Level 4 – Level 4of *Nursing Documentation Using Electronic Health Records* includes chapters 12, 13, and 14. In these last chapters, students learn to perform more complex EHR documentation functions. Level 4 contains the EHR capstone section. Chapters 13 and 14 present the students with case studies that require them to navigate through all the screens of SpringCharts as they build Nurse Notes for multiple patients with various disease processes.

Chapter 12 – Advanced EHR Functionality

Chapter 12 introduces the student to the more advanced EHR functionality features of SpringCharts. Students learn to order diagnostic tests, perform chart evaluations electronically, and export elements of the chart. They also create addendums to existing nurse notes.

Learning Outcomes

After completing Chapter 12, the students will be able to:

12.1 Use EHR to order diagnostic tests.
12.2 Carry out a chart evaluation.
12.3 Use a New Note to create an Addendum to a Nurse Note.
12.4 Carry out printing a Nurse Note.
12.5 Carry out exporting and printing elements of a patient's chart.

Key Terms & Definitions

Terms and abbreviations encountered in Chapter 12:

Critical Results: Grossly abnormal test results that may be life-threatening to the patient.

Critical Test A diagnostic test that requires rapid communication of results whether normal or abnormal.

Presentation Outline

LO 12.1 Diagnostic Tests

Power Point Slides: 1 through 8.

Concept Checkup 12.1

A. True or False: If the nurse selects and orders the incorrect test, it cannot be removed from the chart.
Answer: False
Rationale: When the user clicks the [Order Selected Tests] button at the bottom of the Selected Tests field, the test populates the Test field on the left of the Nurse Note screen. If the incorrect test is inadvertently selected, the user clicks on the test in the left Tests field and answers "yes" to the "Do you want to delete this reference to this test?" query to delete the test from the field.

B. To what area of SpringCharts are all tests ordered from a Nurse Note or Office Visit Note sent?
Answer: Pending tests
Rationale: Once ordered, diagnostic procedures are sent to the Pending Tests area of SpringCharts where they remain until the results are entered either manually or electronically through an interface with the testing facility.

C. What type of connection must be available for a lab to electronically transmit results?
Answer: Interface
Rationale: Once ordered, diagnostic procedures are sent to the Pending Tests area of SpringCharts where they remain until the results are entered either manually or electronically through an interface with the testing facility.

LO 12.2 Chart Evaluations

Power Point Slides: 9, 10, 11.

Concept Checkup 12.2

A. List the four required fields that are necessary to create a new Chart Evaluation item.
Answer:
1. Gender
2. Age
3. Actions
4. Recurring

Rationale: In the set-up window for Chart Evaluations, administrators define specifications for each preventive health measure by:
1. Gender—Select whether an intervention or procedure is specific to male, female, or both.
2. Age—Select the age range for which the criteria should be met.
3. Actions—Indicate the Test, Procedure, or Encounter for which the guideline is recommended.
4. Recurring—Specify if this is a recurring procedure or one-time event. If recurring, enter the time span in number of weeks or the number of screenings/procedures needed in the patient's lifetime.

B. What is the purpose of the Chart Evaluation feature in SpringCharts?
Answer: To define preventive health guidelines and to evaluate patients' charts to recommend guideline adherence
Rationale: SpringCharts' Chart Evaluation feature allows the nurse to define preventive health guidelines and then evaluate patients' charts to recommend guideline adherence.

C. What does the message: *No criterion set* indicate?
Answer: No chart evaluations have been set up on the SpringCharts server.
Rationale: The message: No criterion set indicates that no chart evaluations have been set up on the SpringCharts server.

LO 12.3 Addenda to a Nurse Note

Power Point Slides: 12, 13.

Concept Checkup 12.3

A. Nurse Notes that have been *permanently signed and locked* cannot be edited; however, they can be _____ by using the New Note functionality.
Answer: Amended
Rationale: Nurse Notes that have been permanently signed and locked cannot be amended. On occasion, after completing and locking a Nurse Note entry, a nurse may realize that all appropriate information was not documented. The New Note under the *New* menu in the patient chart allows the nurse to do additional charting, or what is commonly referred to as a late entry or addendum. An addendum should always begin with the words "Late entry" to indicate that documentation occurred after the initial record of the event.

B. Where can a New Note be viewed?
Answer: In the Encounters section of the Care Tree
Rationale: Notes are saved as Encounters and are viewable for all users under the Encounters tab in the Care Tree.

LO 12.4 Printing a Nurse Note

Power Point Slides: 14, 15.

Concept Checkup 12.4

A. What two functions does the [Print] button have for a Nurse Note?
Answer:
1. Printing
2. Faxing

Rationale: Both the [Print] button within the Nurse Note screen and the [Print] button located in the patient's chart allow printing/faxing the Nurse Note itself. The Nurse Note prints in the SOAPIER format with the patient identifiers in the footer of each page.

B. If test results have not been entered into SpringCharts, what word appears after the name of the test in the printed Nurse Note?
Answer: Pending
Rationale: Test results can be included in the Nurse Note. If test results have been entered into a pending test that was ordered within the Nurse Note and completed test created, the printed Nurse Note will contain the name and results of the test. If test results have not been entered into the pending test area, the Nurse Note will simply state pending beside the name of the test.

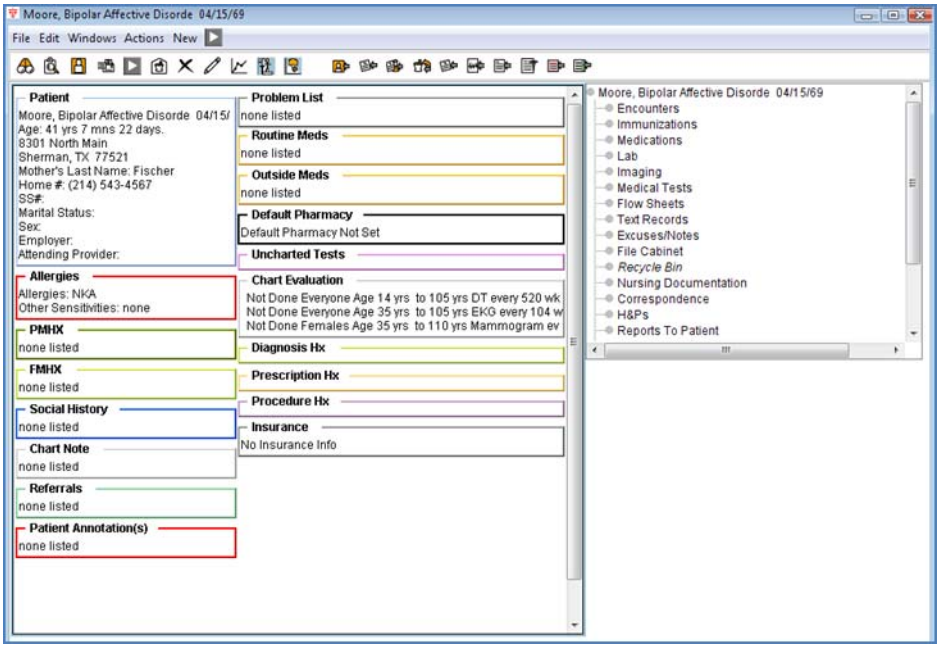
LO 12.5 Exporting & Printing the Chart

Power Point Slides: 16, 17, 18.

Exercise 12.1

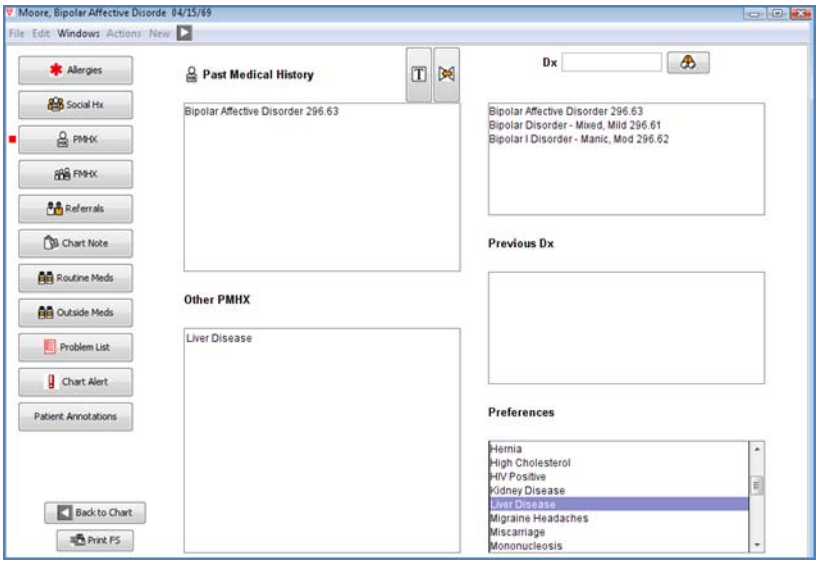
Bipolar Affective Disorder

1. After launching SpringCharts, click on *Actions*, *Open a Chart*. Type in your last name and click the search button. Select your "bipolar" patient and the chart opens.

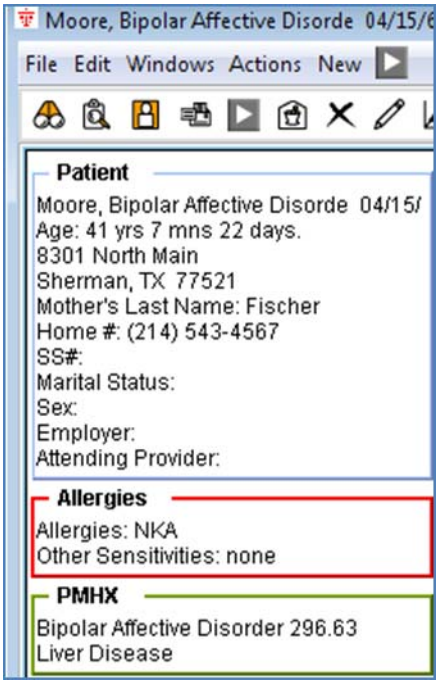


2. Your patient tells you she has a past history of bipolar disorder and liver disease. Click on *PMHX* and it populates the right corner box. Click the *Edit* button. In the space after *Dx*, type Bipolar and click the search button. A list appears in the box below the search button. Click on Bipolar Affective Disorder 296.63 and it moves to the *Past Medical History* box on the left.

- In the *Preferences* text box at the lower right, click on Liver Disease and it moves to the Other *PMHX* box on the left.

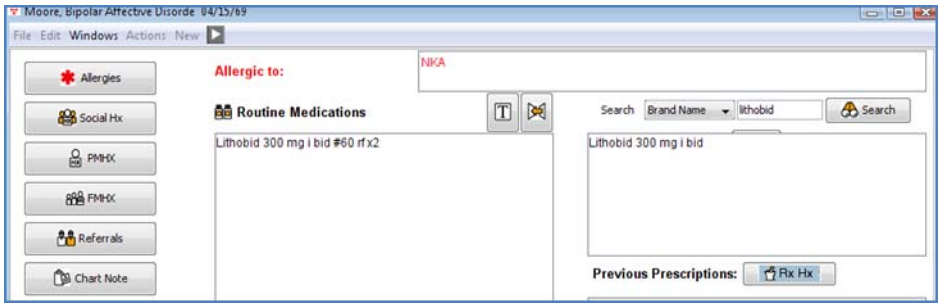


- Click *Back to Chart* in the lower left section of the screen. Note that you can see your new entry under *PMHX*.

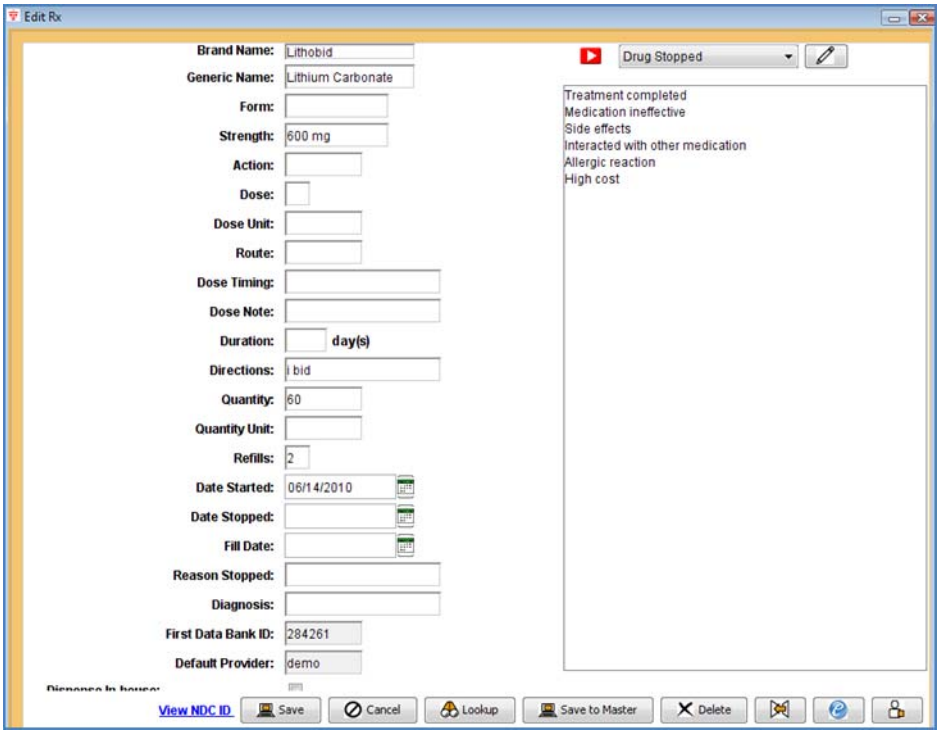


3. You ask your patient about her daily medications. She tells you she has taken Lithobid 600 mg by mouth twice daily for the past six months. Click on the *Routine Meds* field and it populates the right lower corner. Click *Edit*.

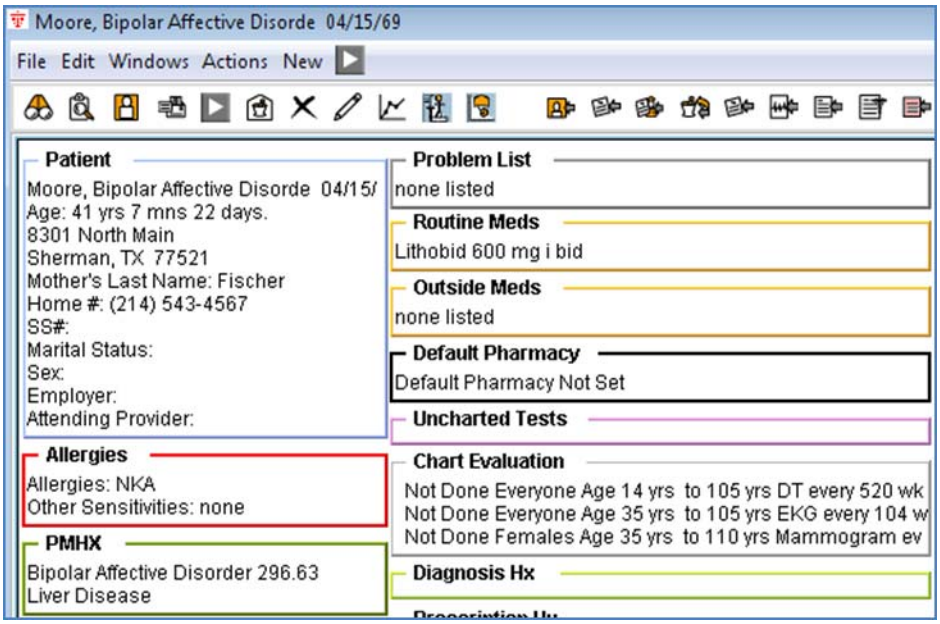
- In the space after *Brand Name* at the upper right type Lithobid and click the search icon. A list of options populates. Click on 300 mg po bid to send it to the *Routine Medications* list on the left.



- Click on Lithobid in the *Routine Medications* area on the left. The *Edit Rx* window appears. Click in the *Strength* and change it to 600 mg. Change the *Date Started* to a date six months ago. Click Save.

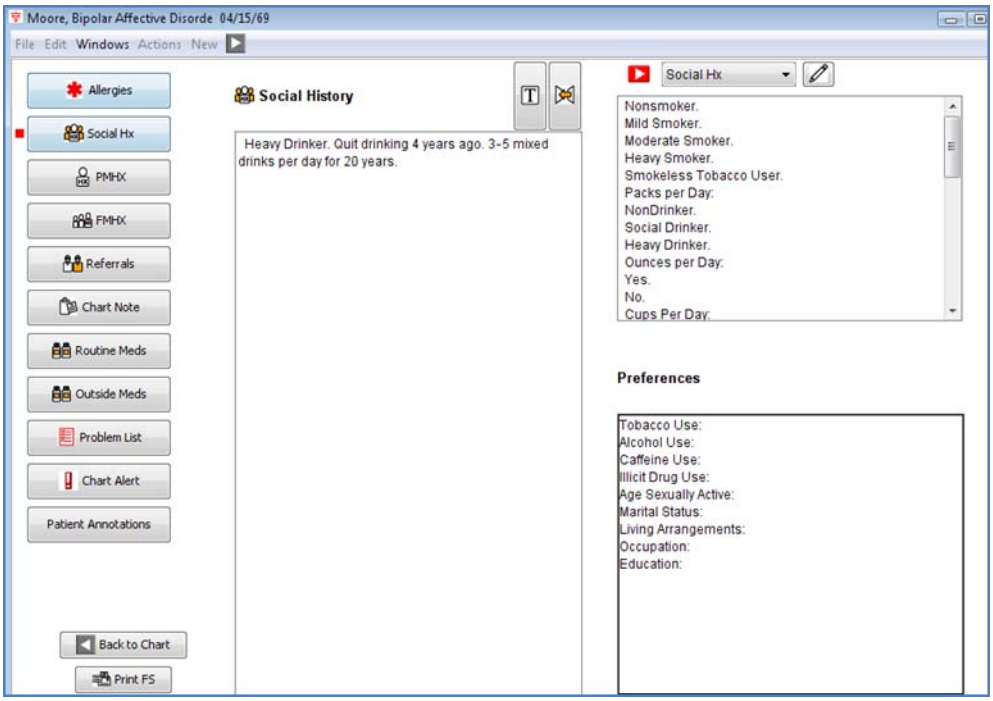


- Click *Back to Chart* in the lower left portion of the window. Note that you can see your new entry.

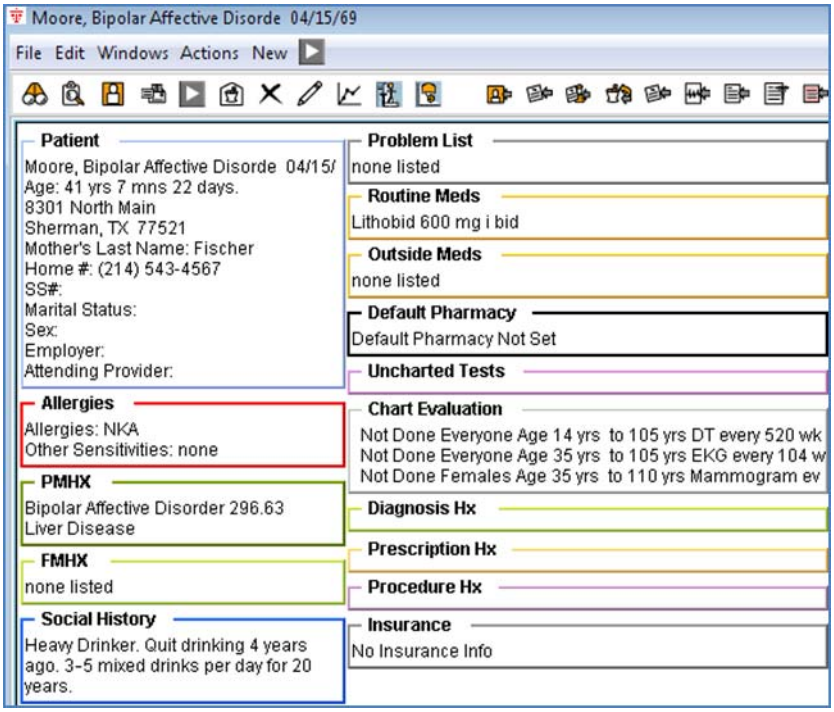


4. Your patient tells you she harmed her liver through a combination of drinking and her bipolar medications. Click on the *Social History* field and it populates in the right lower corner. Click *Edit*.

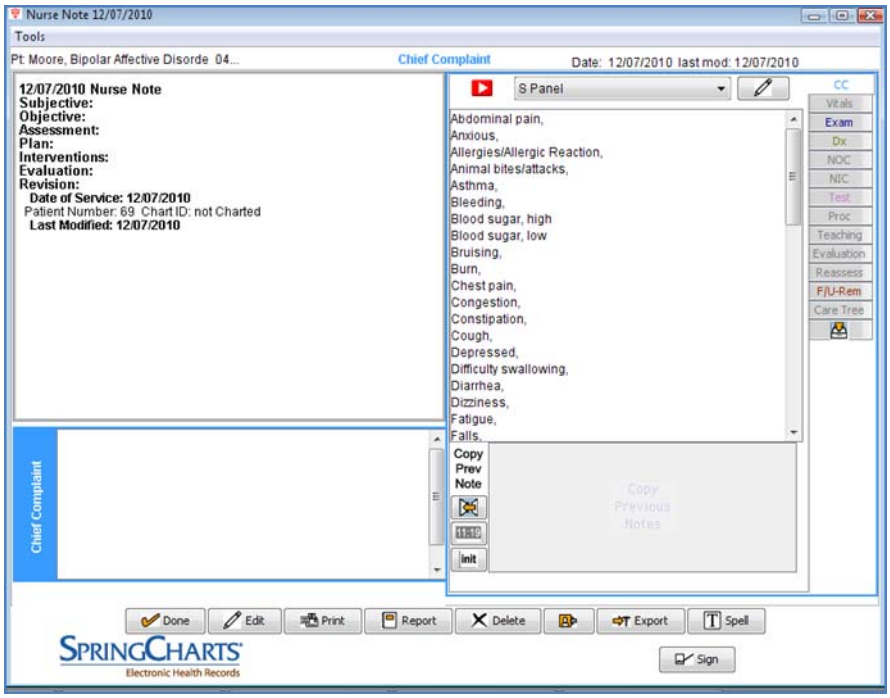
- On the right below *Social History* click on: Heavy Drinker.
- Click after Heavy Drinker and type: Quit drinking 4 years ago. 3–5 mixed drinks per day for 20 years.



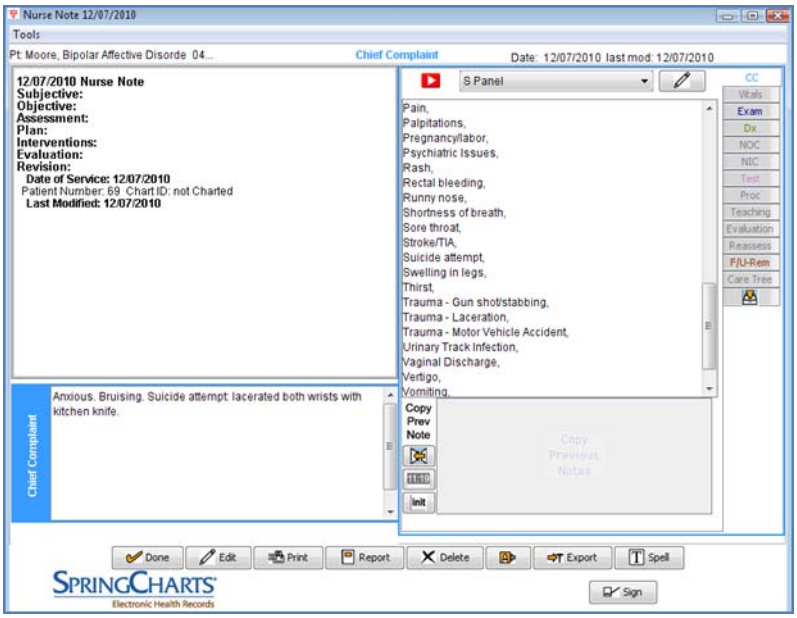
- Click *Back to Chart*. Note that you can see your new entry in the *Social History* field.



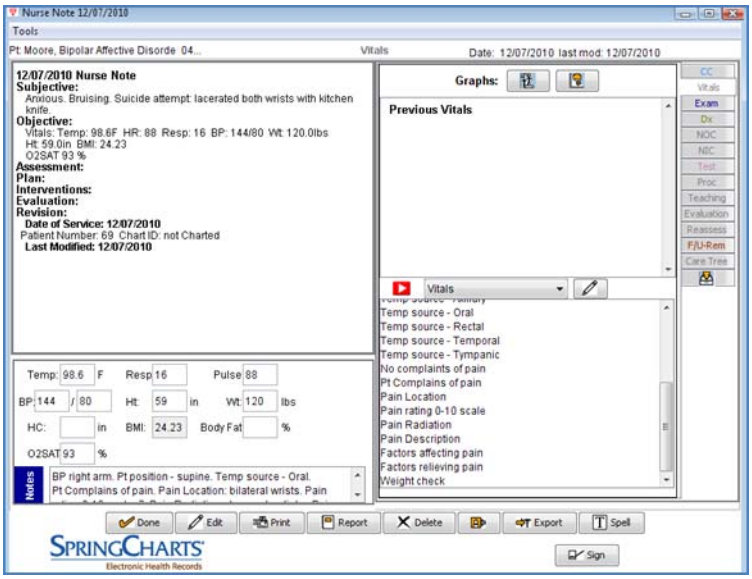
5. Open your *Nurse Note*. On the top horizontal toolbar, click *New*, *New Nurse Note*. The *Nurse Note* opens to the *Chief Complaint* tab at the top of the vertical navigation bar on the right side of the window.



6. Your patient states she is anxious and tried to take her life last night by cutting her wrists with a kitchen knife. She states she has noticed that she is bruising easily. Under the *S Panel* in the text box click on Anxious, Bruising and Suicide attempt. The text will populate in the *Chief Complaint* box on the bottom left of the screen.
   - Click into the *Chief Complaint* field and type after Suicide attempt: Lacerated both wrists with kitchen knife.

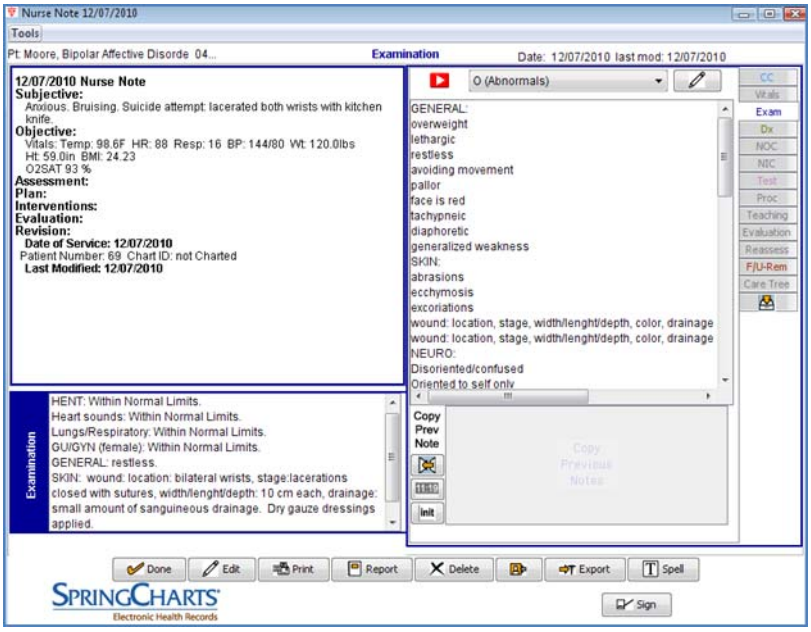


7. Click on the *Vitals* button located below the *CC* button on the right side of the screen in the vertical navigation bar. Note that your *Chief Complaints* now appear in the Subjective section of the *Nurse Note.*
   - You take your patient's vital signs. Document the following: Temp 98.6, Resp 16, Pulse 88, BP 144/80, Ht 59 inches, Wt 120 lbs., O2SAT% 93.
   - Under the *Vitals* text box on the right click: BP right arm, Pt position—supine and Temp source—Oral, Pt Complains of pain, Pain Location, Pain rating 0–10 scale, Pain Radiation, Pain Description, Factors affecting pain, and Factors relieving pain. This sends this text to the *Notes* box on the lower left. Place each of these items on a separate line by clicking in front of it and striking the enter key on the keyboard.
   - Click into the *Notes* box and enter the following information regarding your patient's description of her pain: location—bilateral wrists, 7 on 1–10 scale, does not radiate, stinging type of pain, clenching fists makes it worse, medication makes it better.

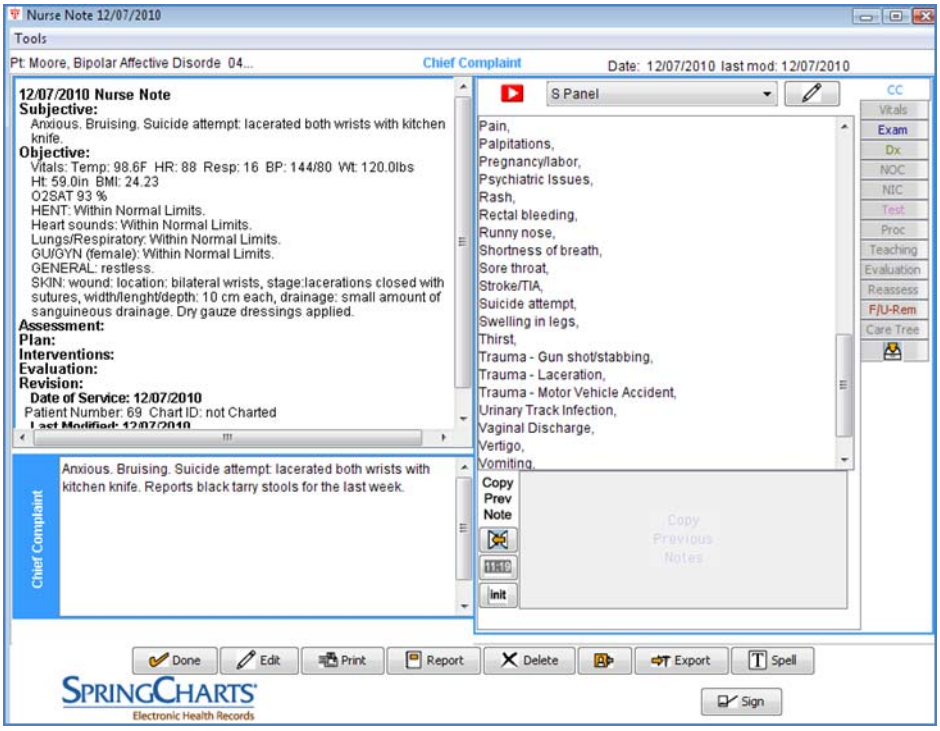


8. Click on the *Exam* button located below the *Vitals*. Notice the *O (Normals)* defaults in the right upper portion of the screen. Select the following systems that are within normal limits when you assess your patient: HEENT, Heart sounds, Lung/Respiratory, and GU/GYN (female). Use the enter key to place these items on separate lines to streamline the documentation.

- Click the drop-down arrow next to *O (Normals)* and select *O (Abnormals)*. Select the following the *General* section followed by: restless. Select the *Skin* section followed by: wound: location, stage, width/length/depth, color, drainage.
- Click in the *Examination* box on the lower left and enter information regarding the wounds after the appropriate heading: Bilateral wrists, 10 cm each, lacerations, closed with sutures, small amount sanguineous drainage, dry gauze dressings applied.

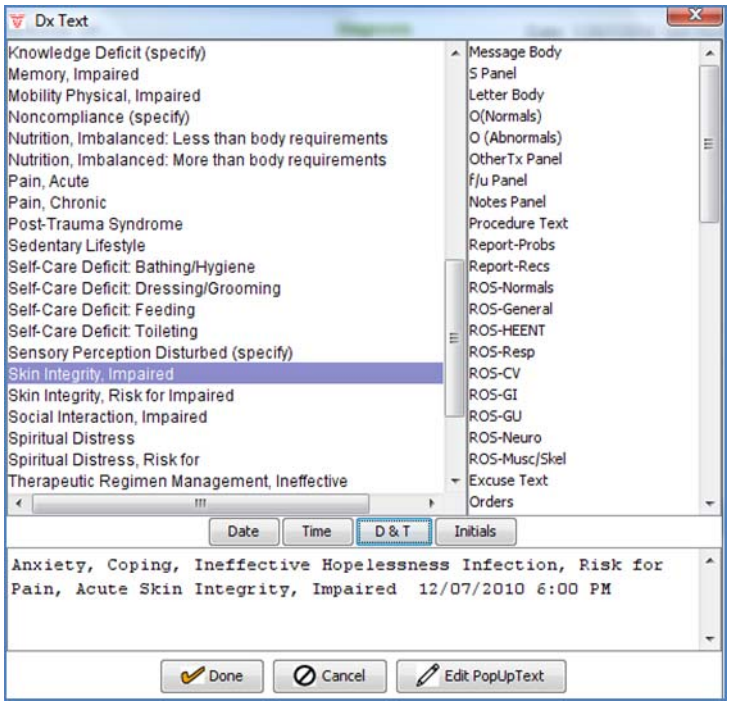


- Your patient tells you she has been having black, tarry stools for the last week. Click back into the CC *(Chief Complaint)* button on the top right and then click into the *Chief Complaint* box on the left side of the screen. Type: Reports black, tarry stools for the last week.

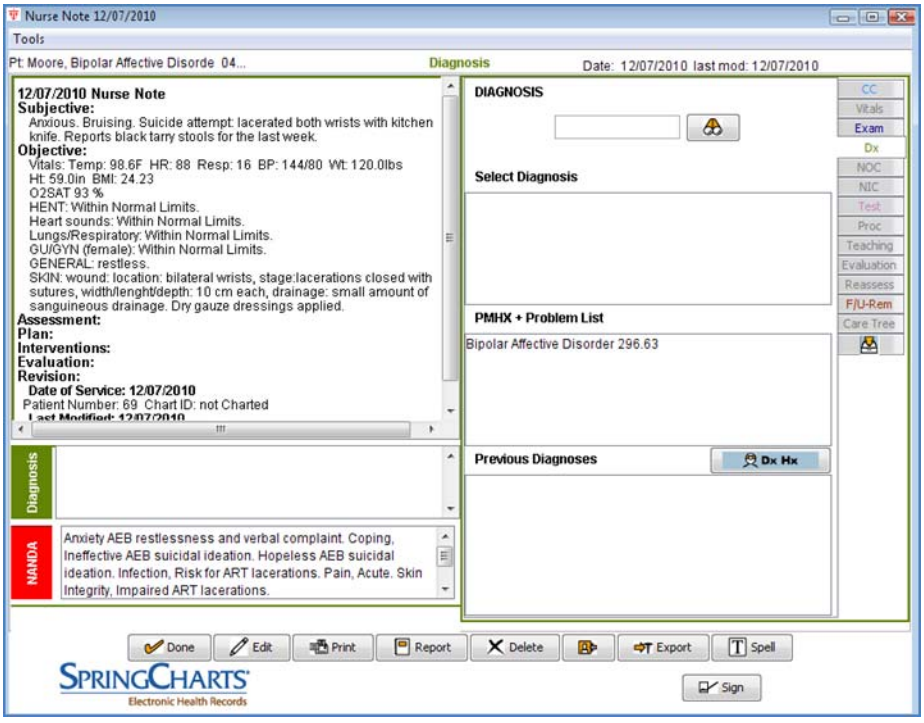


9. Click into the *Dx* button below the *Exam* button in the vertical navigation bar on the right. Click on the red *NANDA* on the left bottom of the screen. The *Dx* text window populates. Click on the following nursing diagnoses and click enter after each to place on a separate line:

- Anxiety.
- Coping, Ineffective.
- Hopelessness.
- Infection, Risk for.
- Pain, Acute.
- Skin Integrity, Impaired.
- Click the *D&T* icon to date and time the entry. Click *Done*.

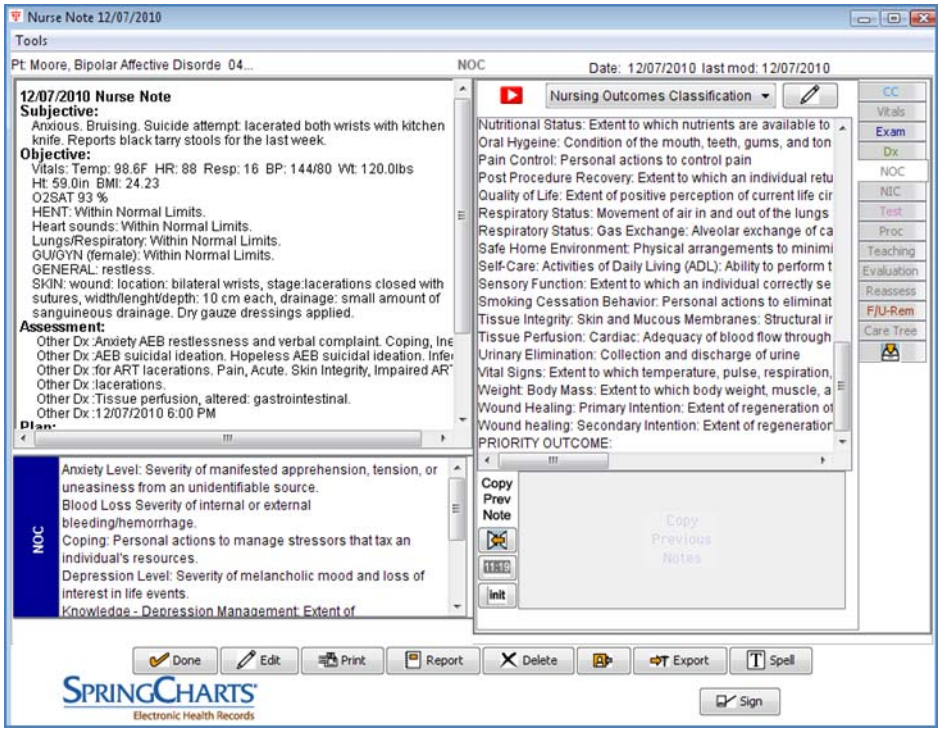


- Click into the *NANDA* text box on the left. Place your cursor in the text field and type Suicide, risk for. Strike your enter key to put the cursor on a new line. Type: Tissue perfusion, altered: gastrointestinal.
- Place the nursing diagnoses in order of priority. Complete the nursing diagnoses with the etiology (R/T) and signs and symptoms (AEB).



10. Click the *NOC* tab in the vertical navigation bar on the right located below the *Dx* tab. Notice that your *NANDA* documentation populates the *Nurse Note*.

- Below the *Nursing Outcomes Classification* select the following:
  - Anxiety Level: Severity of manifested apprehension, tension, or uneasiness from an unidentifiable source.
  - Coping: Personal actions to manage stressors that tax an individual's resources.
  - Depression Level: Severity of melancholic mood and loss of interest in life events.
  - Knowledge—Depression Management: Extent of understanding conveyed about depression and interrelationships among causes, effects, and treatments.
  - Pain Control: Personal actions to control pain.
  - Wound Healing: Primary Intention: Extent of regeneration of cells and tissue following intentional closure.
- Click into the *Nursing Outcomes Classification* text field on the left and type: Blood Loss Severity of internal or external bleeding/hemorrhage as the second nursing outcome. Type: Mood Equilibrium: Appropriate adjustment of prevailing emotional tone in response to circumstances as well.
- Place in order of priority.

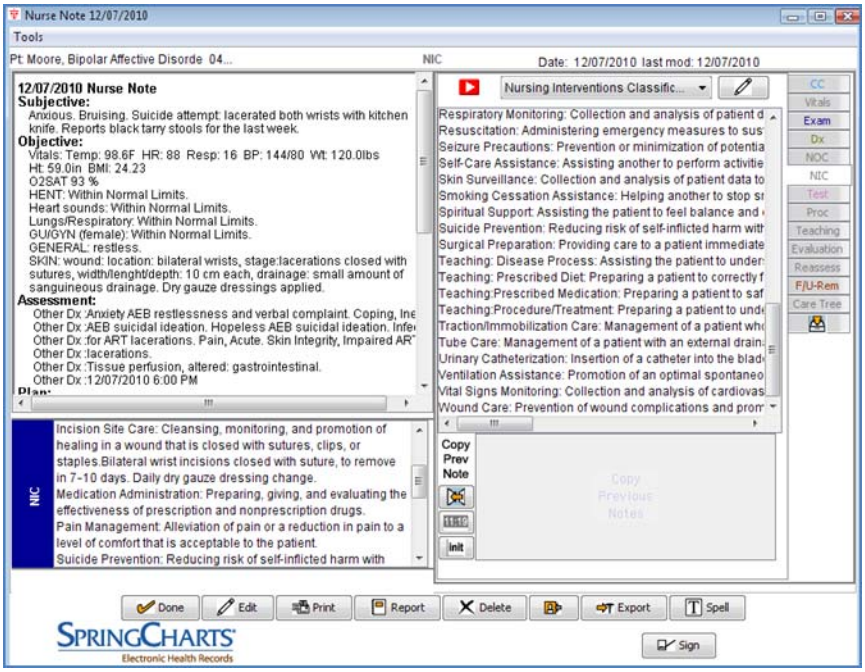


11. Click the *NIC* tab on the right below the *NOC* tab. Notice that your outcomes populate the *Nurse Note*.

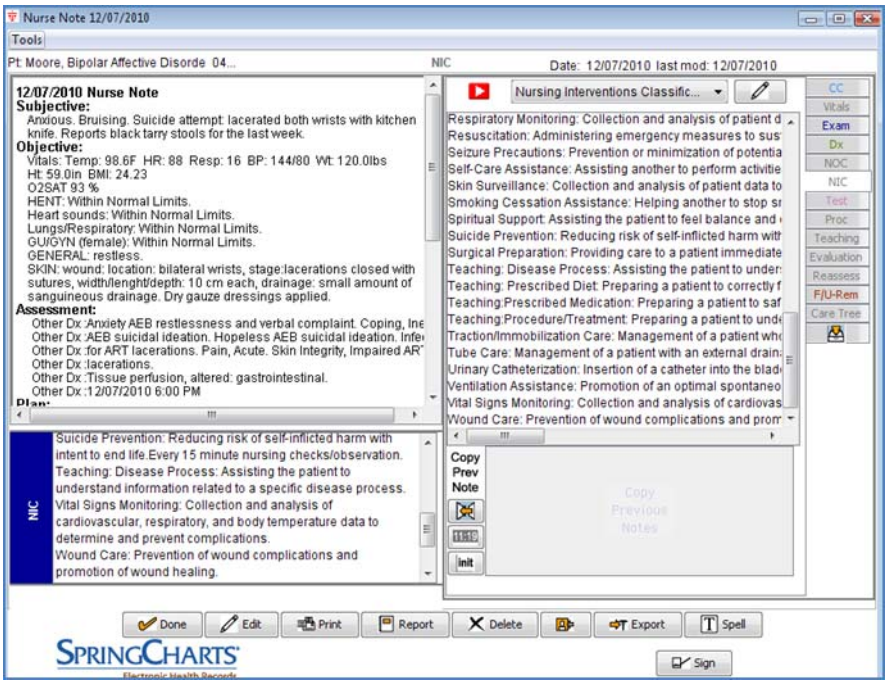
- Select the following interventions:

- Anxiety Reduction: Minimizing apprehension, dread, foreboding, or uneasiness related to an unidentified source of anticipated danger.
- Crisis Intervention: Use of short-term counseling to help the patient cope with a crisis and resume a state of functioning comparable to or better than the pre-crisis state.
- Incision Site Care: Cleansing, monitoring, and promotion of healing in a wound that is closed with sutures, clips, or staples.
- Medication Administration: Preparing, giving, and evaluating the effectiveness of prescription and nonprescription drugs.
- Pain Management: Alleviation of pain or a reduction in pain to a level of comfort that is acceptable to the patient.
- Suicide Prevention: Reducing risk of self-inflicted harm with intent to end life.
- Teaching: Disease Process: Assisting the patient to understand information related to a specific disease process.
- Vital Signs Monitoring: Collection and analysis of cardiovascular, respiratory, and body temperature data to determine and prevent complications.
- Wound Care: Prevention of wound complications and promotion of wound healing.

- Click into the *Nursing Interventions Classification* text field on the left and type: Bleeding reduction, gastrointestinal: Limitation of the amount of blood loss from the upper and lower gastrointestinal tract and related complications. Monitor amount, character, and frequency of stools.
- Click after the Incision Site Care and type: Bilateral wrist incisions closed with suture, to remove in 7–10 days. Daily dry gauze dressing change.



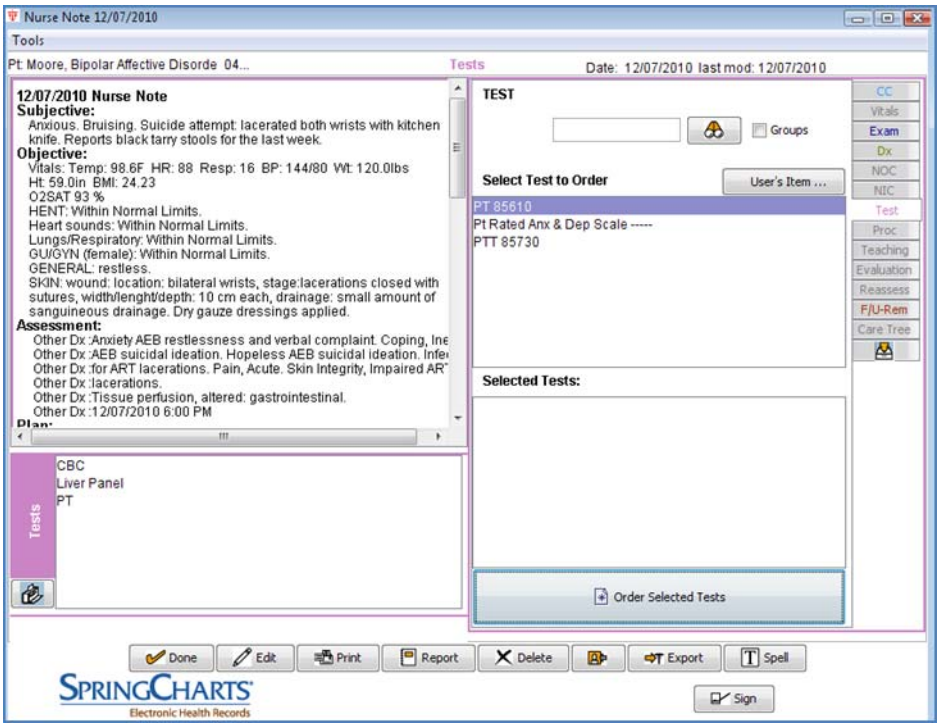
- Click after the Suicide Prevention line and type: Every 15 minute nursing checks/observation.



- Place interventions in order of priority.

12. Click into *Test* in the vertical navigation bar on the right. The nurse practitioner ordered a CBC, PT, and Liver Panel on your patient.

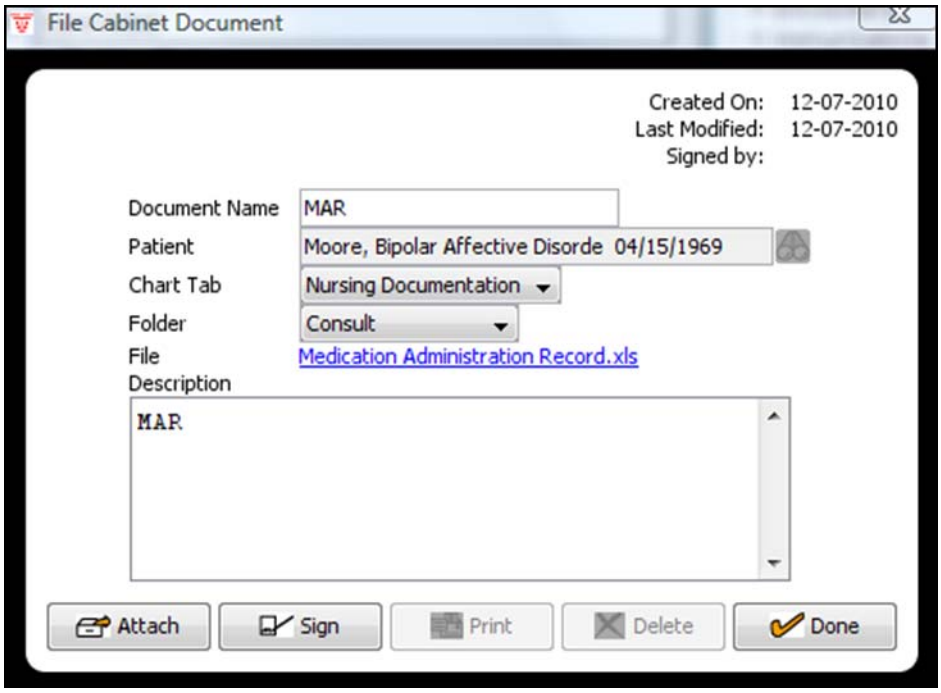
- Click into the space after *Test* at the right upper side of the screen.
  - Type CBC. Click the search icon. CBC 85025 appears in the *Select Test to Order* field. Click on CBC. It appears in the *Selected Tests* field at the bottom right. Click the *Order Selected Tests* button at the bottom right side of the screen and the test populates into the Tests field on the left.
  - Type Liver Panel in the space after *Test* at the right upper side of the screen. Click the search icon. Liver Panel 80058 appears in the *Select Test to Order* field. Click on Liver Panel. It appears in the *Selected Tests* field below. Click the *Order Selected Tests* button at the bottom right side of the screen and the test populates into the Tests field on the left.
  - Type PT. Click the search icon. PT 85610 appears in the *Select Test to Order* field. Click on PT. It appears in the *Selected Tests* field. Click the *Order Selected Tests* button at the bottom right side of the screen and the test populates into the *Tests* field on the left.



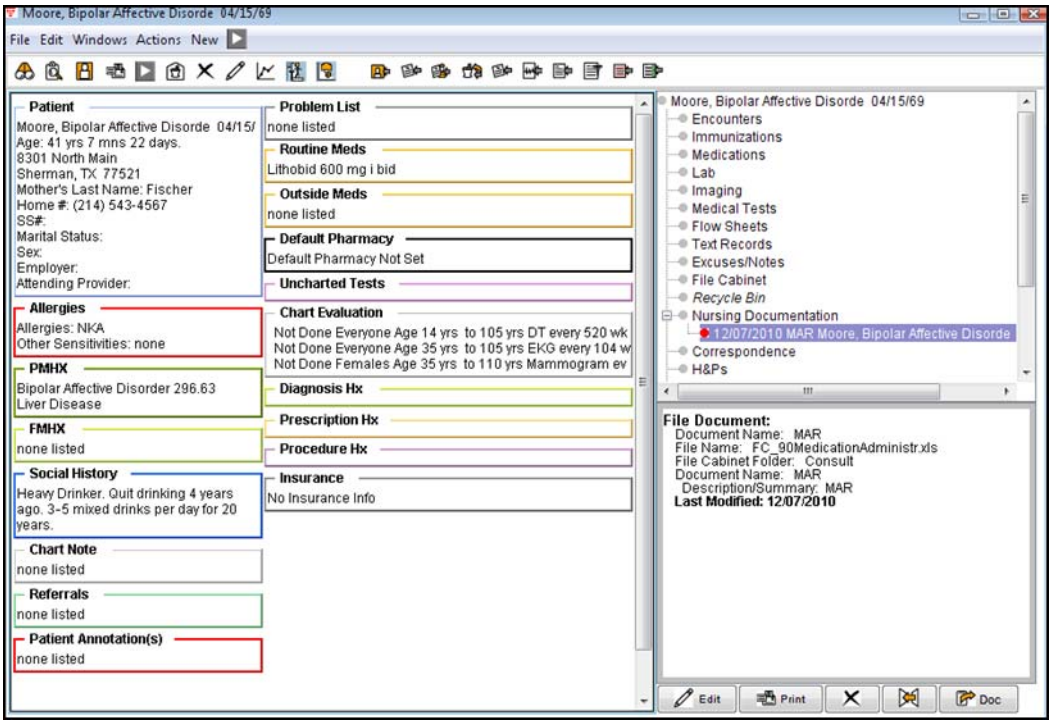
Note: To complete segments 13 and 14 of this exercise you must access certain files contained in the *EHR Materials Folder*. Your instructor or IT staff may need to inform you of the location of this folder.

13. The admission orders indicate that the patient is to continue Lithobid 600 mg by mouth twice daily. Move the nurse note by clicking on the minimize icon in the upper right corner. This will bring you back to the patient's chart. In order to document, click the New menu, Import Items at the bottom of the list.

- Select Import File Cabinet Document and the File Cabinet window appears. Type MAR into the Document name.
- In the Chart Tab select the drop-down box on the right and choose Nursing Documentation. In the Description field type MAR. Click Attach.
- Select Existing. Use the search mechanism to go out and select the blank MAR document.

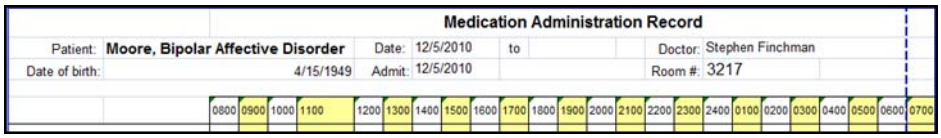


- Click Done. The document appears in the Care Tree on the right in the Nursing Documentation tab. Click on the + in front of Nursing Documentation.

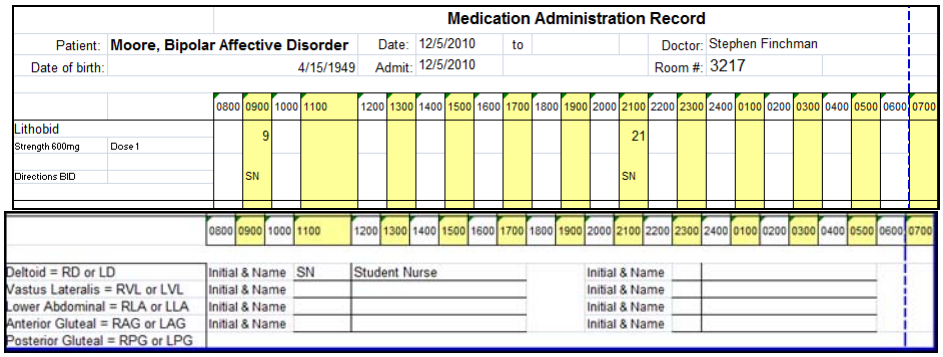


- Highlight the MAR and click Doc at the bottom right hand side of the screen. The MAR document opens.

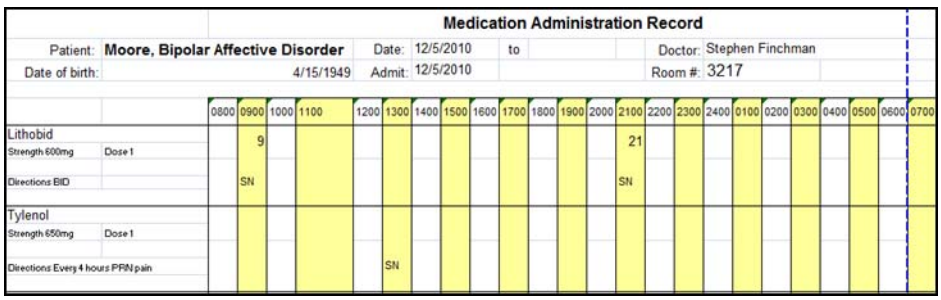
- Enter the Patient, Date of Birth, Date, Admit date, Doctor (Nurse Practitioner), and Room #.



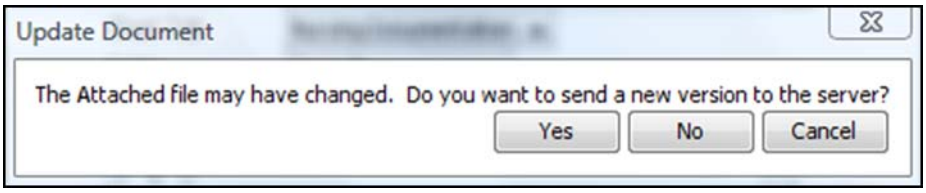
- On the left enter the Lithobid on the blank field above Strength and Dose. In the Strength field type 600 mg and in the Dose field type 1.
- Under directions, type po BID and schedule administration times for 0900 and 2100. Type your name and initials in the Initial & Name area at the bottom of the document.



- Type your initials in the 0900 top time box. Click the save diskette icon to save your work.
- Your patient has Tylenol 650 mg po ordered every four hours prn pain. On the left enter the Tylenol on the blank field above Strength and Dose.
- In the Strength field type 650 mg and in the Dose field type 1. Under directions type every 4 hours prn pain.
- Recognizing that Tylenol is often contraindicated with liver disease, you verify the order with the nurse practitioner. The nurse practitioner tells you to give the Tylenol as ordered because the patient is not a candidate for aspirin or nonsteroidal anti-inflammatory drugs due to her black tarry stool that indicates gastrointestinal bleeding.
- Document administration by typing your initials in the 1300 time box.

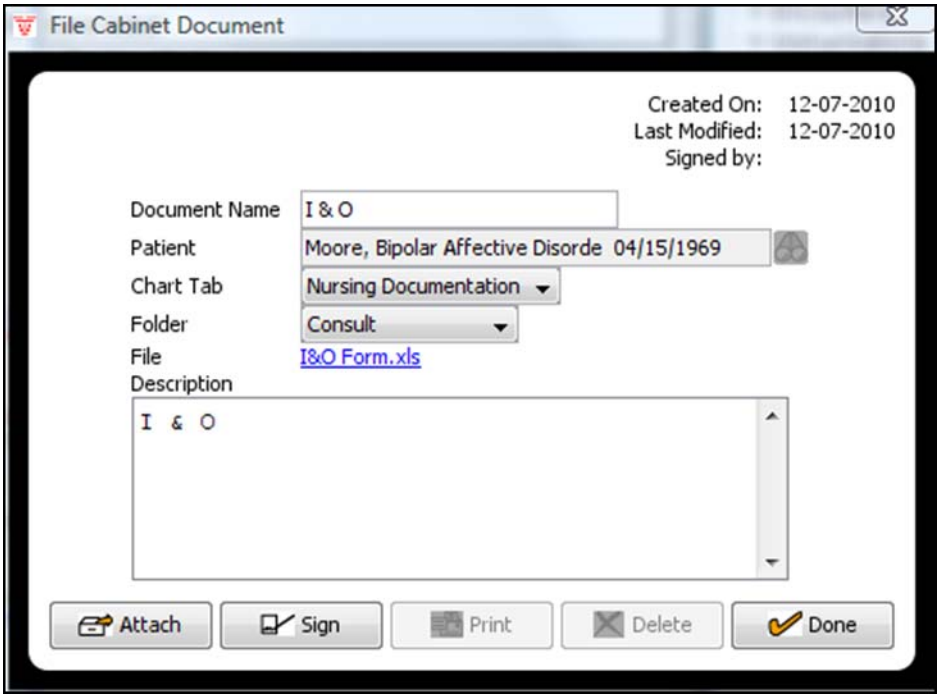


- Click the X on the far right upper corner to close the MAR. A pop up will ask you if you want to save the changes you've made, select yes.
- The File Cabinet Window is still present. Click Done.
- A pop up appears "The Attached file may have changed. Do you want to send a new version to the server?" Click Yes. The window closes.

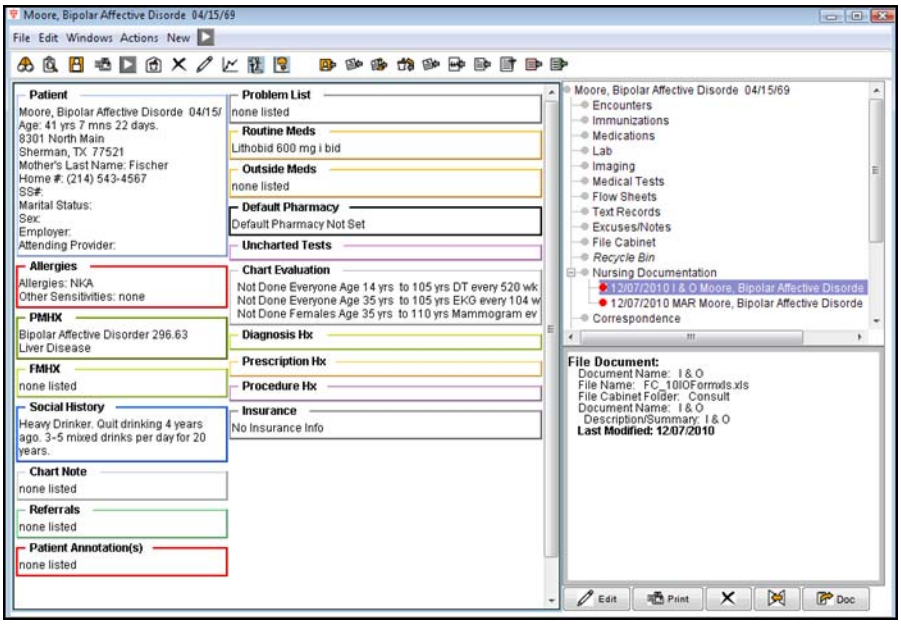


14. In order to document intake and output, import the I&O form.

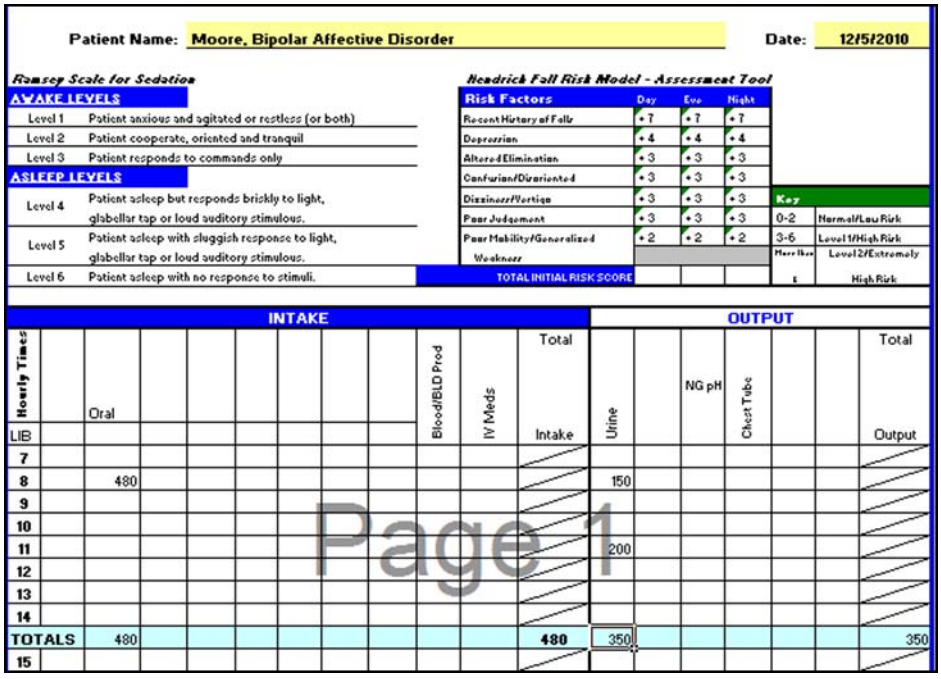
- Click the New menu, Import Items at the bottom of the list. Select Import File Cabinet Document and the File Cabinet window appears.
- Type Intake and Output into the Document name. In the Chart Tab select the drop down box on the right and choose Nursing Documentation.
- In the Description field type Intake and Output. Click Attach.
- Select Existing. Use the search mechanism to select the blank Intake and Output document. Your instructor or IT staff may need to inform you where these documents are kept.



- Click Done. The document appears in the Care Tree on the right in the Nursing Documentation tab.



- Click on the + in front of Nursing Documentation. Highlight the Intake and Output and click Edit at the bottom right hand side of the screen.
- The File Cabinet window appears. Click on the blue hyperlink next to the word File. The Intake and Output document opens. Type in the Patient Name and Date.
- Your patient drank 480 mLs of fluid with her breakfast at 0800 this morning. She urinated 150 mLs at 0800 and 200 mL at 1100.
- Document her intake/output. Complete the 8-hour totals for the shift. Click the save diskette icon to save your work.



Patient Name: Moore, Bipolar Affective Disorder Date: 12/5/2010

Ramsey Scale for Sedation

AWAKE LEVELS	
Level 1	Patient anxious and agitated or restless (or both)
Level 2	Patient cooperate, oriented and tranquil
Level 3	Patient responds to commands only
ASLEEP LEVELS	
Level 4	Patient asleep but responds briskly to light, glabellar tap or loud auditory stimulous.
Level 5	Patient asleep with sluggish response to light, glabellar tap or loud auditory stimulous.
Level 6	Patient asleep with no response to stimuli.

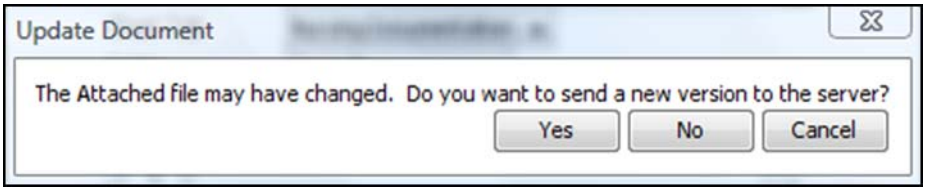
Hendrick Fall Risk Model - Assessment Tool

Risk Factors	Day	Eve	Night
Recent History of Falls	+7	+7	+7
Depression	+4	+4	+4
Altered Elimination	+3	+3	+3
Confusion/Disoriented	+3	+3	+3
Dizziness/Vertigo	+3	+3	+3
Poor Judgement	+3	+3	+3
Poor Mobility/Generalized Weakness	+2	+2	+2
TOTAL INITIAL RISK SCORE			

Key	
0-2	Normal/Low Risk
3-6	Level 1/High Risk
≥ 7	Level 2/Extremely High Risk

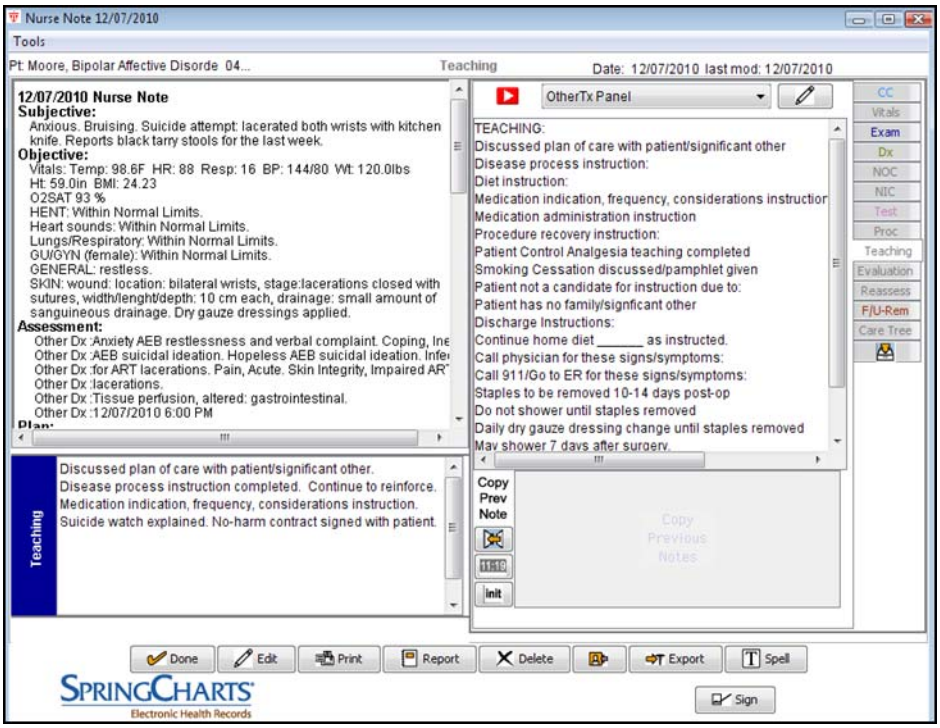
	INTAKE											OUTPUT						
Hourly Times		Oral							Blood/BLD Prod	IV Meds	Total Intake	Urine		NG pH	Chest Tube			Total Output
LIB																		
7																		
8		480										150						
9																		
10																		
11												200						
12																		
13																		
14																		
TOTALS		480									480	350						350
15																		

- Click the X on the far right upper corner to close the I & O document. A pop up will ask you if you want to save the changes you've made, select yes.
- The File Cabinet Window is still present. Click Done.
- A pop-up appears "The Attached file may have changed. Do you want to send a new version to the server?" Click Yes. The window closes.



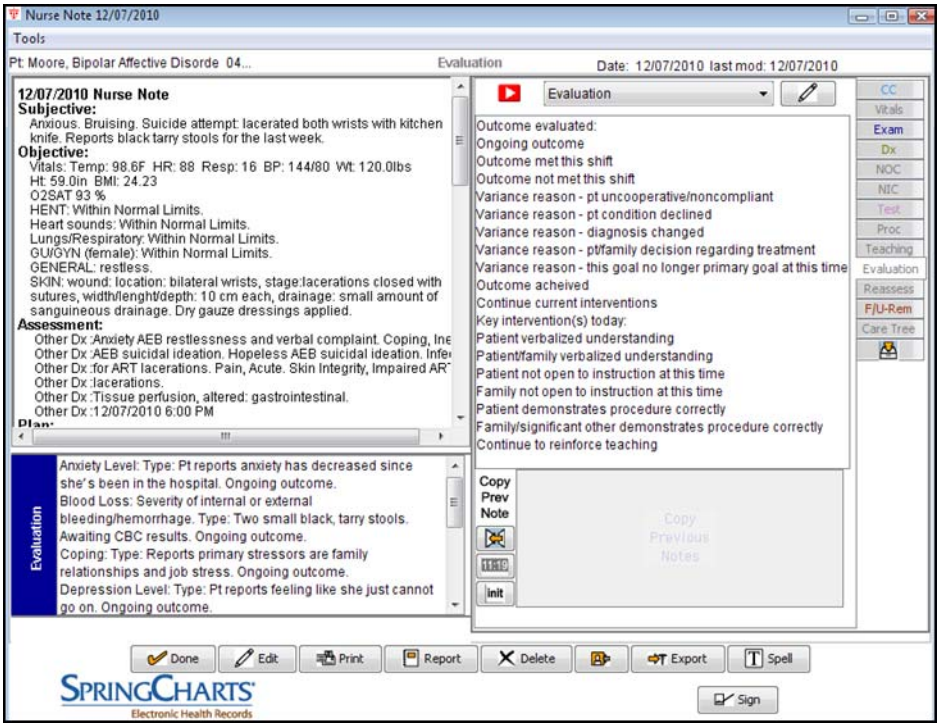
15. The nurse note may be located at the bottom of the screen due to minimizing it earlier. Return to the Nurse Note by clicking maximize icon on the right upper side of the nurse note. Click in the *Teaching* tab on the right.

- Under the *Other Tx Panel* at the upper right portion of the screen, select the following: Discussed plan of care with patient/significant other.
- Disease process instruction completed. Continue to reinforce.
- Medication indication, frequency, considerations instruction.
- Click into the *Teaching* field on the left bottom of the screen after Disease process instruction and type: Suicide watch explained. No-harm contract signed with patient.



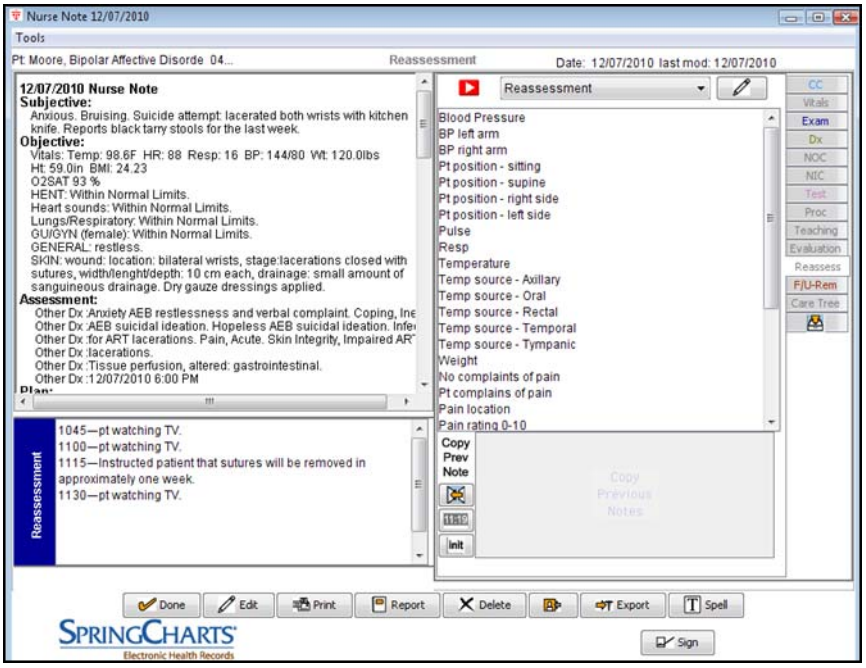
16. Click into *Evaluation* on the right. Using the Evaluation text on the right side, add the text below by clicking on it. (The NOC item for the patient is referenced by the first word.) Add text manually where directed to type.

- Anxiety Level: Type: Pt reports anxiety has decreased since she's been in the hospital. Ongoing outcome.
- Blood Loss: Severity of internal or external bleeding/hemorrhage. Type: Two small black, tarry stools. Awaiting CBC results. Ongoing outcome.
- Coping: Type: Reports primary stressors are family relationships and job stress. Ongoing outcome.
- Depression Level: Type: Pt reports feeling like she just cannot go on. Ongoing outcome.
- Knowledge—Depression Management: Outcome not met this shift. Variance reason—pt uncooperative/non-compliant. Type: Pt states she is not willing to discuss at this time. Will attempt to discuss tomorrow.
- Pain Control: Type: Reports pain level decreased to 3 after administration of Tylenol.
- Wound Healing: Primary Intention: Type: Incisions dry, intact, approximated, secured with sutures. No swelling or redness. Dry gauze dressing applied. Ongoing outcome.
- Continue current interventions.
- Use the Enter key on the keyboard to place text on separate lines to streamline your documentation.



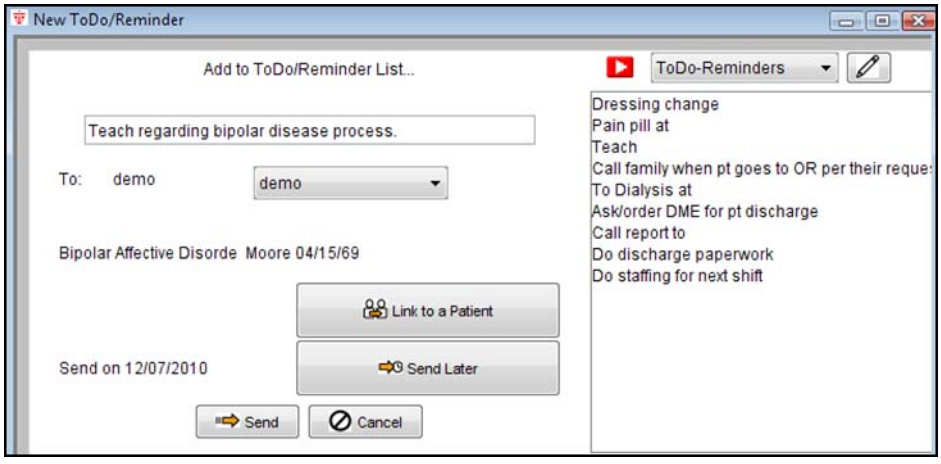
17. Click into *Reassess*. Click in the Reassessment text box on the left side of the screen and type: Every 15 minute observation suicide watch. Enter times 1045, 1100, 1115, 1130.

- 1045—pt watching TV.
- 1100—pt watching TV.
- 1115—Instructed patient that sutures will be removed in approximately one week.
- 1130—pt watching TV.



18. Click into *F/U-Rem*. Notice your documentation from the *Reassess* area populates the *Nurse Note*. On the left side of the screen below the *F/U-Reminders* text click on the icon of a finger with a piece of string tied around it.

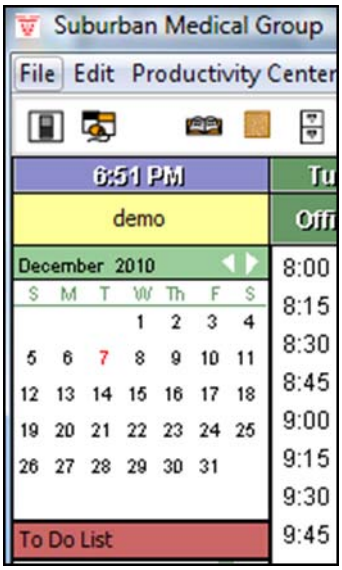
- The *Add to ToDo/Reminder List . . .* window populates. Under the *ToDo- Reminders* text field click: Teach to populate the free text field to the left. Click after Teach and type: regarding bipolar disease process.
- Notice that your patient's name displays in the left middle section of this window. Select your name in the To drop down.



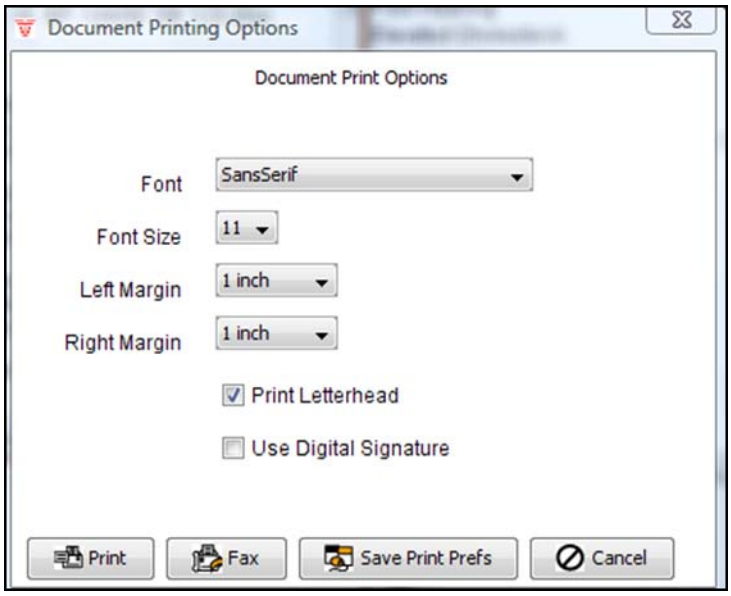
- *F/U-Rem* is linked to a patient when accessed within the *Nurse Note*. Click *Send Later*.

Select tomorrow's date on the calendar. Click *Send*.

- Look to the far left of the software, to the SpringCharts fields that are open outside of the *Nurse Note*. The *ToDo List* appears in dark pink color below the calendar with your new *ToDo-Reminder* below it.



19. With your *Nurse Note* window still open, click on the [Print] button at the bottom of the screen and click print in the Document Print Options screen to print the entire *Nurse Note*.

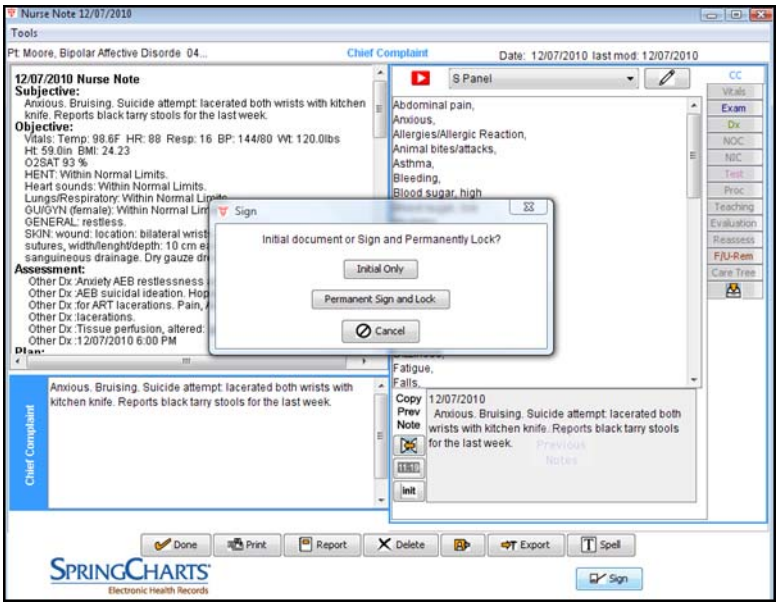


20. Click *Done*. The *Save As* screen populates. Click *Save*.

21. A pop-up appears asking if you want to create a routing slip. Click *No*.

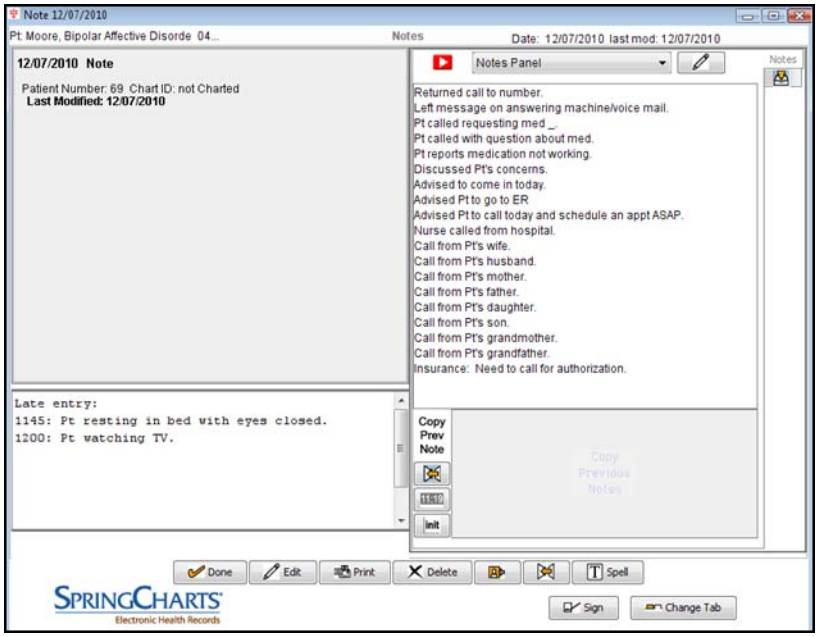
22. In the *Care Tree*, click the + next to *Encounters*. Click on the date of your nurse note and it appears in the bottom right corner box.

- Click *Edit*. Click *Sign*. Select *Permanent Sign and Lock* when finished with your *Nurse Note*.



23. You realize that you forgot to document suicide watch on the patient at 1145 and 1200. Click *New*, *New Note* (not *New*, *New Nurse Note*).

- Click into the free text field at the lower left, enter "late entry" and add the times above. After 1145 type: Pt resting in bed with eyes closed. After 1200 type: Pt watching TV.



- Click *Done*. The *Save As* window opens. Click *Save* and skip billing.

Final Text Review Key

Using Terminology

1. E
2. D
3. F
4. A
5. C
6. B
7. G
8. L
9. M
10. N
11. J
12 H
13. I
14. K
15. O

Rationales:

1. **LO 2.3 Documentation Methods.** SOAP, SOAP(IE), and SOAP(IER) are widely used among healthcare professionals, including nursing, because of the ability to chart assessment findings. However, the SOAP model is primarily a medical model and does not allow for nursing diagnosis and evaluation of interventions. Consequently, nurses often use the SOAP(IER) note format since this style allows for the entire nursing process to be addressed. SOAP(IER) represents:

- S – subjective data (verbalizations of the patient)
- O – objective data (measurable and observable data)
- A – assessment (diagnosis based upon data)
- P – plan (what the nurse plans to do)
- I – interventions (actions taken)
- E – evaluation (patient response to the intervention)
- R – revision (modifications to the plan based on the evaluation)

2. **LO 2.4 Overview of MAR Documentation.** Electronic MARs (e-MARs) reduce the number of medication errors, protecting the patient from harm and the nurse from liability. In addition, e-MARS allow for more efficient tracking of medications within the healthcare system. e-MARs are usually user-friendly and reduce the time spent searching for missing medications.

3. **LO 5.7 Using Practice Guidelines.** A Care Plan consists of documents that provide a "road map" to guide all who are involved with a patient's care, outlining the appropriate treatment to ensure the optimal outcome.

4. **LO 3.6 Understanding the Electronic Chart.** The electronic chart is the repository for patient medical data created through computer automation in the healthcare setting. Similar to the traditional paper chart, it holds such static information as the patient's demographics, allergies, medical history, and medical problems as well as the dynamic information including encounter notes, nurse notes, tests, letters, and reports concerning the patient.

5. **LO 2.5 Standardized Nursing Language.** NANDA-I nursing diagnoses are used to guide nursing decisions and plans of care for individual patients. Selection of diagnostic criteria enables the nurse to develop a plan of care in a variety of settings including hospitals, home health care, hospice, ambulatory care centers, schools, and nursing homes.

6. **LO 3.7 Face Sheet.** Information to complete the electronic face sheet is taken from the paper intake forms that the patient completes containing more constant information such as allergies, past health history, routine medications, and current health problems. Patients in the waiting room typically complete these intake forms while they wait to be seen or admitted. The paper intake forms may be designed to cover the same categories and data flow that appear in the SpringCharts face sheet.

7. **LO 10.1 Patient Rights and Nurses' Responsibilities.** Nursing standards are defined by the American Nurses Association as "authoritative statements by which the nursing profession describes the responsibilities for which its practitioners are accountable."

8. **LO 1.1 The Electronic Health Record History.** EHR — Electronic Health Record: Currently, this term is the most commonly accepted term for storing and accessing patient health information electronically. The EHR meets interoperability standards and therefore is able to be used across many healthcare organizations.

9. **LO 7.2 Building An Office Visit Note.** The American Medical Association (AMA) was founded in 1847 with the purpose of promoting the art and science of medicine.

10. **LO 10.2 Accreditation Requirements.** The most widely recognized accreditation comes from The Joint Commission, a non-profit organization that accredits approximately 17,000 healthcare organizations. Hospitals are evaluated based on their adherence to quality standards, including patient education. While many patient education standards are general, disease-specific requirements for patient education have also been adopted through The Joint Commission Core Measures Initiative.

11. **LO 1.2 The EHR Standards History.** The Certification Commission for Health Information Technology states its mission is "to accelerate the adoption of health information technology by creating an efficient, credible and sustainable product certification program."

12. **LO 9.3 Immunization Record.** Vaccination Information Statement sheets were developed by the Centers for Disease Control and Prevention. VIS sheets delineate the risks and benefits of a vaccine.

13. **LO 7.2 Building An Office Visit Note.** A lab analyte is a blood test compound that is subject to its own specific chemical analysis. A lab panel is composed of multiple analytes that undergo analysis. For example, an electrolyte panel is composed of sodium, potassium, chloride, and carbon dioxide analytes.

14. **LO 7.2 Building An Office Visit Note.** History & Physical often referred to as an H&P, it is the documentation of the patient's health history combined with the physical exam. The H&P is the initial clinical evaluation and examination of the patient.

15. **LO 1.1 The Electronic Health Record History.** A Tablet PC is a portable, handheld computer, with the ability to document directly on the screen with a stylus pen.

Checking Your Understanding

16. F
17. F
18. F
19. F
20. F
21. F
22. T
23. T
24. T
25. F
26. T
27. F
28. F
29. F
30. T

Rationales:

16. **LO 2.4 Overview of MAR Documentation.** Electronic MARs (e-MARs) reduce the number of medication errors, protecting the patient from harm and the nurse from liability. In addition, e-MARS allow for more efficient tracking of medications within the healthcare system. e-MARs are usually user-friendly and reduce the time spent searching for missing medications. Electronic MARs are for documentation purposes only and do not replace any of the "rights" of medication administration.

17. **LO 1.1 The Electronic Health Record History.** Traditionally, a keyboard was the only source for data entry. However, the need for convenience, efficiency, and speed has mandated other methods of input. Voice recognition systems adapt to a person's voice and speech patterns so that the computer inputs data as the operator speaks. Many EHRs are compatible with voice recognition systems. Electronic handwriting recognition is now available. Also, large bodies of preset text known as "templates" can be used to easily input data into the patient's record.

18. **LO 10.5 Implementing, Evaluating, and Documenting Patient Education.** Nurses use a variety of educational tools and methods to teach clients and their families or significant others. For example, during medication administration, a nurse may verbally communicate the name of the medication and its mechanism of action. When the patient is discharged, the nurse may give the patient a drug information sheet for reference at home.

19. **LO 7.2 Building An Office Visit Note.** Once the Office Visit is locked by selecting *Permanent Sign & Lock*, it cannot be unlocked or edited, even by the individual who permanently locked it. However, an addendum can be placed at the bottom of an office visit note, if needed.

20. **LO 1.1 The Electronic Health Record History.** Another network option for a healthcare facility is the web-based EHR or ASP (application server provider) where the EHR is accessed via the Internet using high-speed connections. In this model, the software is not housed on a computer server at the healthcare facility. The EHR web hosting company conducts maintenance, updates, and backups remotely.

21. **LO 9.2 Internal Messages.** The message center is located in the lower right quadrant of the main screen. The SpringCharts message system is an intra- and interoffice mail function that enables users to send and receive messages with other SpringCharts users on the network and to e-mail messages over the Internet.

22. **LO 2.4 Overview of Medication Documentation.** Electronic MARs protect both the patient and the nurse by reducing the number of medication errors and allowing for more efficient tracking of medications within the healthcare system.

23. **LO 7.2 Building An Office Visit Note.** The use of Templates is the most rapid way of building documentation in an office visit.

24. **LO 3.5 Customizing Pop-Up Text.** The *Edit PopUp Text* window allows for 60 line items to be added to any pop-up text category. These text lines can be individual words, sentences, or complete paragraphs. In addition to the 34 preset category headings that come with the installed program (and therefore cannot be altered), 20 customizable categories are in the side menu.

25. **LO 9.1 ToDo's And Reminders.** The *ToDo List* is located in the lower left quadrant of the *Practice View* screen. A ToDo item is set by clicking once on the *ToDo List* title bar. In the *New ToDo/Reminder* window one may 1) notate the ToDo item, 2) send the item to another coworker, 3) link the item to a patient, and/or 4) schedule the ToDo/Reminder for a future date.

26. **LO 5.3 Creating A Letter To A Patient Or About A Patient.** All entries in the patient's care tree are also available to add into the body of the letter by selecting the [Add Chart Notes] button. This is useful when sending office visit notes, such as test results, encounter notes, or information from the face sheet to a referring physician.

27. **LO 10.0 Overview.** Documentation is the mechanism whereby nurses demonstrate the use of the nursing process to determine that patients' educational needs are met.

28. **LO 5.6 Creating An Excuse Note And Order Form For A Patient.** Order forms are used to record orders for lab, imaging, and medical tests that are conducted at a third party facility. Within the order window the user selects a medical diagnosis(es) from the patient's *Previous Dx* window to associate a relevant diagnosis with the test that is ordered.

29. **LO 2.3 Documentation Methods.** SOAP, SOAP(IE), and SOAP(IER) are widely used among healthcare professionals, including nursing, because of the ability to chart assessment findings. However, the SOAP model is primarily a medical model and does not allow for nursing diagnosis and evaluation of interventions. Consequently, nurses often use the SOAP(IER) note format since this style allows for the entire nursing process to be addressed. SOAP(IER) represents:

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- I – interventions (actions taken)
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30. **LO 3.7 Face Sheet.** Information to complete the electronic face sheet is taken from the paper intake forms that the patient completes containing more constant information such as allergies, past health history, routine medications, and current health problems. Patients in the waiting room typically complete these intake forms while they wait to be seen or admitted. The paper intake forms may be designed to cover the same categories and data flow that appear in the SpringCharts face sheet.

31. C

Rationale:

LO 5.1 Recording Vital Signs. Typically, vital signs are recorded as part of a regular nurse note or on a flowsheet in an acute care setting or as part of a provider note in an ambulatory setting. SpringCharts EHR has a feature that allows vital signs to be recorded outside of a regular note. This feature in SpringCharts is only used when patients need frequent vital sign monitoring in either the inpatient or outpatient setting. For example, hypertensive patients may come to an outpatient healthcare clinic for the sole purpose of having their blood pressure monitored.

32. B

Rationale:
LO 10.5 Implementing, Evaluating and Documenting Patient Education. If the content of the patient education is a psychomotor skill such as insulin administration or changing an ostomy appliance, patients, or their caregivers, should be given the opportunity to demonstrate the skill

to the nurse before being expected to perform the skill independently without supervision. Return demonstration gives both the patient and the nurse confidence that the skill is being performed accurately.

33. C

Rationale:

LO 1.3 EHR Certification Bodies. The Certification Commission provided an official recognition and approval that had been requested from both the private sector and from government agencies. Such industry standards–based criteria for EHRs promoted confidence in their use. In the past, the lack of uniform requirements and standards was a considerable hurdle to the extensive adoption of EHRs. When HHS awarded the contract to the Certification Commission, this barrier was specifically addressed to promote the use of an EHR by primary care providers, hospitals, home-health, and other organizations. As stated by Mike Leavitt, the former HHS secretary, "The seal of certification removes a significant barrier to widespread adoption of electronic health records. It gives healthcare providers peace of mind to know they are purchasing a product that is functional, interoperable, and will bring higher quality, safer care to patients."

34. B

Rationale:

LO 4.1 Overview. The *Objective* component of the SOAP or SOAPIER note contains the nurse's observations and generally includes the vital signs and findings from the physical exam.

35. B

Rationale:

LO 9.2 Internal Messages. At times, a nurse may need to provide confidential patient information to a coworker quickly. The *Urgent Messages* function prevents having to locate the coworker and provide a mechanism for communicating information discreetly in order to maintain patient privacy. The urgent message functions similar to an instant message. The message pops up on the recipient's SpringCharts display.

36. B

Rationale:

LO 7.1 The Office Visit Note. An OV window has three main sections. Typically, the left-side panel displays the patient's Face Sheet overview. This panel allows the practitioner to view the Face Sheet items without having to exit the Office Visit display. Any of the Face Sheet categories can be added into the Office Visit Note to document that the provider discussed these issues with the patient.

37. C

Rationale:

LO 5.7 Using Practice Guidelines. SpringCharts provides access to the National Guideline Clearinghouse™ (NGC). The NGC is a comprehensive database of evidence-based clinical practice guidelines and related documents. The NGC website contains numerous healthcare treatment plans containing objective, detailed clinical information for physicians, nurses, and other healthcare professionals.

38. C

Rationale:

LO 1.4 Benefits Of The EHR. MIPPA- Medicare Improvements for Patients and Providers Act of 2008. The act establishes Medicare reimbursement for providers, reduces racial and ethnic disparities among Medicare recipients, and places limits on certain rapidly growing Medicare supplemental insurance.

39. D

Rationale:

LO 3.5 Customizing Pop-Up Text. SpringCharts pop-up text can be edited from multiple locations. In any dialogue box within SpringCharts that displays pop-up text, the edit icon gives access to the *Edit PopUp Text* window where text can be added, deleted, or modified. Pop-up text is stored in the SpringCharts database by user login name; therefore, each user has a personal set of pop-up texts that can be modified without affecting any other user's pop-up text.

40. D

Rationale:

LO 3.1 A Brief History. The CCHIT-certified *SpringCharts EHR*™ software has been chosen as the training tool for this textbook because of its ease of use, richness in features, and its ability to be customized to suit a wide range of healthcare specialties. SpringCharts is an international program and is used by over 1,500 physicians and thousands of nurses, medical assistants (MA), nursing assistants (NA) and other healthcare personnel.

41. A & C

Rationale:
LO 10.3 Assessing Patients' Learning Needs. While assessing the patient, the nurse should identify barriers to learning such as language, poor vision or hearing, pain, and anxiety. Cultural norms may dictate who receives education in addition to the patient. The nurse should determine the patient's preferred method of learning. Determining the patient's current level of knowledge

and living environment is also important. The nurse must assess the patient's ability to learn, including health literacy. Documentation of patient education must indicate assessment of learning preferences, barriers to learning, and readiness to learn, or motivation.

42. B

Rationale:

LO 2.1 Introduction to Documentation. Documentation provides one mechanism for communication among healthcare professionals. Each member of the healthcare team is required to document contributions to patient care, such as assessments, diagnostic tests, therapeutic treatments, medications, and preparation of the patient and family for discharge.

43. B

Rationale:

LO 5.1 Recording Vital Signs. In the outpatient setting, vital signs and notes can be transposed into a regular Office Visit note by selecting the [Convert Note] button at the bottom of the screen. This action places the recorded vital signs into an Office Visit Note in the *Objective* portion of the SOAP note, giving the provider a wide range of other pop-up text to add to the note, such as diagnoses and procedures. Once changed to an Office Visit Note, the original *New Vital Only* note cannot be filed separately.

44. A, B, C

Rationale:

LO 3.7 The Face Sheet. There are multiple ways to edit a patient's Face Sheet including: select a Face Sheet item from the chart edit menu, select the Open Face Sheet button found on the patient chart tool bar, or right-click on an item in the Face Sheet and select Edit.

45. C

Rationale:

LO 1.2 The EHR Standards History. CCHIT- Certification Commission for Health Information Technology is an independent initiative that seeks to accelerate the adoption of EHRs with a credible certification program.

46. C

Rationale:

LO 9.4 Patient Instructions. To obtain and distribute a *Patient Instruction*, the provider opens either a new or existing Office Visit Note or Nurse Note from a patient's chart. From within either of these two patient encounter windows, the provider selects the *Tools* menu and chooses *Patient Instructions*. A list of all instructions that have been created in Spring- Charts is available for selection. The user is provided the option to print or e-mail the selected patient instruction sheet.

47. B, C, D

Rationale:

LO 7.2 Building An Office Visit Note. To discontinue a medication that a patient is currently receiving, an *Encounter* must be created in the patient's EHR. Medications may be discontinued from within an Office Visit, Nurse Note, new TC note, messages, or anywhere in SpringCharts where the patient's drug list can be accessed. To discontinue a patient's medication, the clinician selects the specific prescription and highlights it to open the *Edit Rx* window. This graphic user interface (GUI) enables the practitioner to input a *Date Stopped* and a *Reason Stopped*. The *Reason Stopped* can be selected from preset pop-up text.

48. B

Rationale:

Previous Patient Tracker records are automatically stored each day in the Tracker Archive found under the main Edit menu.

49. A

Rationale:

LO 1.1 The Electronic Health Record History. Internet and intranet technologies have increased the availability of healthcare databases that can be shared and accessed across large distances giving healthcare providers accessibility to the EHR from remote locations such as nursing homes, a patient's home, a home office, or hospitals. Access to these networks is limited and data flowing on the network is encrypted for security.

50. C

Rationale:

LO 4.1 Overview. The *Plan* component includes the nursing goals applicable to the patient stated in *Nursing Outcomes Classification (NOC)* format. In the planning phase, the nurse sets the anticipated time frame for goal attainment. Outcomes are reviewed periodically, typically every shift to determine patient progress.