

Clinical Concept Maps

The concept maps you will be constructing for clinical will help you to connect patient data in a meaningful manner that will facilitate a deeper understanding of your patient. Think of these concept maps as a clinical picture of your patient that allows you to graphically explain why interventions have been ordered and what kind of effect they seem to be having. The way you will make these explanations is by linking each intervention to appropriate patient assessment findings.

Concept mapping also allows you to learn and demonstrate your awareness of other relationships that exist among the concept map data. Clinical concept mapping helps you and your instructor to evaluate what you know about the status of a patient and what further information you need to provide safe and effective nursing care.

Creating a Clinical Concept Map

CENTER OF MAP

- In the middle of the map, draw a picture of your patient. Stick figures are fine but you may be as creative as you like (no photos please). You may want to personalize your drawing to depict your patient's characteristics and health status.

OUTER ZONE

- In the outer zone, write all of your patient's healthcare provider orders that are currently in effect. Enclose each item separately in a circle or symbol of some kind. These include but are not limited to:
 - Activity order
 - Diet Order
 - Intake and output order
 - Code status order
 - Lab orders
 - Treatments/procedures (frequent vital signs, blood sugar checks, dressing changes, wound irrigation, staple removal, saline lock flush, incentive spirometry, bladder training, physical therapy, maintenance IV solutions, oxygen orders and so forth)
 - Medications:
 - All routine medications
 - Those PRN medications that are actually administered to your patient during your days of care.
 - You do not need to write out the entire medication order and only need to state the name of the medication such as "Lasix." However, do indicate if a medication is ordered PRN, for example "Vicodin PRN."

INNER ZONE

- In the inner zone, you will write relevant assessment data enclosed in a circle or symbol that explains.
 - **Reason for Order:** The indication or reason why each item in the outer zone was ordered for the patient. For example, if a patient has a medication order for PO Bactrim, (a medication used to treat urinary tract infection), this medication would be placed in the outer zone and would be connected in the inner zone with the patient's urinary tract infection symptoms.
 - **Effect of Order:** The results or effects of implementing the order. Look for those assessment data that indicate the impact the intervention is having.
 - In the early phase of treatment, when a condition is still acute, your patient may not yet demonstrate data indicating improvement. Be alert for any signs that

indicate even small improvement, such as decreasing dysuria or frequency or a falling WBC count in the urine.

- If you are taking care of a patient who is well-controlled on a maintenance medication, such as Protonix to treat a history of gastroesophageal reflux disease (GERD) your assessment may only produce findings associated with the therapeutic effect. In this example, you would connect the Protonix (outer zone) with an assessment such as “no complaint of heartburn” to demonstrate the effectiveness of the medication.
- **Possible Side Effects From Implementing Order** Identify patient assessment findings related to signs or symptoms that could be associated with the possible side effects of a medication,
 - For example, a common side effect of Prilosec is a headache. This, if your patient has a headache, it could be associated with the taking of this drug
- Assessment data does not refer only to the information you personally collect during your physical assessment of your patient but includes any and all pertinent patient information that you have learned during your review of the medical record, discussion with family members and learned while caring for the patient. Pertinent lab and diagnostic results (such as X-Ray results) are also included in assessment findings.
- To differentiate historical assessment data from current assessment data use the abbreviation Hx in front. For example, if a patient had a hip fracture in the past that has healed, you would write: “Hx: Hip fracture.”
- Leave room in the inner zone to allow you to squeeze in more information during your clinical days as you collect further pertinent assessment data.

CONNECTING MAP COMPONENTS

- Drawing lines between related data is a very important step. The very act of linking data will deepen your understanding of your patient and will demonstrate your understanding of the relationships between various concepts.
- Use color in any way that makes sense to you. You may find it helpful to pencil lines in at first, going over the penciled lines later in different colors of ink when you have the lines where you want them to be. Please use different colors to draw lines as it is difficult to differentiate one line from another when they intersect if they are all the same color.
- **Between-Zone Connections:** Connect each item in the outer zone to the assessment data in the inner zone that describes:
 - The reason for the order
 - The result of implementing the order
 - Presence (or absence) of side effects associated with implementing the order
- **Within-Zone Connections:** Items within zones should be connected to each other when indicated.
 - For example, your patient may have urinary frequency, dysuria, and a urinalysis (lab result) indicating >100,000 WBCs. These are all associated with a urinary tract infection (UTI) and should be connected to demonstrate your awareness of these relationships.
 - Within-zone connections also occur when your patient is taking medications that interact with each other. For example, if a patient were taking both Vicodin and morphine for pain, there is the potential for an increased sedative effect and a connecting line would appropriately be drawn between these two drugs.
- When the nature of a relationship is less obvious, as in this case, you can clarify it by including a phrase along the axis of the line, such as “increased sedating potential” to explain your thinking.
- Do not draw lines through words; go around in order to preserve legibility