

Usability

Documentation for the EHR Era

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IT'S HOW MEDICINE

SHOULD BE

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The Rush System

Volume (per month)

50k Ambulatory Office Visits

15k Hospital-based Encounters

7k ED visits

Clinical Staff

~850 Attending Physicians

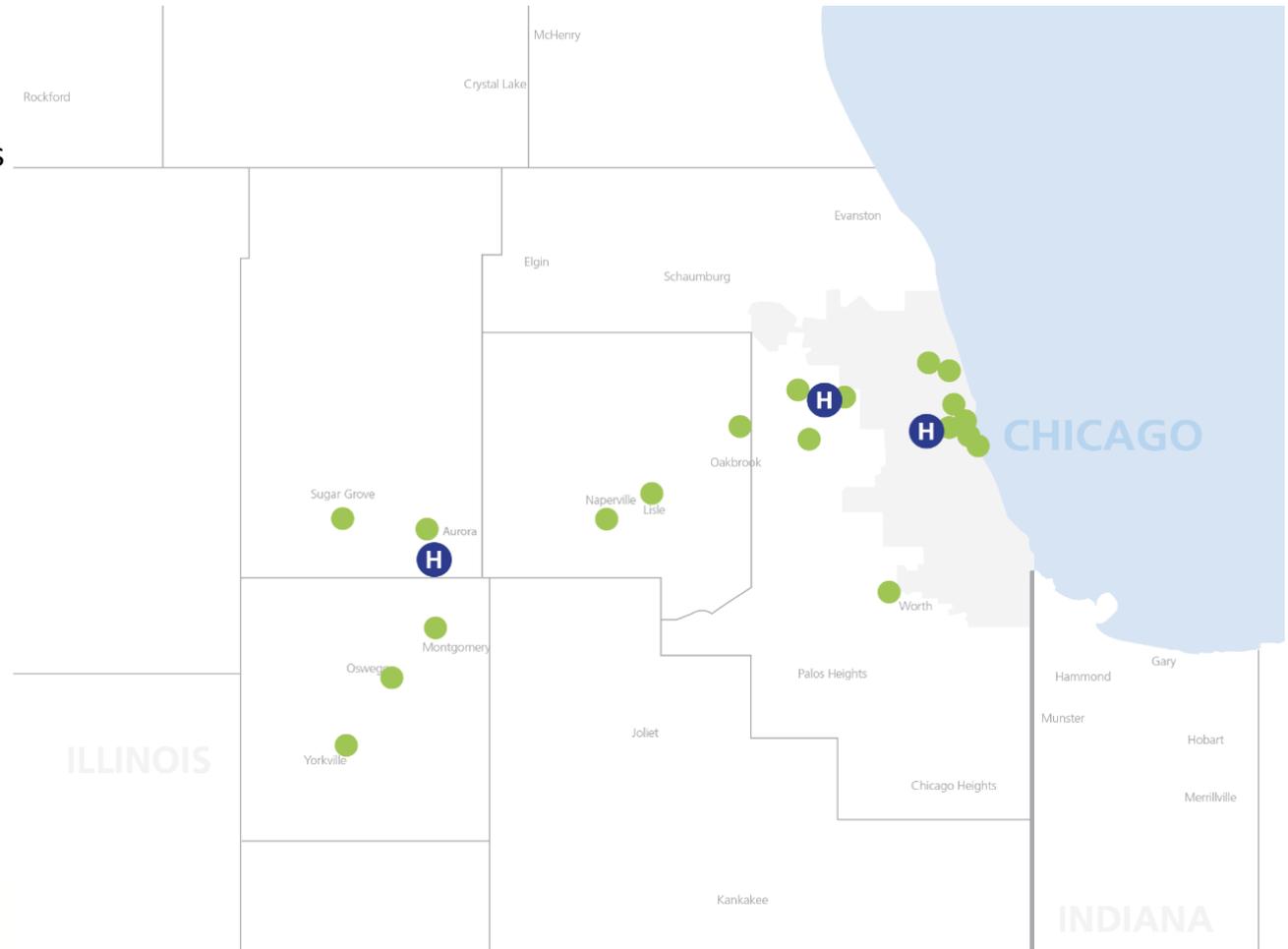
~350 House Staff

~250 APPs (NPs/PAs)

Ambulatory Practices

~50 owned practices

~100 private practices



Rush University Medical Center



KLAS Arch Collaborative

Received our results in August 2017

RUSH UNIVERSITY MEDICAL CENTER BENCHMARKED
AGAINST OTHER COLLABORATIVE MEMBERS

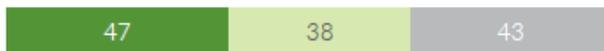
■ Above Average
 ■ Average
 ■ Below Average

Comparison Measure	Collaborative Rank	Epic Customers Rank
Inpatient Efficiency: Percent of Documentation Completed During Inpatient Rounds	8 of 10	5 of 6
Ambulatory Efficiency: Percent of Documentation Completed During Clinic Visits	9 of 11	6 of 6

SELF-REPORTED AMBULATORY CHARTING EFFICIENCY

Physicians only: based on percent of clinic charting completed during or immediately after the patient encounter

■ High Efficiency
 ■ Medium Efficiency
 ■ Low Efficiency



Rush University Medical Center

SELF-REPORTED INPATIENT CHARTING EFFICIENCY

Physicians only: based on percent of charting completed during or immediately after inpatient rounds



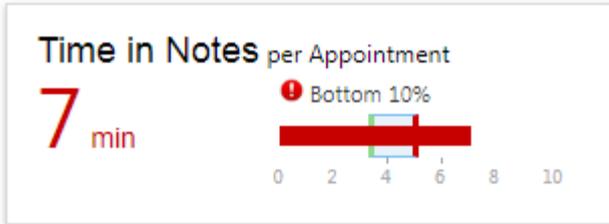
KLAS Arch Collaborative

RUSH UNIVERSITY MEDICAL CENTER BENCHMARKED
 AGAINST OTHER COLLABORATIVE MEMBERS

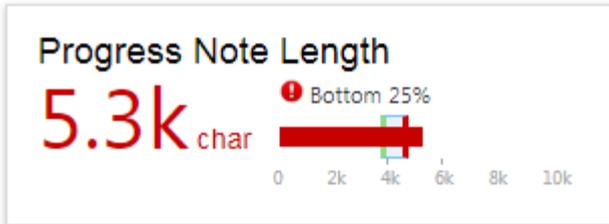
■ Above Average
 ■ Average
 ■ Below Average

Comparison Measure	Collaborative Rank	Epic Customers Rank
Overall Level of Personalization	1 of 13	2 of 7
Use of Personalized Templates	1 of 12	2 of 7
Use of Personalized Macros	7 of 11	5 of 7
Use of Personalized Order Sets	11 of 13	7 of 7
Use of Preference Lists	8 of 11	7 of 7
Use of Personalized Report Views	8 of 11	6 of 7
Use of Speed Buttons/Shortcuts	6 of 12	4 of 7

Current State at Rush - Documentation



Average among Epic institutions is **4.3 minutes**

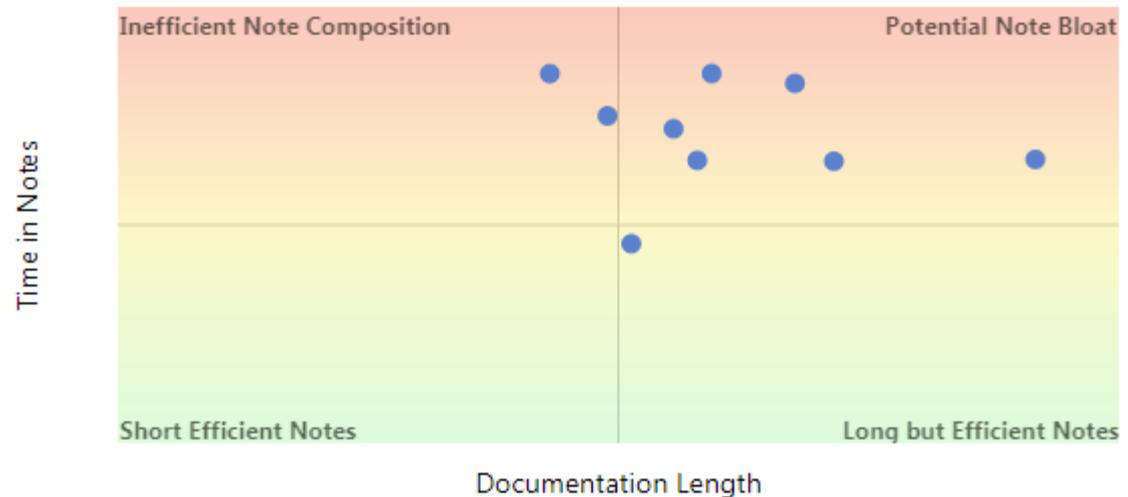


Our average progress note is **8+ pages long**

34% of EHR time spent on documentation on average

High propensity for **Note Bloat** in our clinical documentation

Time in Notes vs Documentation Length by Specialty Grouping



Physician Comments from KLAS Survey

If there is any way to further **reduce the “bulk” of notes** that is generally worthless but is only included for billing purposes or because its “supposed to be there,” that would be ideal.

There are **a lot of garbage notes and repeated content**, and that makes it hard to find something new. The templates invite the wrong information.

Current State at Rush

We have **over 500 SmartText (system-level) templates** for 4 note types (H&P, Consult notes, Progress Notes, and Discharge summaries)

Providers are using our “Standard” SmartText templates
only 5% of the time

Why?

Nearly 10 years ago as we made the transition to Epic we were focused on imitating the paper chart.

We have not
**reset our clinical documentation
for the EHR era**

It is much easier to inefficiently write an 8 page note as a provider in the EHR era without any realization of what you have done and what amount of data is actually useful. **We have to actively combat this tendency.**

Why?

Over 500 templates to choose from

Most templates were ported (not redesigned) from paper era

Documentation standards are unclear - usability & regulatory

Our templates did not incorporate new documentation functionality:

- Patient-entered data

- Voice to text & navigation

- Form-based documentation (NoteWriter)

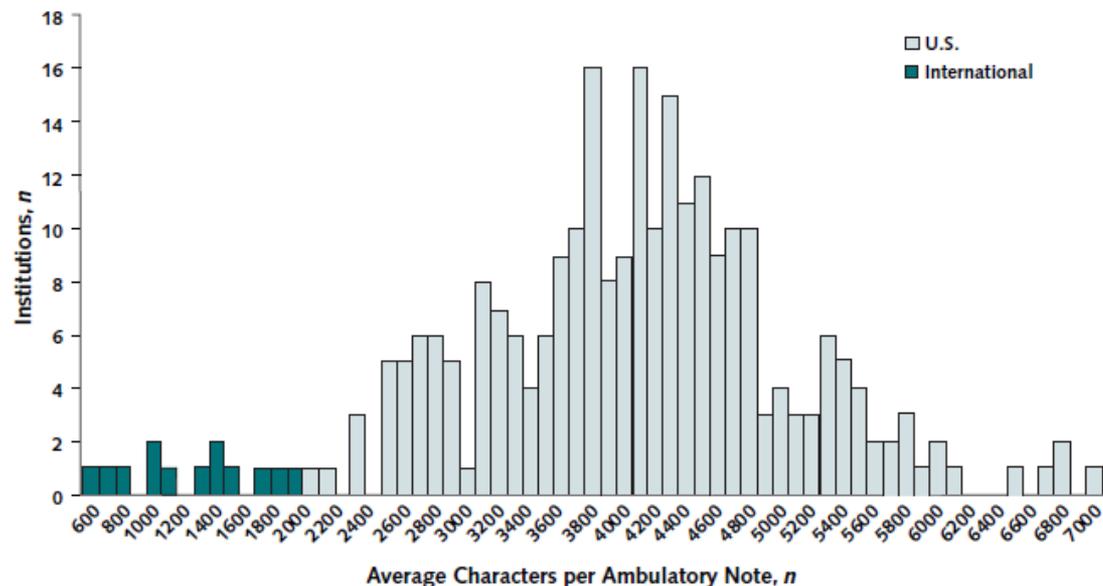
- Problem-Oriented Charting

Our templates lacked purpose and clear ownership

Physician Burnout in the Electronic Health Record Era: Are We Ignoring the Real Cause?

N. Lance Downing, MD; David W. Bates, MD, MSc; and Christopher A. Longhurst, MD, MS

Figure. Average characters per ambulatory progress note in U.S. and international health systems.



Column height represents number of organizations. Dark columns represent 13 organizations outside the United States (140 000 notes from Canada, the United Kingdom, Australia, the Netherlands, Denmark, the United Arab Emirates, and Singapore). Light columns represent 254 organizations in the United States (10 million notes).



Electronic Health Records: a “Quadruple Win,” a “Quadruple Failure,” or Simply Time for a Reboot?

Michael Hochman, MD, MPH

The Gehr Family Center for Implementation Science, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA.

“There must be a **dramatic and thoughtful simplification of EHR documentation templates**: it should not take over 200 mouse clicks and more than 700 key strokes to complete one ambulatory encounter.

Put simply, **EHRs must be redesigned around the needs of clinicians and patients** rather than billers and administrators.”

How?

Redesign/Simplify – 500 templates to 10

Define primary purpose of note is to capture the patient's story and document current plan of care. *Everything* does not need to reside in the note.

Oversight – formed documentation redesign committee with clinicians, IT, quality and billing/compliance. Provided increased voice for clinicians in this process.

Support – support change & personalization. Socialized idea with multiple provider groups and built a support team for 1:1 at the elbow support.

Best Practices for Clinical Documentation

Best Practices for Clinical Documentation to decrease Note Bloat & meet Coding/Compliance requirements

History and Physical

Note Elements	Best Practice Recommendations	SmartLink Suggestions	Minimum Requirement for Professional Billing/Hospital Coding
Chief Complaint	Patient's primary reason for encounter in the patient's language. Can be pulled from nursing documentation.	<u>.CHIEFCOMPLAINT</u>	REQUIRED
History of Present Illness	Describe recent events, relevant changes in patient's condition and patient's report with at least 4+ elements		REQUIRED
Past Medical History	Review and document that review by pulling historical data into note or an attestation statement	<u>.PMHDATA</u> or <u>.PMHATTEST</u>	REQUIRED Prenatal history required for OB pre-op H&Ps
Past Surgical History	Review and document that review by pulling historical data into note or an attestation statement	<u>.PSHDATA</u> or <u>.PSHATTEST</u>	
Family History	Review and document that review by pulling historical data into note or an attestation statement	<u>.FAMHXDATA</u> or <u>.FAMHXATTEST</u>	

Additional Benefits

Culture – Clinicians now have a renewed voice in documentation standards

Analytics – Able to build reports around recommended SmartTool use per required section or data element

Agility – Reduced maintenance

Early Results

Only a few provider groups have completed training but early results show a **37% reduction in time in notes**

Survey Question	Results
My efficiency using Epic's EHR will improve	97% Agreed or Strongly Agreed
1:1 Support session was effective use of time	100% Agreed or Strongly Agreed
Physician likelihood to recommend training to a colleague	91% of physicians would recommend to colleague
Interest in additional training beyond the group and 1:1 training provided	70% of providers asked for additional training

Other Success Stories - Inpatient

ONLINE FIRST JANUARY 19, 2018—ORIGINAL RESEARCH

A Prescription for Note Bloat: An Effective Progress Note Template

Daniel Kahn, MD^{1*}, Elizabeth Stewart, MD², Mark Duncan, MD¹, Edward Lee, MD¹, Wendy Simon, MD¹, Clement Lee, MD¹, Jodi Friedman, MD¹, Hilary Mosher, MD³, Katherine Harris, MD³, John Bell, MD, MPH⁴, Bradley Sharpe, MD⁵, Neveen El-Farra, MD¹

¹Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, California; ²Division of Hospital Medicine, Alameda Health System, Oakland, California; ³Department of Internal Medicine, Carver College of Medicine, Iowa City, Iowa; ⁴Department of Internal Medicine, Division of Hospital Medicine, University of California, San Diego, San Diego, California; ⁵Department of Medicine, Division of Hospital Medicine, University of California, San Francisco, San Francisco, California.

Notes had approximately **25% fewer lines**.

Notes were **signed on average 1.3 hours earlier** in the day.

Note quality was improved based on PDQI-9, a validated note scoring tool

Other Success Stories - Ambulatory

General Pediatrics Clinic – Note Completion Time (Hours)



Problem Oriented Charting with NoteWriter implemented



Example from SSMHealth at [UGM 2017 \(PAC02\)](#) – combined Patient-Entered Questionnaires, NoteWriter and Problem Oriented Charting with template re-design to significantly reduce documentation time

Lessons Learned

Explain the Why? Provide clear purpose

Strict standards for documentation won't succeed.
Personalization should be allowed to operate in a
framework for success.

Partner with colleagues in coding/compliance and
quality

Continued Challenges

Regulations & other administrative burdens

Non-standard interpretations of regulations

Use of other EHR data, not only data in notes

Non-incentivized training time for physicians /
difficulty with delayed value proposition

Continue to encourage vendor usability testing on local
level and push integration into workflow

Questions?

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