

# Leveraging Functionality of Clinical Documentation Software to Transform a Traditional Nursing Tool



UNC  
HEALTH CARE

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# eChart (Siemens Soarian®)

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- Used primarily for Nursing and Ancillary documentation.
- Quality and Performance Audits reports derived directly from charted data.
- Post Fall documentation feeds Incident Reporting System.
- Hand-off reporting moved to the bedside.
- Ongoing staff feedback is key factor to our success.

# Electronic Clinical Documentation

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- Siemens Soarian<sup>®</sup> (eChart) documentation software implemented for inpatient Nursing starting in 2007.
- Clinical Design and Implementation Committee (CDIC) guides development.
- CDIC has representatives from every Nursing service line, Nursing administration, Pharmacy, Respiratory Therapy, OT, PT, SLP, Food and Nutrition Services, Performance Improvement, Compliance, Legal, and IT.
- CDIC meets 8hrs every month to review user feedback, enhance clinical documentation, devise implementation plans, and explore software functionality.

# User Feedback

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- Need quick access to a comprehensive snapshot of pertinent patient information (e.g. isolation, precautions, skin breakdown, invasive lines, psychosocial concerns, contact information, etc.).
- Hard to sort / filter through mountains of charted data.
- Pull specific data elements to the forefront depending on the task at hand - auditing & bedside reporting time could be reduced if particular data elements were easily obtained.
- Reduce the number of mouse clicks.

# eKardex – Clinical Summary

- Create an electronic kardex that groups information similar to how a nurse would give report.
- Data is simply a byproduct of documentation – NOT an additional step.

Summary	Head to Toe	Skin	Tubes/Drains	Vascular Access	Assessments	Interdisciplinary	Education	Quality	Contact/Belongings	Clinical Notes	Vitals	Labs	Specialty
<b>Patient History</b>													
1 Occurrence ▶ [Print] [List] [Close]													
12/07/11 17:54													
Patient History													
Reason for Admission - Pt. State ... <a href="#">pain- back and stomach</a>													
Other illnesses/surgeries <a href="#">Gallbladder, Tonsillectomy, several kidney procedures, DM, HTN, GERD, peripheral neuropathy, Multiple Myeloma, Asthma-Childhood</a>													
Learning Preferences <a href="#">Verbal/Discuss</a>													
Learning Barrier <a href="#">Pain</a>													
Vision <a href="#">Contacts, Glasses</a>													
Hearing <a href="#">Intact</a>													
Speech													
<hr/>													
<b>Clinical Considerations</b>													
1 Occurrence ▶ [Print] [List] [Close]													
12/08/11 12:00 12/07/11 17:54													
Advance Directive Type <a href="#">Health Care Power of Attorney</a>													
Precautions <a href="#">Bleeding, Falls, Neutropenic</a>													
Protocols Initiated <a href="#">Bowel Dysfunction, Catheterization: Urinary, Cardiac Monitoring, Central Venous Access Device, ICU, Neurological Assessment, Oral Care, Oxygen: Non-Ventilated Patients, Pain Management, Telemetry</a>													
Other Protocols Initiated													
Activity													
Diet													
Cultures Sent													
<hr/>													
<b>Measurements</b>													
2 Occurrences ▶ [Print] [List] [Close]													
12/08/11 00:00 12/07/11 17:54 11/29/11 14:04													
Height <a href="#">172.72</a> <a href="#">171.5</a>													
Admission Weight <a href="#">94.5</a>													
Last Recorded Weight <a href="#">97.7</a> <a href="#">94.5</a>													
Body Mass Index <a href="#">31.68</a> <a href="#">32.40</a>													
Body Surface Area													
<hr/>													
<b>Psycho-Social</b>													
1 Occurrence ▶ [Print] [List] [Close]													
10/13/11 12:42													
Family Considerations <a href="#">Cares for children and mother at home</a> <sup>Δ</sup>													

# Asmts & Admission/Discharge

- Ability to precisely retrieve data by number of occurrences or number of days per container.
- Staff input used to determine content & default data retrieval method.

The screenshot displays a medical software interface with several tabs and data tables. Two red boxes highlight specific settings:

- Assessments Filter:** A red box highlights the 'Assessments' tab and its filter options: 'All', 'Nursing', 'PT', 'OT', 'SLP'. Below these, it shows '1 - 300 of 337' and '7 Days'.
- Admission / Discharge Filter:** A red box highlights the 'Admission / Discharge' tab and its filter options: '2 Occurrences'.

The main data table shows assessment results for various categories over time. The 'Admission / Discharge' table shows specific dates and times for admission and discharge events.

Category	12/09/11 12:00	12/09/11 11:35	12/09/11 11:00	12/09/11 10:45	12/09/11 10:00	12/09/11 09:00	12/09/11 09:00	12/09/11 08:30	12/09/11 08:00	12/09/11 08:00	12/09/11 08:00	12/09/11 08:00	12/09/11 08:00	12/09/11 08:00	12/09/11 08:00	12/09/11 07:00
Activities/Interventions	✓		✓		✓	✓			✓							✓
Asmt - Cardio / Respiratory									✓							
Asmt - GI / GU																
Asmt - Neuro / HEENT											✓					
Asmt - Skin / Musculo												✓				
Asmt - Tubes / Drains													✓			
Asmt - Vascular Access Devices																
Education															✓	
Falls Risk																
Graphics				✓			✓									

  

Category	11/28/11 08:30	04/05/11 10:41	04/05/11 06:15	03/26/11 15:41
Admission	✓ Δ			✓ Δ
Rec Therapy Asmt/Treatment				
Discharge Asmt			✓ Δ	
Discharge Meds		✓		

  

Category	11/28/11 17:32	11/28/11 10:14	03/26/11 11:38	03/26/11 09:08
Dietitian Assessment	✓ Δ		✓ Δ	
PT Acute Care Evaluation		✓ Δ		✓ Δ
Rec Therapy Asmt/Treatment				

# Interdisciplinary Plan

- Keeping pertinent information together allows for faster, more accurate data review.

The screenshot displays a software interface for an interdisciplinary plan, organized into several panels:

- Problems:** Lists issues such as Fall Risk, Self-Care Impairment, and Skin Integrity Impairment.
- Nursing:** Includes a team update dated 08/06/10 at 07:02 regarding bowel and bladder continence.
- Other Ancillary:** A note stating "No data is available for the specified timeframe or occurrence."
- PT (Physical Therapy):** Shows one occurrence on 12/09/11 at 10:59 with various transfer types and LOAs (e.g., Supine to Sit, Contact Guard Assist).
- OT (Occupational Therapy):** Shows one occurrence on 08/06/10 at 16:22 with team updates on barriers (Chronic R sided weakness, Hard of hearing) and strengths (persistence, participation). It also lists patient goals and STG (Standardized Therapeutic Goal) items like Eating and Groom Self.
- SLP (Speech-Language Pathology):** Shows one occurrence with a note: "No data is available for the specified timeframe or occurrence."
- Rec./Music Therapy:** Shows one occurrence on 12/09/11 at 07:36, including team updates on Social FIM (7) and barriers (endurance, balance), and a patient goal: "To walk independently."

# Core Measures - Quality

- Easily view groups of patient data from disparate assessments for auditing or hand-off report.

Summary	Head to Toe	Skin	Tubes/Drains	Vascular Access	Assessments	Interdisciplinary	Education	Quality	Contact/Belongings	Clinical Notes	Vitals	Labs	Specialty																														
<b>Quality Measures</b>						<b>Audit - *future release</b>		<b>Restraint Audit - *future release</b>																																			
<p>12/06/11 14:35</p> <p>Influenza Vaccine: 2 - Vaccine received prior to admission during current flu season, not during this hospitalization</p> <p>Pneumococcal Vaccine: 2 - Vaccine given in the past, not during this hospitalization</p> <p>Smoking Status: Never Smoker (CDC 4)</p> <p>Smoking History: No or Unable to Determine (UTD)</p> <p>Smoking Cessation Counseling Giv ...</p>						<p>No data is available for the specified timeframe or occurrence.</p>		<p>No data is available for the specified timeframe or occurrence.</p>																																			
						<b>Pain Audit - *future release</b>		<b>Skin Audit</b>																																			
						<p>No data is available for the specified timeframe or occurrence.</p>		<p>2 Days ▶</p> <table border="1"> <thead> <tr> <th></th> <th>12/09/11 08:00</th> <th>12/09/11 08:00</th> <th>12/09/11 06:57</th> <th>12/09/11 03:00</th> <th></th> </tr> </thead> <tbody> <tr> <td>Name Band</td> <td colspan="5">On Patient and ID verified</td> </tr> <tr> <td>Bed Check</td> <td colspan="5">Power On, Heel Relief On, Side Rails Up x 3</td> </tr> <tr> <td>Position</td> <td colspan="2">Semifowler</td> <td colspan="2">Right Lateral</td> <td>Right Lateral</td> </tr> <tr> <td>Braden Score</td> <td colspan="5">17</td> </tr> </tbody> </table>							12/09/11 08:00	12/09/11 08:00	12/09/11 06:57	12/09/11 03:00		Name Band	On Patient and ID verified					Bed Check	Power On, Heel Relief On, Side Rails Up x 3					Position	Semifowler		Right Lateral		Right Lateral	Braden Score	17				
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# Specialty – Labor & Delivery

- Obstetricians saw the quality and flexibility of information available and asked to document in eChart.
- Currently planning tabs for other specialties like Rehab and Oncology.

Summary	Head to Toe	Skin	Tubes/Drains	Vascular Access	Assessments	Interdisciplinary	Education	Quality	Contact/Belongings	Clinical Notes	Vitals	Labs	Specialty																																										
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# Education

- Clinicians educated at various committee & staff meetings.
- ISD Training developed online tutorial - available from within eChart.

The screenshot shows a web browser window titled "Clinical Summary Tutorial -- Webpage Dialog". The main content area features a light blue background with the "e-Chart" logo and the "UNC HEALTH CARE" logo. A yellow callout box in the top left corner contains the following text: "Clinical Summary is a view-only display in e-Chart that provides an alternate way to view patient data. It is designed to work like a 'Kardex' or a hand-off communication tool, and displays data that the nurse or clinician has already saved for the patient via the Charting display." Below the logos is a login form with fields for "User name" and "Password", a "Change Password" checkbox, and a "Login" button. A "Help" button with a question mark icon is also present. A yellow callout box in the bottom right corner says: "Click the Continue button to advance through the tutorial unless otherwise directed." Below this is a "Continue" button. At the bottom of the window, there is a navigation bar with buttons for back, forward, and close. A "SCHEDULED DOWNTIME" notice is visible at the bottom left of the page content, and a copyright notice for Siemens Medical Solutions USA, Inc. is at the bottom center.