Restoring the Story and Creating a Valuable Clinical Note

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oday's clinical notes don't serve anyone particularly well. Cogent summaries are few and far between, having been replaced by templates that emphasize billability over interpretability. These long, overly detailed documents—with dozens of imported values ranging from test results to problem lists—manage to simultaneously over- and underwhelm. On the one hand, generating and reading such a note are time-consuming tasks that require substantial cognitive load and contribute to burnout (1, 2). Yet, the final product still fails to communicate much useful information (3), and much of what it does include may not even be accurate (4).

There is a critical distinction between documentation and communication: Communication can document, but documentation alone rarely communicates what matters most. Too often, the welter of data loses the story of the patient. In particular, structured data from the electronic record are poorly suited to communicating an understanding of the actual person and their background, experiences, resources, challenges, hopes, fears, and goals. This can impede collaboration and erode humanism in medicine, especially when a patient's care involves multiple specialty teams.

We believe it is imperative that clinicians reclaim the clinical note as a means of showing the cognitive processing involved in turning medical information into a thoughtful assessment and plan. Doing so could also more effectively tell patients' stories in the context of their life circumstances and community. This reclaiming will involve 2 categories of effort: eliminating useless information, and leveraging narrative prose to communicate clinical insights and capture the patient's individuality.

CHANGE 1: CURTAILING "NOTE BLOAT"

Current documentation practices evolved to meet billing requirements with little input from clinicians, patients, or caregivers (5). However, new Centers for Medicare & Medicaid Services documentation requirements (effective 1 January 2019) and revisions to Medicare's Physician Fee Schedule (effective 2021) will finally let clinicians focus on pertinent issues rather than a defined list of elements. There will no longer be a requirement for specific bullet points (6).

This change offers enormous potential to markedly reduce physician documentation burdens. Limiting repetition of automatically generated text in clinical notes should be an early priority. Given that electronic health records allow near-immediate access to data, we see little benefit in regurgitating such information now that the Centers for Medicare & Medicaid Services no longer requires doing so as a means of showing patient complexity.

Time and effort saved on data entry can be redirected to the creation of meaningful notes that relay the

patient's story. Such notes would synthesize rather than summarize, concisely reflecting the cognitive work of physicians. Where raw data are needed to support decisions, artificial and augmented intelligence and machine learning will soon perform data extraction on demand, allowing clinicians to redirect effort toward higher-order cognitive tasks.

CHANGE 2: RESTORING THE STORY

At present, it is far too easy to open a patient chart, read volumes of data, and find that no single person has stated what they believe is happening. As a result, many clinicians find themselves writing separate signout documents after they have finished their official notes in order to effectively communicate to each other what actually matters. This wasted effort evinces the low regard clinicians have for the notes we are spending hours creating.

So, what should a note include? The ideal clinical note is more than a verbatim transcript. It is a coherent representation of relevant data that have been sifted through and examined in the context of the patient's life and priorities, yielding an assessment of the situation and rationale for recommended next steps. The cognitive effort of distilling complex information from multiple data sources into a cogent synthesis is the central work of internists. A medical stenographer can capture everything that happens during an encounter. A clinician, by contrast, understands what to include, what to leave out, what to act on, and how to move forward. Notes capturing this information will be far more valuable than a plain restatement of all facts.

A Way Forward: Making the Changes

The Restoring the Story Task Force of the American College of Physicians recommends the principles exemplified in the **Figure** in order to effect the changes needed. These principles are meant to foster high-value components of the medical record that communicate salient details and thus allow others to gain insights about the patient, our fellow human being.

We believe this suggested approach is appropriate for specialists, including ambulatory and inpatient clinicians, academicians, and community practitioners. To be sure, there will be barriers to change. It will take time and specific strategies to unlearn and deimplement the maladaptive templates that clinicians have adopted to meet the past requirements of payers. Expectations in certain

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Figure. Improving on today's clinical notes.

CC:

Followup

[Consists of 3 paragraphs of HPI that have been carried forward unchanged for the past 5 y.]

Interval History:

- -Admitted to hospital for ADHF -Diuretics increased
- -Unclear reason for worsening, in past have suspected noncompliance with diuretics

[Consists of a templated ROS but includes such laboratory results as the hemoglobin A1c level under the Endocrinology section.]

Lists heart failure, hypertension, dyslipidemia, and obesity. This section also includes several old billing codes that do not belong here, such as those for onychomycosis, encounter for work clearance, and páronychia.]

Allergies:

Medications:

[Consists of a list of 25 medications, including several duplicates with discrepant dosages.]

[Consists of a templated examination, including aspects that probably were not done (e.g., "CNII-XII intact").]

[Consists of 4 pages of laboratory values in no particular order with no comments or interpretation.]

[Consists of 3 pages of verbatim ECG reports copied and pasted without interpretation, as well as results from a stress test and computer interpretations of 5 recent electrocardiograms.]

Assessment and Plan:

Advanced heart failure, IV diuresis in hospital, now discharged on increased doses of diuretics. Unclear

Gaining some weight again.

Increase diuretics

-May need readmission

"I'm feeling better but have started gaining weight again.'

Mr. Smith is a 74 y/o former smoker with HTN, HLD, obesity, and chronic systolic heart failure (EF35%, NYHA III-IV Stage C) who was recently admitted to the hospital for five days for acute decompensated heart failure. Presented with AKI (Cr 2.6 from 1.2), 20lb weight gain, and shortness of breath briefly requiring BiPAP. After several days of IV diuresis, they escalated his home furosemide from 40 daily to BID. He had no evidence of ischemia (normal Tn, ECG) and no evidence of worsening LVEF on TTE during hospitalization. Treating team uncertain of

Today reports feeling better from breathing standpoint but legs starting to "swell." He does not have medications on hand. Tells me home life has been hard as his wife was recently diagnosed with a recurrence of breast cancer, is back in treatment, and has no longer been able to remind him to take his meds. She also did cooking, he is now eating more prepared foods.

NKDA

Meds:

- -Furosemide 40mg PO BID
- -Aspirin 81mg PO daily -Atorvastatin 40mg PO QHS
- -Carvedilol 12.5mg PO BID -Spironolactone 25mg PO daily

Gen: Appears well, speaking in full sentences HENT: JVP not able to be discerned given body habitus

Lungs: Clear Heart: RRR, no s3 Belly: soft, no fluid wave

Ext: 1+ pitting edema to ankles bilaterally

-TTE during hospitalization showed LVEF 30-35%, no WMA, no pulm HTN, no valve dz, this is stable from prior, see record for details

Labs reviewed: Cr has returned to baseline

Assessment and Plan:

74M w/ NYHA III-IV Stage C CHF (EF 30-35%) here after recent admission for decompensated heart failure, likely due to eating less healthfully and forgetting to take meds in wake of his wife (who previously helped him care for himself) being diagnosed with breast cancer recurrence. While he has gained some weight, he looks well and is in good spirits—I'm hopeful we can turn this around in outpatient setting.

-INCREASE furosemide to 80mg PO BID for 3 days -CHECK WEIGHT daily and call if increases above 195 -Nurse will call in 3 days to check weight and titrate

-Reorder all meds in blisterpak for easier administration

-Social work eval to see what help he may need at

-Dietitian referral

-High risk decompensation—return to clinic in two

Left. Typical outpatient follow-up note. This note shows such shortcomings as imported text, inaccuracies, and lack of detail about therapeutic plans. The clinician also misses the patient's story that explains the reason for the hospitalization. Automatically generated text that has been truncated is indicated by brackets; without this truncation, this note stretched to 8 pages. Right. Follow-up note that restores the story. By contrast, this note (1 page in its entirety) avoids importing data, synthesizes information, includes accurate information, and documents only the relevant components of page in its entirety) avoids importing data, synthesizes information, includes accurate information, and documents only the relevant components of the examination that was done. The patient's story about his wife's cancer diagnosis also shines through, providing context to both understand the reason for his decompensation and develop a therapeutic plan. Furthermore, this plan is specifically spelled out. ADHF = acute decompensated heart failure; AKI = acute kidney injury; BID = twice daily; BiPAP = bilevel positive airway pressure; CC = chief complaint; CHF = congestive heart failure; CN = cranial nerves; Cr = creatinine; dz = disease; ECG = echocardiography; EF = ejection fraction; eval = evaluation; ext = extremities; gen = general; HENT = head, ears, nose, and throat; HLD = hypersensitivity lung disease; HPI = history of the present illness; IV = intravenous; JVP = jugular venous pressure; labs = laboratory values; LVEF = left ventricular ejection fraction; M = man; NKDA = no known drug allergies; NYHA = New York Heart Association; PMH = past medical history; PO = by mouth; pulm HTN = pulmonary hypertension; QHS = every bedtime; ROS = review of systems; RRR = regular rate and rhythm; Tn = intraocular pressure; TTE = transthoracic echocardiography; WMA = wall motion abnormality; y/o = veers old years old.

2 Annals of Internal Medicine Annals.org settings may require different approaches to make notes situationally appropriate. Medicolegal concerns may make some clinicians fearful of underdocumenting. Indeed, allowing clinicians to succinctly cut to the chase will require us all to trust that our colleagues have performed a relevant and sufficiently comprehensive examination. We also acknowledge the nonclinician readers of the note, including the patient. Words should be used in such a way that the patient knows that the clinician cares, decisions were made together, and what matters to the patient is respected.

We look forward to a near future in which notes work for us, our colleagues, and our patients. The challenges of making change are great, but the need for change is even greater. By eliminating redundancy and restoring the story, we can reclaim notes from the billers and improve medical care by recentering the focus on human dignity and redirecting our efforts toward healing rather than documenting. Writing these more meaningful notes will not necessarily be easier—recall the following quote, which has been attributed to many sources: "I have made this letter longer than usual because I lack the time to make it shorter." Yet, these notes would be more useful to us all, and writing them should prove more rewarding. That's why the time is now. Let us seize the moment and shed the superfluous.

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