

Better Health. Powered by Information.

Connect Care

Clinical Documentation Improvement with Facilitated Norms and Standards

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Clinical Documentation Committee
Clinical System Design Program

June 23, 2022



Objectives

- Review progress with post-launch clinical documentation improvement initiative.
- Illustrate how standardized building blocks can improve documentation quality.
- Illustrate how “interactive documentation” could promote compliance with documentation norms.

Clinical Documentation Improvement

- **Context**
 - Anticipated issue... “note bloat”
- **Documentation Quality**
 - Contributing Causes
 - Programmatic Improvement
- **Building Block Optimization**
 - Making Smart-Stuff Intelligent
- **Interactive Charting Supports**
 - Progress and Summative new-generation documentation templates
- **Discussion**
 - Next steps and suggestions

Documentation Norms

“Note Bloat” is clinical documentation that is:

- Difficult and time-consuming to read
- Cluttered by inconsistent/inappropriate use of text, tables, lists, fonts, styles... leading to cognitive dissonance
- Obscures what is clinically important... decreasing situational awareness (perception and comprehension of information needed to take action)
- Hard to codify
- Hard for AI-enhanced searching to prioritize
- Productive of long, mis-ordered, imprecise, search results
- Clumsy to interface with other health information systems

Documentation Norms

“Note Bloat” reflects failed paper → digital paradigm change

Data review tool → Data analysis tool

Patient-level information persists, always available

Chart already does the work of data organization, categorization, presentation

Shift from documenting the ‘What’ to the ‘Why’

Record understanding of the relationships between observations, problems

Exposing reasons for choices

Highlighting outcome tracking that will validate choices

Generation Gap?

Trainees give highly positive ratings to text automation; better than before (perception that Quantity trumps Quality?)

Attendings rate products of text automation as unequivocally worse

Clinical Documentation Improvement

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 - **Documentation Quality**
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 - Discussion
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Documentation Degradation

“Note Bloat” Accelerants

1. Mistuned tokens

Failure to standardize fonts, formats, presentation, time intervals, abbreviation norms, data structure, alert indicators

Tokens not adapted to different documentation contexts (e.g. H&P vs Progress)

Difficulty quickly correcting document elements based on tokens (without losing refreshes)

2. Misused Copy-Paste, Copy-Forward

Obscures what is changed/new/important

Notes become indistinguishable variants with loss of attribution and accountability.

Contributes to growth in length and loss of focus

3. Misplaced Documentation

Using note as a Wiki-like draft discharge summary rather than other on-purpose tools

Failure to document patient-level data outside of encounter notes

Failure to take advantage of problem-oriented charting for complex patients

Documentation Quality Improvement

“Note Bloat” Remedy → Systematic Approach

- ❑ Programmatic Approach
- ❑ Oversight – priority, sponsorship, advocacy & authority
- ❑ Norms – principles, styles, references, best practice examples
- ❑ Compliance – audit, feedback, trending
- ❑ Documentation Tools & Templates Overhaul
- ❑ Training – anticipatory, base, continuing
- ❑ Intervention – strategy and evaluation framework

Documentation Oversight

“Note Bloat” Remedies

- ✓ Programmatic Approach
- ✓ Oversight – priority, sponsorship, advocacy & authority
- ❑ Norms – principles, styles, references, best practice examples
- ❑ Compliance – audit, feedback, trending
- ❑ Documentation Tools & Templates Overhaul
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- ❑ Intervention – strategy and evaluation framework

Clinical Documentation Committee

ClinDoc Quality Workgroup

6 Month Plan / Targets

- After Visit Summary - medication display
 - Race and Ethnicity Category list
 - Problem reconciliation
 - Summative documentation optimization
 - Update Documentation Norms*
 - Update Clin Doc Policy and Procedure*
 - Smart Form principles and or Procedure documentation*
- 

Documentation Norms

“Note Bloat” Remedies

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Connect Care Norms



Connect Care Manual

- ✓ Home
- ✓ Access
- ✓ Training & Readiness
- ✓ Personalization
- ✓ Mobility
- ✓ Dictation
- ✓ Communications
- ^ Norms

Norms and Compacts

The Connect Care initiative brings major change to best workflows, Connect Care users face many user practices. Modernized policies and procedures will

Connect Care navigates unknowns with user-validation and accountability between providers and consumers. Short and simple, compacts can be easier to act on

Where the focus is on user expectations of one another, all users to do their best.

Connect Care compacts and norms are summarized as follows:

- [Information Sharing Norms](#)
- [Minimum Use Norms](#)
- [Documentation Norms](#)

Clinical Documentation

What is it?

Clinical documentation is the process by which we record health observations, assessments or plans so that they can be shared with other members of the health care team. All forms of clinical documentation serve communication, collaboration and coordination.

There are two categories of clinical documentation:

1. **Progress** documentation records new or changed findings, clinical progress or otherwise indicates what is unique or important about a defined period within a larger care encounter or episode. Progress notes are typical transactional documents. Ideally, they highlight clinically important developments since the last summative note.
2. **Summative** documentation gathers all information pertinent to an encounter or episode, organizes observations, exposes meaning, and offers a plan keyed to care goals. Examples of summative documents include consultation notes, admission histories, discharge summaries, surgery reports, transfer notes and integrative plans of care.

Best practices vary by category.

Why does it matter?

Connect Care

clinical information system

DOCUMENTATION Norms





Alberta Health Services
Connect Care



Connect Care

Copy-Paste & Copy-Forward Principles

Copy-Paste and Copy-Forward Principles

Principle	Implications	Clinician Responsibilities

Clinical Documentation Committee

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Documentation Audits

“Note Bloat” Remedies

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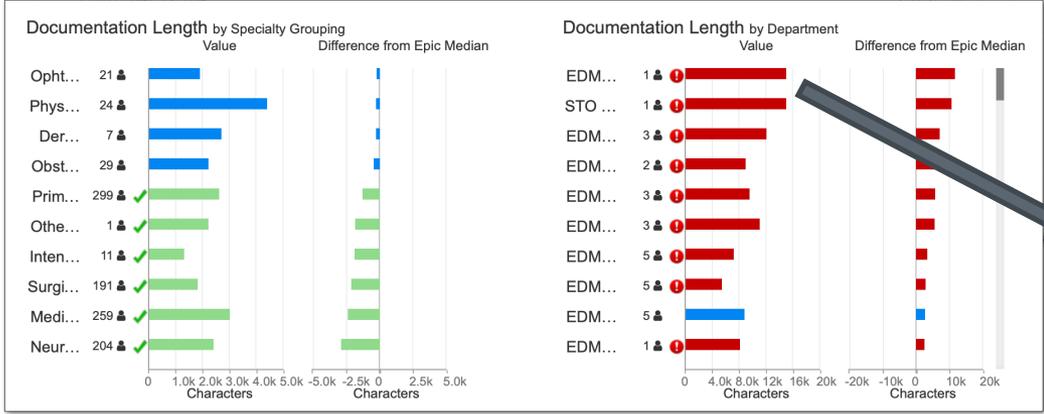
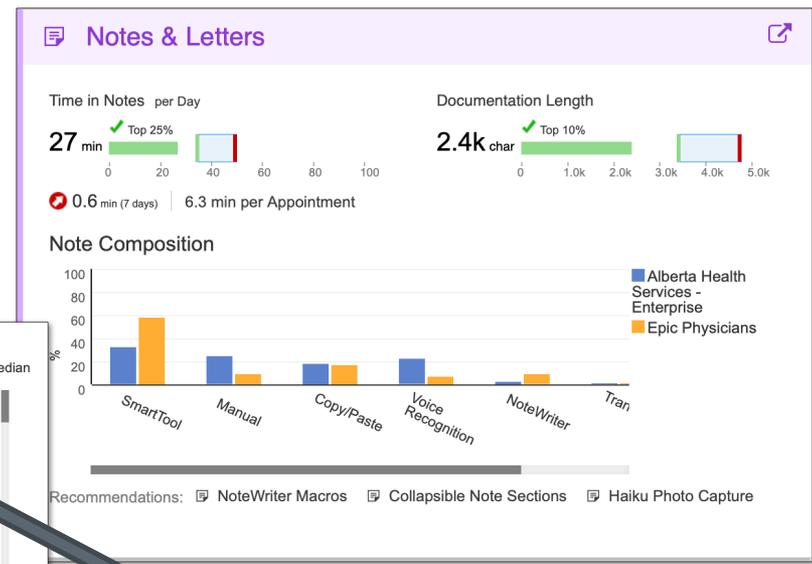
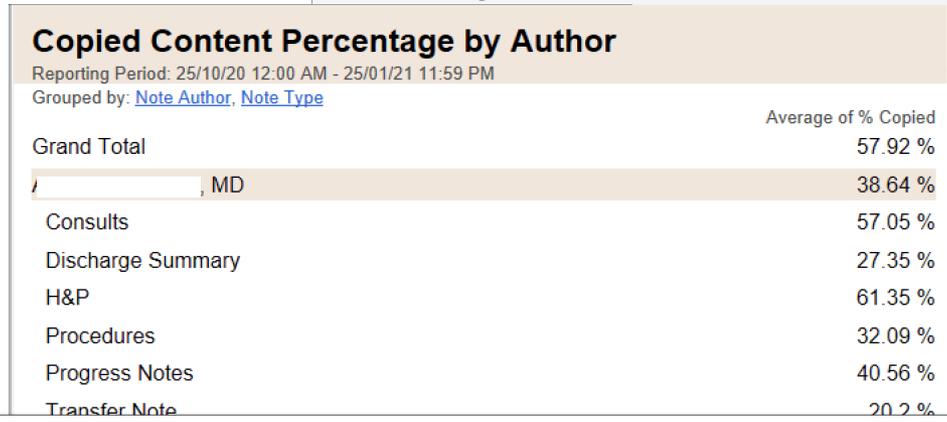
Connect Care Norms Compliance

Note Type	Note Size	File Time	Cosign Information	Note Author	Author Type	% Voice	% Copied	
H&P	29067	14/01/21 1946	Cosign Not Required		Physician	0 %	6 %	
H&P	23629	17/01/21 1310	Cosign Not Required		Physician	0 %	4 %	
H&P	23526	18/01/21 1729	Cosign Not Required		Physician	0 %	0 %	
H&P	21406	14/01/21 1102	Cosign Not Required		Physician	0 %	0 %	
Service Date	Note Type	% MD	% Voice	% Copied	Note Size	Collapsible?	CCAs?	Flag?
05/11/20	0941 Progress Notes	100 %	0 %	100 %	477			
06/11/20	1022 Progress Notes	100 %	0 %	100 %	523			Y
					663			Y

Note Copy Summary

Note contains content copied from:

- 1 - A different author
- 6 - 100% copied content



Connect Care Norms Compliance

Encounter Date: 11/01/2021

MD H&P Date of S
 Physician Addendum
 Specialty:

PROGRESS NOTE

Date of Exam: 14/01/21

Summary case:

1. Diagnosis of stage 2A (mediastinal and bilateral supraclavicular lymphoma of the nodular sclerosis type with a diagnosis made)
2. Three cycles of chemotherapy according to protocol COG A
3. Radiation therapy to the involved field in the amount of 21
4. Diagnosis of relapsed nodular sclerosing Hodgkin lymphoma (previous radiation field) and left supraclavicular area confirmed
5. Treatment as per AHOD 1221(Bv-Gem) x 2 cycles. He presented
6. Treatment with Brentuximab plus IGVE x 2 cycles confirmed on CR post 2 cycles confirmed on PET/CT done

Other issues:
 Recent maternal death from relapse Ewing Sarcoma

HPI
 is feeling physically well, asymptomatic, no running nose contacts. He is having 1 - 2 normal BM per day. He denies any appetite.
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 had received high dose chemo and brentuximab at initial diagnosis was considered low risk and expected to do well so hence the transplant was not recommended, I mentioned for patients who are refractory or have relapsed.

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Review of Systems:
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 Constitutional: Negative.
 HENT: Negative.
 Eyes: Negative.
 Respiratory: Negative.
 Cardiovascular: Negative.
 Gastrointestinal: Negative.
 Endocrine: Negative.
 Genitourinary: Negative.
 Musculoskeletal: Negative.
 Skin: Negative.
 Neurological: Negative.
 Hematological: Negative.
 Psychiatric/Behavioral: Negative.
 Appropriately

Physical Examination:

	Most Recent Value
Height	25/12/2020 - 15/01/2021 1.815 m 11/1/2021
Weight	62.5 kg 11/1/2021
BSA (Calculated - sq m)	1.78 sq meters 11/1/2021
BMI (Calculated)	19 11/1/2021
BP	108/67 11/1/2021
Temp	36.1 °C 11/1/2021
Pulse	89 11/1/2021
Resp	22 11/1/2021
SpO2	98 % 11/1/2021

Physical Exam
 Vitals signs reviewed.
 Constitutional:
 Appearance: Normal appearance.
 HENT:

Encounter Date: 11/01/2021

Follicle Stimulating Hormone (FSH)
 Luteinizing Hormone (LH)
 Collection Time: 11/01/21 11:46 AM
 Result Value
 Luteinizing Hormone (LH)
 4.9

Bilirubin, Total
 Collection Time: 11/01/21 11:46 AM
 Result Value
 Bilirubin, Total
 17

Bilirubin, Conjugated
 Collection Time: 11/01/21 11:46 AM
 Result Value
 Bilirubin, Conjugated
 3

Parathyroid Hormone (PTH)
 Collection Time: 11/01/21 11:46 AM
 Result Value
 Parathyroid Hormone (PTH)
 6.3

Gr Sinuses
 Result Date: 4/11/2020
 Narrative: === ORIGINAL REPORT === Indications: Patient needs baseline assessment prior to autologous stem cell transplant Comparison: Neck CT from September 16, 2020.
 Findings: Adequate pneumatization of the paranasal sinuses according to age. Partial opacification of the base of the right paranasal sinus, reflecting polyp versus cyst detected on previous CT. The remaining paranasal sinuses appear normal. No significant nasal septal deviation. The nasal bone is a partially seen and appear intact. No acute bone or joint abnormality. The orbits are symmetric. The sella shows normal morphology and size. No focal bony lesions. The soft tissues are unremarkable. Impression: Partial opacification of the base of the right maxillary sinus, likely reflecting known polyp versus cyst detected on previous study. Dictating Resident:

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Information Standards

- SmartLinks and SmartPhrases used to generate the summative document return dates and times using inconsistent formats.
- eSafety and documentation style calls for DD/MMM/YYYY to avoid ambiguity.

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Constitutional:
Appearance: Normal appearance.
HENT:

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Collection Time: 11/01/21 11:46 AM
Result Value
Luteinizing Hormone (LH)
Bilirubin, Total
Collection Time: 11/01/21 11:46 AM

Font Standards

- Should be Segoe UI 11 point (Connect Care standard) throughout... but is not.
- Bold and underline font emphasis used inconsistently... not helping to reflect either document structure or concept importance.
- “!”, “*”, font colour used inconsistently

bony lesions. The soft tissues are unremarkable. Impression: Partial opacification of the base of the right maxillary sinus, likely reflecting known polyp versus cyst detected on previous study. Dictating Resident:

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Connect Care Documentation Norms Compliance

Encounter Date: 11/01/2021

Physician: [REDACTED] MD H&P Addendum Date of S

Specialty: [REDACTED]

PROGRESS NOTE [REDACTED]

Date of Exam: 14/01/21

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6. Treatment with Brentuximab plus IGVE x 2 cycles [REDACTED] on CR post 2 cycles confirmed on PET/CT done [REDACTED]

Other issues:
Recent maternal death from relapse Ewing Sarcoma [REDACTED]

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[REDACTED] is feeling physically well, asymptomatic, no running nose contacts. He is having 1 - 2 normal BM per day. He denies any appetite. He is struggling with his recent loss. Both [REDACTED] and his [REDACTED] today. [REDACTED] was particularly frustrated to go to [REDACTED] in the mentioned that his main support is coming from his [REDACTED] in addition, he is trying really hard to [REDACTED] and stay there until Jesse is well enough to come back [REDACTED] had some questions today including:
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Physical Examination:

Physical Exam
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Constitutional:
Appearance: Normal appearance.
HENT:

Follicle Stimulating Hormone (FSH) 6.9
Luteinizing Hormone (LH) 4.9
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Summative Documentation Norm

- Summative documents should report clinically significant (pertinent) positives and negatives and should not repeat information within same document.
- SmartLinks used to pull-in information that does not add to what is in history.
- Inconsistent use of abbreviations.

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Physical Exam
 Vitals signs reviewed.
 Constitutional:
 Appearance: Normal appearance.
 HENT:

Encounter Date: 11/01/2021

Summative Documentation Norm

- Many SmartLinks pulling in data formatted inefficiently... not prose-appropriate. Lots of wasted space. Inconsistent density of information.
- Non-summative data included.
- 14 pages is way too long to serve most summative information needs.

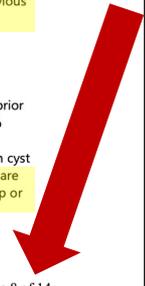
Gr Sinuses

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Clinical Documentation Improvement

- Context
 - Anticipated issue... “note bloat”
 - Documentation Quality
 - Contributing Causes
 - Programmatic Improvement
 - **Building Block Optimization**
 - Making Smart-Stuff Intelligent
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Documentation Tools

“Note Bloat” Remedies

- ✓ Programmatic Approach
- ✓ Oversight – priority, sponsorship, advocacy & authority
- ✓ Norms – principles, styles, references, best practice examples
- ✓ Compliance – audit, feedback, trending
- Documentation Tools & Templates Overhaul
- ☐ Training – anticipatory, base, continuing
- ☐ Intervention – strategy and evaluation framework

Connect Care Documentation Tools Overhaul

Patient Active Problem List

Diagnosis

- Depression
- Type 2 diabetes mellitus
- Hypertension
- Insomnia
- Diabetes mellitus



Principal Problem:

Type 2 diabetes mellitus

Active Problems:

Hypertension
Diabetes mellitus

Resolved Problems:

* No resolved hospital problems. *

Prose-optimization

- Building-block SmartLinks validated to return correct (expected) information
- Returned content complies with style and format guides.
- Optimized for clinician-friendly, succinct
- Sensitive to eSafety guides (e.g., avoiding medication interp error)

Current Outpatient Medications on File Prior to Encounter

Medication	Sig	Dispense	Refill
• enalapril maleate 10 mg tablet	Take 10 mg by mouth one (1) dose per day, in the morning.		
• LORazepam 1 mg tablet	Take 1 mg by mouth every six (6) hours, as needed for anxiety.		
• metFORMIN 500 mg tablet	Take 1,000 mg by mouth two (2) times per day (with breakfast and supper).		
• buPROPion, long acting (ZYBAN) 150 mg 12 hr tablet	Take 150 mg by mouth 2 (two) times a day. Do not crush, chew, or split.		
• cetirizine (REACTINE) 5 mg tablet	Take 5 mg by mouth 1 (one) time each day.		
• furosemide (LASIX) 20 mg tablet	Take 20 mg by mouth 2 (two) times a day.		
• insulin aspart-aspart protamin (NOVOMIX 30 PENFILL U-100 INSUL) 100 unit/mL (30-70) cartridge	Inject 15 mg under the skin two (2) doses per day.	30 mL	2



Long-Term Medications:

- buPROPion, long acting (ZYBAN), 150 mg, oral, bid
- cetirizine, 5 mg, oral, daily
- enalapril maleate, 10 mg, oral, daily
- furosemide, 20 mg, oral, bid
- insulin aspart-aspart protamin, 15 mg, subcutaneous, bid
- insulin lispro-insulin lispro protamine (HumaLOG Mix 25) injection, 4 units, subcutaneous, bid
- LORazepam, 1 mg, oral, q6h PRN
- metFORMIN, 1,000 mg, oral, bid with breakfast & supper

Prioritization

- Focus on SmartLinks used most frequently but most specialties
- Name using a consistent norm that makes discovery easy, with cues for prose-optimized and summative-ready.

Smart Tools Audit & Tune up:

Specialty	SmartLink ID	SmartLink Name	Unique Users Who Used This SmartLink in the Reporting Period	Times This Specialty Used This SmartLink in the Reporting Period	Short Description	Mnemonic
Emergency Medicine	100326	MEDICATIONS - CURRENT PRESCRIP	4	121	Medications - Current Liste	CMEDSOP
General Practice	101184	EDPTMEDS	6	116	Display patients outpatient	EDPTMEDS
Psychiatry	100063	MEDSSCHEDULED	5	102	Scheduled Medications	MEDSSCHEDULED
Psychiatry	100064	MEDSPRN	5	101	PRN Medications	MEDSPRN
Psychiatry	100065	MEDSINFUSIONS	4	88	Infusions Meds	MEDSINFUSIONS
Intensive Care	100063	MEDSSCHEDULED	3	73	Scheduled Medications	MEDSSCHEDULED
Emergency Medicine	49011	ED MEDICATIONS - ADMINISTERED /	3	72	ED Medications - ordered a	EDMEDS
Intensive Care	100064	MEDSPRN	2	70	PRN Medications	MEDSPRN
Emergency Medicine	77	MEDICATIONS - PREVIOUS TO THIS E	19	61	Medications ordered prior	MED
Family Medicine	101046	AHS IP CURRENT TIP MEDS	5	57	Medications - Current Liste	CMEDLIST
Cardiology	101184	EDPTMEDS	2	55	Display patients outpatient	EDPTMEDS
General Practice	100063	MEDSSCHEDULED	7	50	Scheduled Medications	MEDSSCHEDULED
Internal Medicine	77	MEDICATIONS - PREVIOUS TO THIS E	13	50	Medications ordered prior	MED
Internal Medicine	19	MEDICATIONS - CURRENT, LISTED C	10	49	Medications - Current Liste	CMEDS
General Practice	100064	MEDSPRN	10	49	PRN Medications	MEDSPRN
Internal Medicine	2108000004	AHS AMB HOME MEDS	1	48	Home Medications - curren	HOMEMEDS
Family Medicine	100063	MEDSSCHEDULED	5	43	Scheduled Medications	MEDSSCHEDULED
Cardiology	100063	MEDSSCHEDULED	5	42	Scheduled Medications	MEDSSCHEDULED
Family Medicine	100064	MEDSPRN	5	42	PRN Medications	MEDSPRN
Pediatrics	19	MEDICATIONS - CURRENT, LISTED C	14	38	Medications - Current Liste	CMEDS

Connect Care Documentation Tools Overhaul

Structure

- Key information given primacy of place (following Connect Care APSO provincial standard and AHS Qure guidelines)
- Supporting information in collapsible sections.

General Internal Medicine H&P Note - Admit from Emergency Department

Patient: Ahsip, Tommy (DOB 6 Sep 1938)
PHN|MRN: 100055897 | 1000014397
Referred by: Timothy Alexander David Graham
Consult Date: 27 Jan 2021 (completed 12:15)
Admit Date: 01 Aug 2019

This 82 y.o. year old man presented from home (home care) to the emergency department because of nausea and vomiting and is assessed by the general internal medicine service for possible admission.

Principal Problem:
Abdominal pain
Active Problems:
Type 2 diabetes mellitus
CKD (chronic kidney disease)
Hypertension

Assessment & Plan:

Symptoms, signs and findings best explained by a biliary obstruction negatively impacting diabetes, blood pressure and chronic renal failure co-morbidities, with all expected to return to baseline.

Type 2 diabetes mellitus

Hyperglycemia with early lactic acidosis likely stress and hydration related.

- Fluid and metabolic resuscitation, with improvement already apparent while holding metformin.
- BBIT NPO protocol until able to eat and resume home insulin regimen.

Abdominal pain

Presentation and imaging consistent with biliary colic with CBD obstruction with no findings consistent with cholangitis or sepsis.

- Brief bowel rest while completing assessment, pain control and rehydration.
- General surgery consult for possible early intervention.

Hypertension

Transiently hypotensive with volume depletion.

- Resume outpatient meds when pressure and creatinine normalized

CKD (chronic kidney disease)

Worsening renal failure indicators likely transient with expectation of return to baseline.

- Hold loop diuretic

Admission Indication: Unable to eat, hypovolemia, failed road test, possible occult sepsis.

GOC: R1

IPC: No active isolations; COVID19 (last 1 week) negative

ELOS: < 5 days

- Robert Stanley Arthur Hayward, MD, MPH, FRCPC

Subjective ∨

Objective ∨

Connect Care Documentation Tools Overhaul

Standards

- Date & time standards compliance.
- Abbreviation compliance
- Use of font style to reflect document structure.
- Font face and style
- Etc.

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Objective ∨

Connect Care Documentation Tools Overhaul

Structure

- Purpose of summative document reflected in structure and placement of key SmartLinks.

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Subjective ∨

Objective ∨

Question

Succinct integrative statement

Action-oriented
problem-oriented
assessment and plan

Answer

APSO standard

Collapsed details

Connect Care Documentation Tools Overhaul

Composition

- Promote use of full Connect Care chart.
- Promote use of problem-oriented charting.
- If charting (problem management, med management, history sections, etc.) done, then most of summative document is created automatically, with a few areas inviting in-system dictation.

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Subjective ∨

Objective ∨

Automated

Facilitated

Voice

Problem-oriented charting

Clinical Documentation Improvement

- Context
 - Anticipated issue... “note bloat”
- Documentation Quality
 - Contributing Causes
 - Programmatic Improvement
- Building Block Optimization
 - Making Smart-Stuff Intelligent
- **Interactive Charting Supports**
 - Progress and Summative new-generation documentation templates
- Discussion
 - Next steps and suggestions

Guiding Principles

- **Document with purpose**
 - Content selected and organized to promote continuity and coordination of care
 - The full chart is electronically available with views supporting other purposes (archival, legal, reimbursement, etc.)
- **Document with ease**
 - Reward adherence to minimum-use norms with automation of as much of summative documentation as possible

Guiding Principles

- Only include information essential to purpose that is not readily available elsewhere
 - Demographics, for example are in headers/footers
 - Do not replicate med/surg/fam/device history if possible to reference existing H&P in same system
- Expose clinician thinking, not clerking
 - Emphasize commentary on things like labs (e.g., what's different/new/trending) rather than replication of data available elsewhere

Principles → Tools → Practice

- Headings and Layout
 - Major headings to reflect feedback received
 - Suppression of all text embellishments that will not translate well to pdf exports (Netcare)
 - Suppression of embedded help on save
- Conditional Content
 - Suppress headings and space used if content not available/used
 - Specialty customizations appear automatically
- Interactive Structured Documentation
 - Emerging document is widely “clickable”, giving rapid access to chart data and to tools for updating that data, then instantly incorporated in refreshed note.
- Embedded Feedback

Hospital Course – Example of Interactive Documentation

The screenshot displays a web-based interface for documenting a hospital course. At the top, there is a text editor with a toolbar containing options like 'SEGOE UI', '11', and bold/italic/underline/align/insert links. The main text area contains a paragraph: "This 83 y.o. man was brought from homelessness to the EDM WMC University of Alberta Hospital because of worsening dyspnea and was admitted for therapy." Below this, a summary states: "The hospital course includes the following developments since admission on 01 Aug 2019:" followed by a bulleted list: "Off iCare and monitors - 03 Aug 2019", "IV to PO antibiotics - 04 Aug 2019", and "...". A blue horizontal bar below the text reads "Ahsip, Tommy for visit on 01/08/2019". Below this bar is a structured data entry form titled "Inpatient Presentation [.PRESENTATION]". The form has two rows of buttons. The first row is for "Patient" and includes buttons for "presented", "was brought", "transp by EMS", "was transferred", and "other [clear]". The second row is for "from" and includes buttons for "home", "home (indep)", "home (fam care)", "home (hm care)", and "homelessness". A blue arrow points from the word "therapy" in the main text to the "presented" button in the form.

.e.g., “Hospital Course”

- Wiki-like record of key developments in a hospital encounter.
- Figures prominently in discharge, deceased, transfer templates.
- → Initiated automatically with interactive “SmartText” that presents as easily readable prose but has embedded structured data that is quickly edited by clicking on any dark-blue text to access pop-up point-and-click editors.

Navigator Speed Buttons for Standard Summative Documentation

The screenshot shows the Navigator Speed Buttons interface. At the top, there is a 'Sidebar Summary' dropdown menu and a 'Handoff' button. Below this is a toolbar with icons for navigation and search. The main area is divided into two sections: 'Index' and 'Notes & reports'. The 'Index' section contains a grid of buttons with left and right arrows, representing various clinical tasks. A red arrow points from the 'Notes & reports' button in the Index section to the 'Notes & reports' section below. The 'Notes & reports' section features a 'Chart' button with a left arrow and a 'New Basic or Problem Oriented Charting (POC) Note' section. This section lists various charting templates with left and right arrows, such as 'Hx & PE', 'ED Consult', 'Transfer', 'Operative', 'IP Consult', 'Discharge', 'Deceased', and 'Progress'. A note at the bottom states: 'Basic (core) and POC templates reflect AHS documentation norms.'

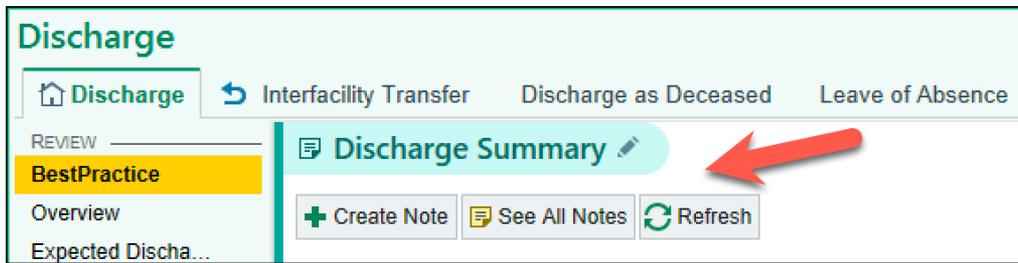
Index	
← Index & checklists	? ← Inpatient team
← Problems & Hx	→ ← Problem charting →
← Meds & adverse	→ ← Med admin →
← Vitals, IO, lines	← Blood & consents
← Recent results	← Early warning
← Risks & screening	→ ← Billing & stickies
← Notes & reports	← Other systems →

Notes & reports	
Chart (←) New Basic or Problem Oriented Charting (POC) Note	
← Hx & PE Basic POC	← IP Consult Basic POC
← ED Consult Basic POC	← Discharge Basic POC
← Transfer Basic POC	← Deceased Basic POC
← Operative Basic POC	← Progress Basic POC

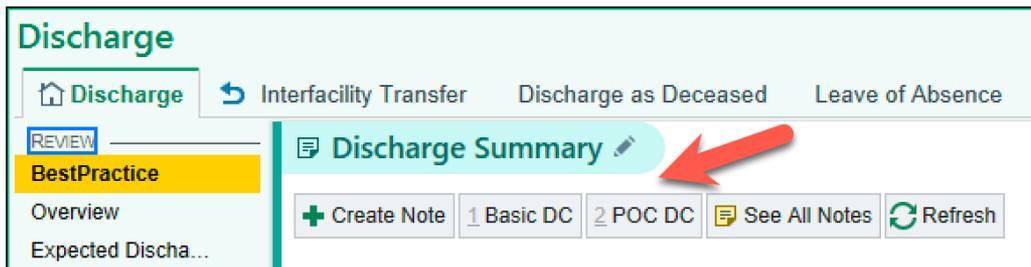
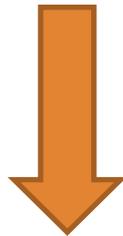
SideBar Support

- Inpatient SideBar index and associated displays overhauled as part of DQI and implemented with soft-launch.
- Includes a tools for generating DQI standard summative documentation with a single click (opens correct editor to correct template ready to go).
- Templates pull from all standardized documentation objects.
- Dramatic decrease in information burden to create key summative documents.

Navigator Speed Buttons for Standard Summative Documentation



The screenshot shows the 'Discharge' navigator interface. At the top, there are navigation options: 'Discharge' (selected), 'Interfacility Transfer', 'Discharge as Deceased', and 'Leave of Absence'. Below this, there is a 'REVIEW' section with a dropdown menu currently set to 'BestPractice'. The main content area displays 'Discharge Summary' with a red arrow pointing to it. Below the title are three buttons: '+ Create Note', 'See All Notes', and 'Refresh'.



This screenshot shows the same 'Discharge' navigator interface as the top one, but with two additional speed buttons added below the 'Create Note' button. The buttons are labeled '1 Basic DC' and '2 POC DC'. The 'REVIEW' dropdown menu is now set to 'REVIEW'. A red arrow still points to the 'Discharge Summary' button.

Speed Buttons

- Admission, Discharge, Transfer navigators have sections facilitating completion of required summative documentation.
- Speed Buttons can be configured to automatically initiate a standardized template.
- Users can create their own buttons if they know the template to specify.
- Used to instant initiation of specialty-specific variants of the provincial documentation standard templates.

Subjective-Objective Note Simplify

My Note

Note Details

Service: General Internal ...

ROS Physical Exam

★ SEGOE UI 11 B I U S A +

Insert SmartText

Subjective

F2 - Change in symptoms (Optional) ▾

F2 - Symptom trackers (Optional) ▾

F2 - Patient goals (Optional) ▾

Review of Systems

Objective

Vitals: F2 - Extended vitals ▾

F2 - Inpatient scores (Optional) ▾

Signs: F2 - Change in signs (Optional) ▾

F2 - Sign trackers (Optional) ▾

Physical Exam

Investigations:

F2 - Selected labs from last 3 days (Optional) ▾

Subjective Objective Note

- Part of Problem Oriented Charting workflow.
- DQI creates “choose-your-journey” default Subjective Objective Note template that allowed users to select from a number of pick-lists for how much detail to include.
- Defaults allow for typical, simple, notes to be rapidly generated (navigate through F2 or by clicking and selecting) and, if not relevant, can be ignored and automatically suppressed.
- More complex notes supported by user selecting just the data/tests that are relevant.
- Prose content and style reminds users to follow “documentation by exception”.
- Result highlights what is new or important and avoids copy-paste progress notes.

New Build

- **Workflow enhancements**
 - New Sidebar: illustrates “interactive charting”
- **Problem Oriented Charting**
 - New POC elements: hospital course, progress note, problem overviews remove drives for copy-paste
- **Interactive**
 - New summative documentation templates “reward” adoption of new workflows with much less work
 - Prose documentation “emerges” as user interacts with embedded links and in-context popup data-entry

Documentation Norms

“Note Bloat” Remedies

- ✓ Programmatic Approach
- ✓ Oversight – priority, sponsorship, advocacy & authority
- ✓ Norms – principles, styles, references, best practice examples
- ✓ Compliance – audit, feedback, trending
- Documentation Tools & Templates Overhaul
- ☐ Training – anticipatory, base, continuing
- Intervention – strategy and evaluation framework

Documentation Improvement Supports

Parallel Activities

Derive Norms-informed Style Guide

Target audience: embedded personalization jockeys producing SmartPhrases, etc.

Consistent with decision support and safety style guides.

Specific to level of use of fonts, emphasis, colours, abnormality symbols, etc.

Optimize Building Blocks

SmartLinks - ~50-75 needed (mostly derivatives, some new, some conditional)

SmartLists - ~20 advanced SmartLists with embedded SmartLinks and SmartText

SmartPhrases - ~20 building blocks that can be selectively pulled for specific needs

Provincially Standardized Templates

Provincial summative documentation (SmartText) templates

Render specialty-adapted variants

Spotlight Best Practice Examples

Annotated examples illustrating how best to use advanced automation templates in conjunction with charting best practices, including problem-oriented charting.

Documentation Improvement Supports



Connect Care Builders

- Home
 - Clinician Builder Program
 - Clinician Builder Training
 - Build Management
 - Style Guides
 - Documentation Style Guide
 - Build Tools
 - Best Practice Advisories
 - Care Paths
 - Mobility
 - Documentation
 - SmartLinks
 - Standard SmartLinks

Connect Care SmartLink Reference

The table below lists SmartLinks (and associated SmartPhrase tokens) that are recommended for use in Connect clinical documentation. These will pull in chart data using AHS-approved formatting standards (e.g. date format), also render information to a succinct format that minimizes note-bloat. Note that many are Connect Care adaptat of Foundation SmartLinks that will not appear in default training or support references.

AHS_CC_Builders_SmartLinks				
Link Token	Phrase Token	Description	Text Return	Null Return
@LNAME@	.lname	Patient last name in format "Lname"	Brown	
@FNAME@	.fname	Patient first name in format "Fname"	Joseph	
@NAME@	.name	Patient full name in format "Fname Lname"	Joseph Brown	
@PREFNAME@	.prefname	Patient preferred name "PName"	Joey	
@AGE@	.age	Patient's age in years	82 y.o.	
@AGEPEDS@	.agepeds	Patient's age in years, months or hours	3 y.o. 2 m.o.	
@SEX@	.sex	Patient's sex at birth in medical format	male	
@GENDERID@	.genderid	Patient's gender identity in medical format	male	
@GENDERIDP@	.genderidp	Patient's gender identity in common prose format	man	person
@HIS@	.his	"his" or "her" or "they"	his/her/they	
@CAPHIS@	.caphis	"His" or "Her" or "They"	His/Her/They	
@HE@	.he	"he" or "she" or "they"	he/she/they	
@CAPHE@	.caphe	"He" or "She" or "They"	He/She/They	
@HIM@	.him	"him" or "her" or "them"	him/her/them	
@m@	.m	"Mr." or "Ms."	Mr./Ms.	
@PATDOBMT(11)@	.dobformal	Date of birth in Alberta date format. The numeric parameter is important to avoid truncation less than 11 characters.	23 Mar 1975	
@HMPH@	.hmpH	Patient's home phone number	780-555-1212 (home)	There is no such numb (home)
@MBPH@	.mbph	Patient's mobile phone number	780-555-1212 (mobile)	There is no such numb (Mobile)
@WKPH@	.wkph	Patient's work phone number	780-555-1212 (work)	There is no such numb (work)
@ULI@	.uli	Patient's Alberta Health Care Number	123456789	
@MRN@	.mrn	Patient's Connect Care medical record number	1234567891	

Documentation Improvement Intervention

Strategic Intervention

Define Scope

Big-Bang re-set → Building Blocks

Sequential by specialty → Audit, Feedback, Best Practice Models

Precision intervention in problem specialties with key-influencers

Tools before Reform

Optimize Building Blocks

Re-assert Norms through Style Guides and Promoted Building Blocks

Up-skill builders, power users, super users, key-personalizers

Reform standard templates and publish Best Practice examples

Pandemic Opportunity

Lead with focused set of high-quality COVID-19 summative documentation models and templates

DQI – Phase I Closure

- Prototype Stakeholder Review
 - Sources
 - Participants
 - Consensus recommendations
 - Points of divergence
- Prototypes → UAT → Soft Launch
 - Changes to headings, layout, columns
 - Strategies for adaptive documentation
 - Strategies for just-in-time support for minimum use norms
- Next Steps
 - Full launch Summer 2022, promotion, training, usage surveillance

Clinical Documentation Improvement

- Context
 - Anticipated issue... “note bloat”
- Documentation Quality
 - Contributing Causes
 - Programmatic Improvement
- Building Block Optimization
 - Making Smart-Stuff Intelligent
- Interactive Charting Supports
 - Progress and Summative new-generation documentation templates
- Discussion
 - Next steps and suggestions

Follow-up:

- Initiative connect-care.ca
- Norms norms.connect-care.ca
- Manual manual.connect-care.ca
- Builder builders.connect-care.ca

Better Health. Powered by Information.

Connect Care

Clinical Documentation Improvement Initiative

Rob Hayward

Clinical Documentation Committee
Clinical System Design Program

June 23, 2022

