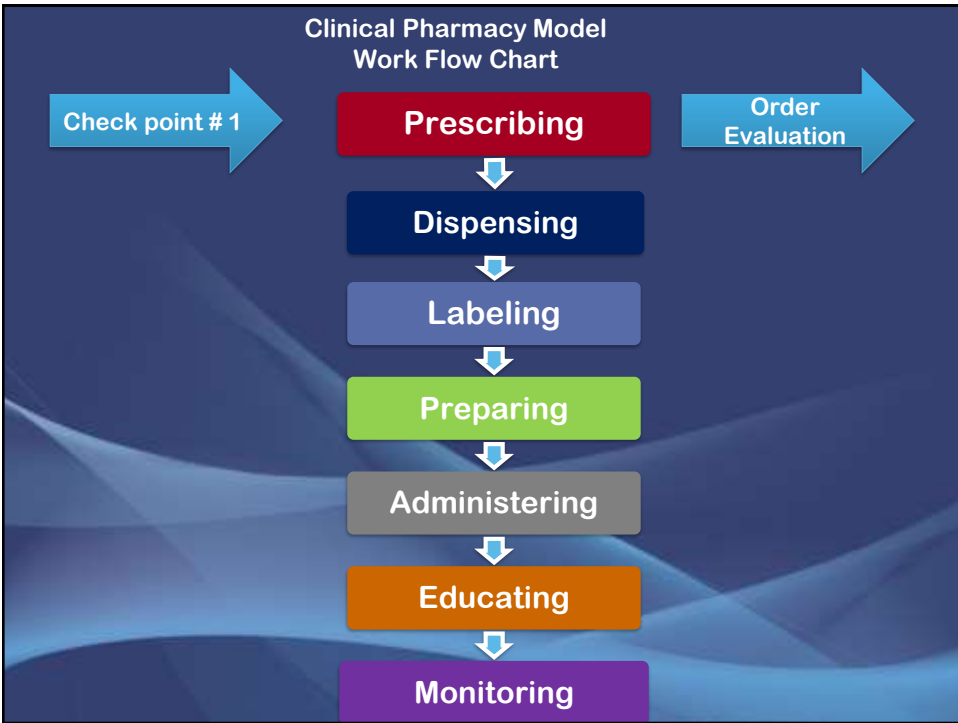
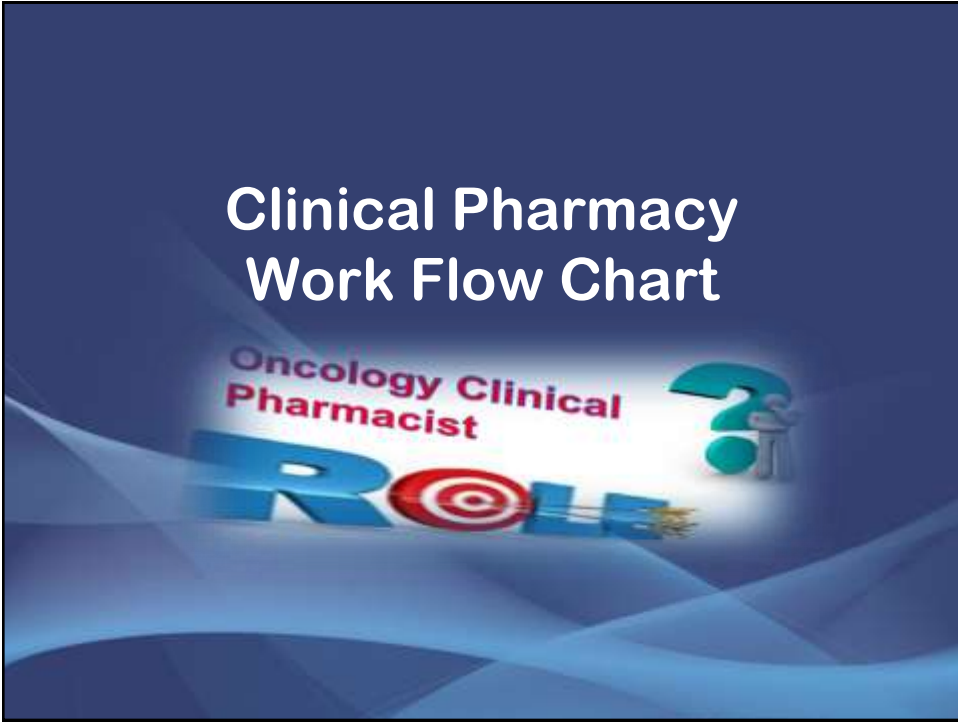
To maximize the clinical effect of medicines and Minimize the risk of treatment-induced adverse events.

To provide **high-quality**, coordinated, **patient-centered care**.

Clinical Pharmacy practices at our clinical pharmacy



We are working in compliance with ASHP-ACCP Guidelines American Society of Health-System Pharmacists and American College of Clinical Pharmacy



Checkpoint #1: Order Evaluation

Our workflow begins at the point the order is entered by the prescriber, followed by pharmacist review.



Checkpoint #1: Order Evaluation

- Chemotherapy order sheet review include :

- ✓ Review the original medication orders and independently **verify them against published standards.**
- ✓ Confirming that the prescriber ordered all the medications necessary for the **entire treatment regimen**, including **hydration** and **supportive care orders**.
- ✓ Evaluating the prescribed **anti-emetic protocol** according to the emetogenic power of the prescribed chemotherapy.
- ✓ Measurements from which a patient's medication dosage and administration rate are calculated should be confirmed (e.g., **height, weight, BSA**).

It is important to review trends in height and weight as a double check to ensure there were no errors in documentation.

Checkpoint #1: Order Evaluation

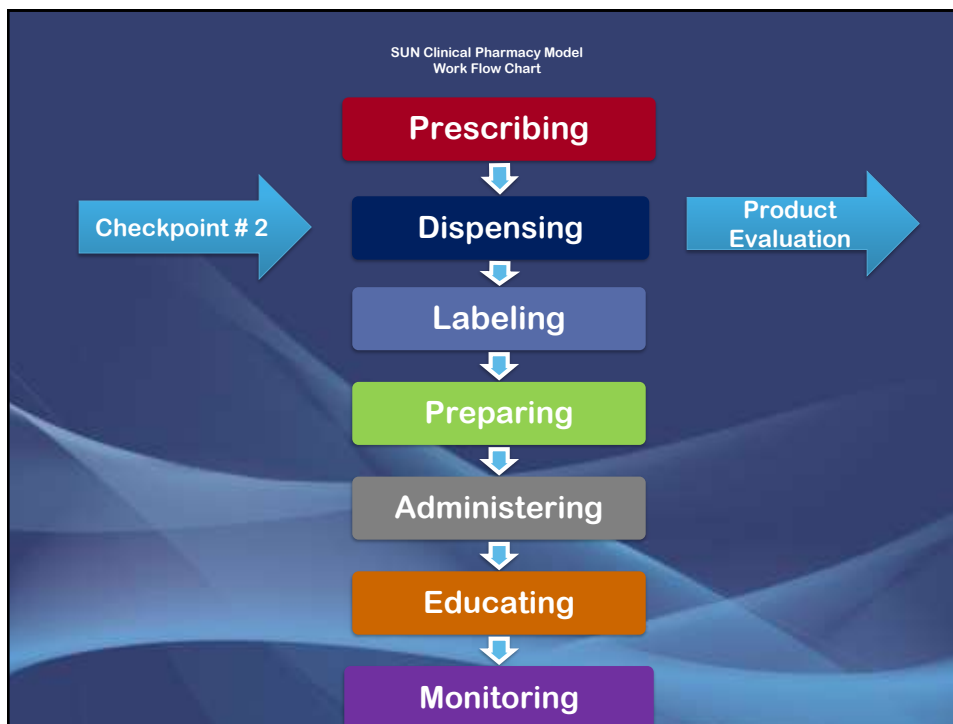
- Chemotherapy order sheet review :
 - ✓ Check the date a patient was last treated and the next planned treatment date should be compared to ensure that an **appropriate interval** has elapsed since treatment was last administered.
 - ✓ Evaluate **the lab. Results** and physical assessment values to determine whether they are within acceptable ranges or if **treatment modifications are indicated**.
 - ✓ Alert physicians to the need for a potential **dose adjustment** according to hematological toxicities, **renal and hepatic dysfunctions**.
 - ✓ A patient's **allergy, drug sensitivity**, and adverse drug effect histories and evaluate the current medication profile for **potential drug interactions** with planned chemotherapy treatment.

Documentation



- After treatment orders have been verified, all work related to medication-order processing and preparation accuracy should be routinely documented in a standard format.
- Our documentation is based on EMR(**Electronic Medical Record**).

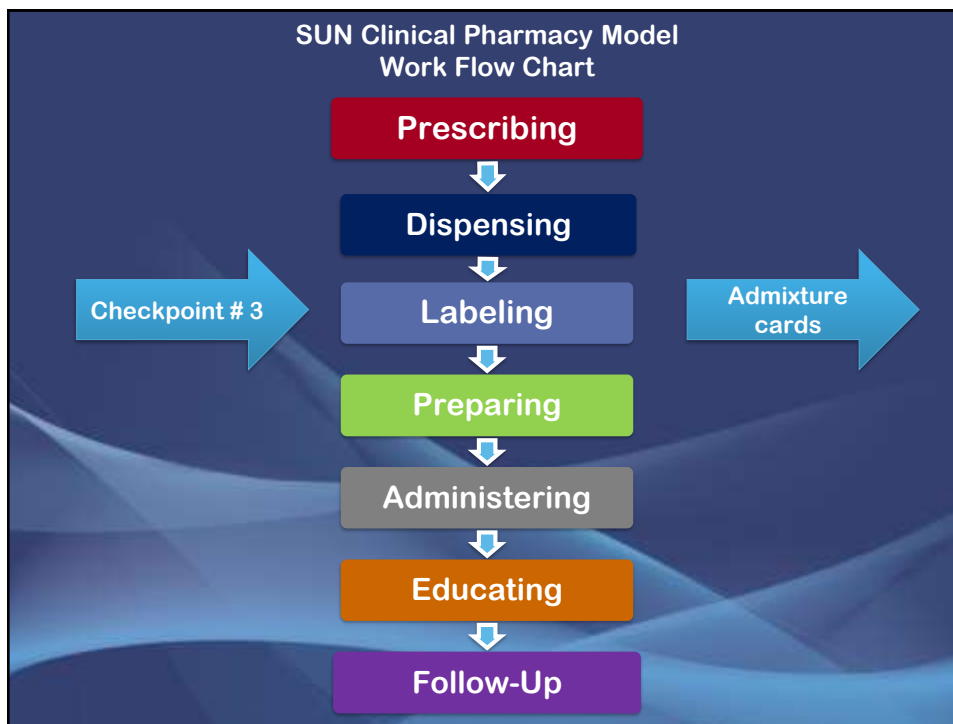




Checkpoint #2: Product Evaluation

- ✓ Clinical Pharmacists evaluate the dispensed product for:
 - The original batch number and valid expiry date.
 - Visually examine the medication product and compare with its standard physical appearance characteristics.
 - Confirm that the medication's storage was compliant with the appropriate storage conditions.



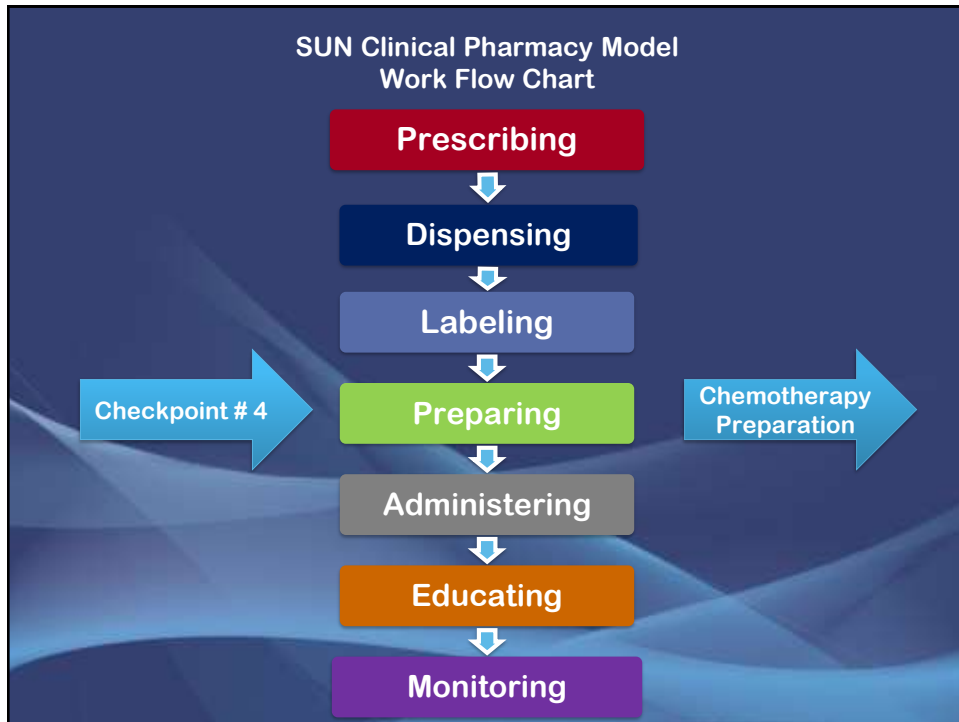


Checkpoint #3: drug admixture cards (Prep)

• The preparation label include the following info:

- ✓ Identify the drug prepared for each patient and the persons who prepared and checked the medications.
- ✓ Instructions for diluents according to the drug compatibilities.
- ✓ Drug administration sequence and duration
- ✓ Number of doses
- ✓ Starting date and time





Checkpoint #4: Chemotherapy Preparation

- Chemotherapy is prepared in the Chemotherapy Preparation Area **under Aseptic conditions.**



Checkpoint #4: Chemotherapy Preparation

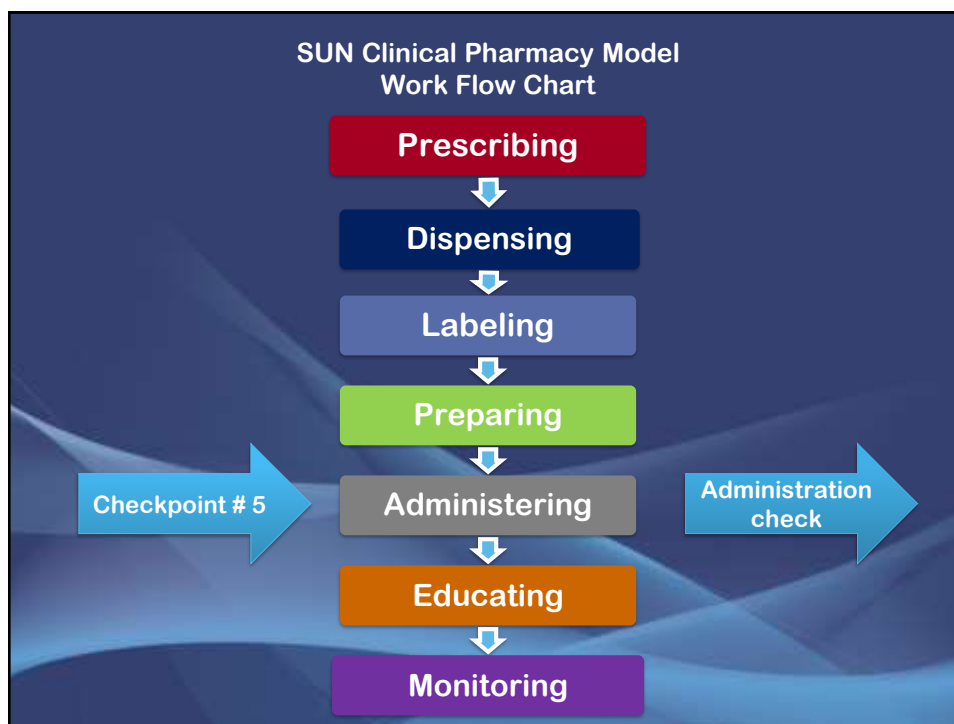
Each chemotherapy drug will be prepared with the proper diluent(s) for reconstitution and/or admixture, and given the appropriate expiry date and time, as indicated in the Chemotherapy Preparation and Stability Chart .



Checkpoint #4: Chemotherapy Preparation

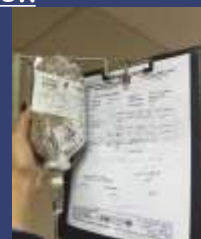
- Protect from light the photosensitive drugs.
- Visual Inspection of the final product.

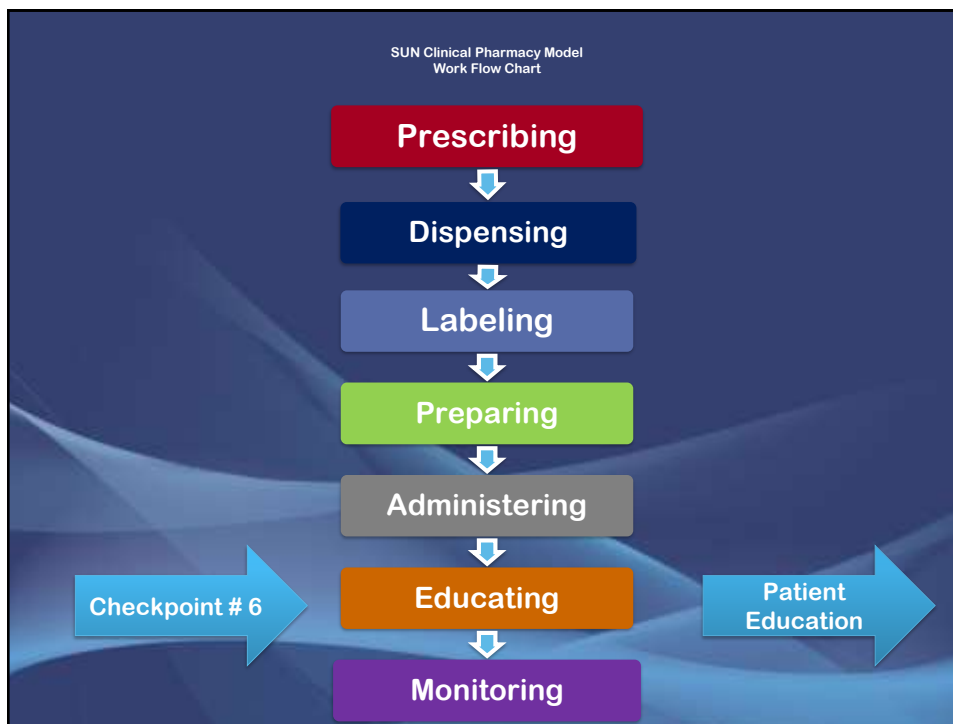




Checkpoint # 5: Administration check

- ✓ Confirm that the medication will be administered to the intended patient by comparing a patient's name and unique identifying code or number with medication labels .
- ✓ Before starting treatment, recheck each chemotherapy medication independently against the prescriber's orders.
- ✓ Check the infusion rate at the initiation and periodically throughout the infusion.
- ✓ Examine the medication container and its general appearance before administration.





Checkpoint # 6: Patient education

- Take medication history list of all current medications.
- Check drug-drug interactions and report for intervention.
- Educate the patient about:
 - Food-drug interactions
 - how to take their self-administered medications.
 - expected side effects
 - Drug specific Protective measures.
- Teach the patients how to recognize and report expected and unexpected toxicities.



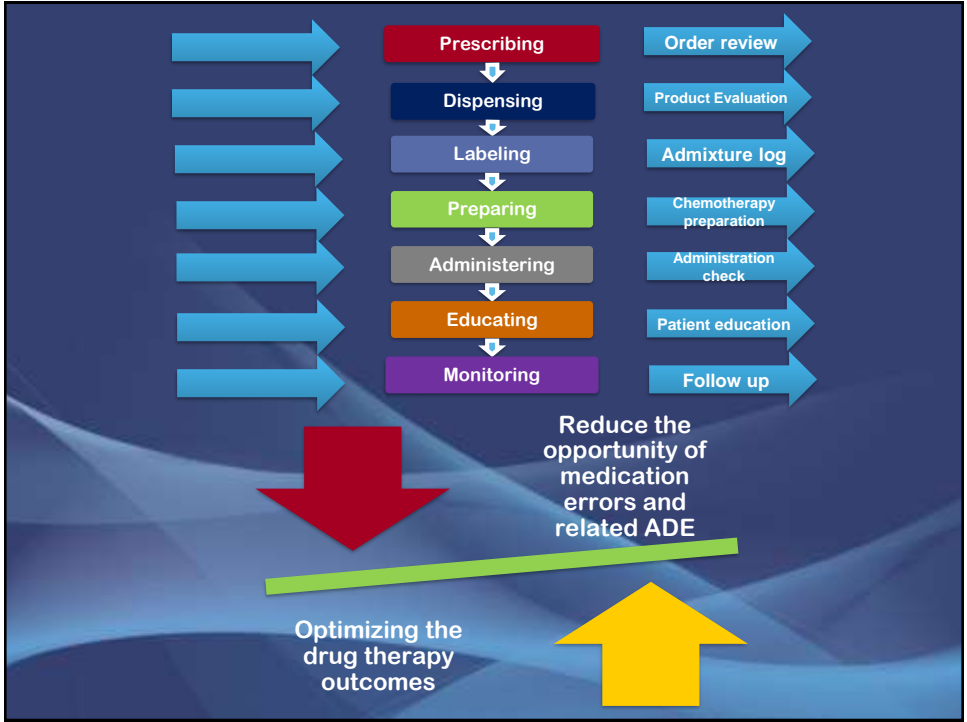
Checkpoint #7: Monitoring

- Identify medication related problems and evaluating collaboratively with other members of health care team the need for intervention.
- Monitor patient adherence to prescribed regimens.
- Encourage the patients to ask questions



Multidisciplinary Monitoring System of Medication Use and Verification

Clinical pharmacists are a crucial component of a system of **double-checks** that ensure safe care, optimal charge capture, and compliance with both external and internal guidelines.



Challenges

Oral Chemotherapy

Drug Information Center

Inpatient monitoring and Clinical Rounds

Conclusion

- Clinical Pharmacists have a significant role to play in the management of cancer patients, and should be members of multi-professional teams of each hospital.
- Pharmacy input can lead to a decrease in healthcare costs and to an improvement of the quality of patient care.
- Interaction with the healthcare team in patient rounds, identification of drug-related problems, and provision of information to patients and clinicians, can result in an improved outcome for the patient and hospital.



Thank you