



Case Study: eDOCs - Physician Documentation Adoption at an Urban Community Hospital

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Introduction

Few hospitals in the nation have full electronic physician documentation (HIMSS EMR Adoption Model). Efficient and effective electronic physician documentation can bring relevant information to the point of care, share valuable information from other members of the care team, and generate documentation to improve patient engagement and transitions of care. Physician documentation is now a measure for Stage 2 Meaningful Use. This case study describes the adoption of and the lessons learned from eDOCs, an initiative for full physician documentation at a 519 bed, acute care urban community hospital with more than 1,600 affiliated physicians and 232 residents.

Objectives

Promote full adoption of electronic physician documentation in the E.H.R. and eliminate physician paper notes from the hybrid health record.

Methods

A design committee comprised of clinicians, quality, health information management, information systems, and informatics designed limited structured notes by:

- Adapting guidelines from AHIMA's 'Data Elements for EHR Documentation'
- Integrating data capture requirements for Meaningful Use, Joint Commission, and the Stroke-Get With the Guidelines
- Adapting pertinent data elements and values from extant paper documentation

Versions of the following notes were developed for each service and specialty:

- Admitting history and physical
- Progress
- Consultation
- Consult progress
- Care Summary / Discharge

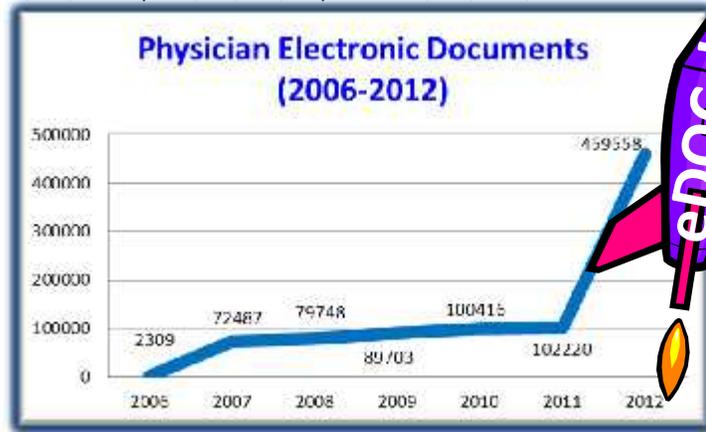
Selectable, shared data elements brought into relevant notes:

- Ambulatory medication history
- Active inpatient medications
- Problem lists
- Medication allergies
- Most recent results
- Immunizations
- Vital signs
- Preferred language
- Advanced directive status
- Smoking history
- Pain score

Free-text was used for those fields where a narrative was preferred

- History of present illness
- Assessment and plan
- Follow-up instructions
- Comment fields for the physical exam and results

Training was and continues to be offered at grand rounds, hands on computer training, and at the desktop level. Computer-based training, quick reference guides, and frequently asked questions are posted on the hospital intranet.



Document Types (2006-2012; N=906,441)



Documents Created By Service (2006-2012)

Service	Total	Percent
Medicine	265371	29%
Ob/Gyn	250860	28%
Pediatrics	199848	22%
Unspecified	103467	11%
Surgery	52247	6%
Anesthesia	15448	2%
Procedure	11635	1%
Orthopedics	7565	1%
Total	906441	100%

Number of Document Templates By Service (2012)

Service	Document Templates
Internal Medicine	59
Surgery	55
Pediatric	30
Tests/Procedures	26
Neonatology	6
Obstetrics-Gynecology	6
Anesthesiology	5
Orthopedics	5
PICU	4
Generic Note	2
Total	224

Results

The number of physician documents generated in 2012 (459,558) was four times more than the previous year (102,220). Two hundred twenty-four (224) document templates are now available in our production environment. The most common document template used was the progress note (57%). During a recent 2 week period (2/3/2013-2/16/2013), a total 36,074 physician documents were created. 99.8% (36,012) were electronic and 0.2% were paper (62). Targeted, one-on-one training for physicians who are still writing paper notes continues to reduce the number of physician generated paper notes.

Summary

- Clinician input is a critical success factor throughout the clinical document life cycle of design, development, testing, training, adoption, and change control.
- Template customization by specialty and personalized acronym expansion promotes physician adoption and satisfaction.
- The value of clinical documentation to the care team and patient is related to the quality not quantity of the information. Accurate lists of active medications and problems are of greater value than pages of test results that may not be relevant. Note bloat can compromise usefulness.
- If all clinical documentation becomes electronic, the E.H.R. must capture all data for quality reporting. At present, capturing data for quality may require duplicate data entry. e-Measures should be aligned to one standard (i.e., National Quality Forum), and E.H.R. certification should require automated capture of quality measure data and reserve clinical documentation for that data that cannot be captured otherwise (AMIA 2011 Policy Meeting). As David Bates testified to the HIT Policy Committee: "Documentation for measuring quality should be collected as a byproduct of care" (Bates 2/13/13 HITPC testimony).

Next Steps

- Improve usability of clinical documents with medical logic modules (i.e., easier access to medications and results by category and time period).
- Modify the care summary to reduce note bloat and optimize readability of the final document for both patient and the receiving provider.
- Apply the Clinical Decision Support Performance Improvement model's 5 Rights to reduce duplicate data entry and improve capture of quality measures for Meaningful Use, CMS, Joint Commission, Stroke GWTG, and others.
- Integrating other specialty systems into the E.H.R. is necessary to remove the paper chart, i.e., endoscopy, cardiovascular studies, perioperative records. Greater interoperability is needed for effective and more affordable integration.