

Optimizing Clinical MD Documentation

The Problem

Documentation is an essential part of medical care and is the core of any process improvement intervention. However documentation is becoming increasingly cumbersome and redundant. Furthermore, the current state of note writing is inefficient and underutilizes existing electronic systems to optimize efficiency, accuracy, education, and compliance.

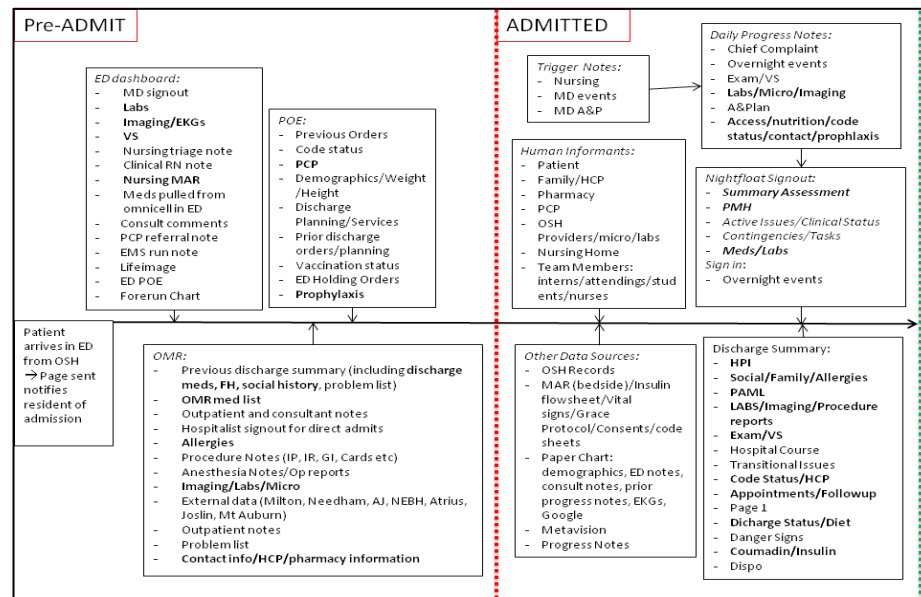
Aim/Goal

As part of the Department of Medicine's Stoneman Quality improvement elective, the team of residents designed a project that would highlight the state of current MD documentation and provide a roadmap for the characteristics of an ideal inpatient clinical note. We sought to provide suggestions that might be incorporated to optimize clinical documentation.

The Team

- Haider Javed Warraich, MD, PGY-3, Department of Medicine
- Kristin Burke, MD, PGY-3, Department of Medicine
- James Brush, MD, PGY-3, Department of Medicine
- Kudakwashe Maloney, MD, PGY-5, Med-Derm
- Sarah Moravick, QI Project Manager, Health Care Quality
- Alex Carbo, MD, QI Director, Department of Medicine

The Current State of the Clinical Note



Areas Identified for Improvement

Efficiency:

- Similar information is collected separately by different providers
- Data cannot be viewed and entered on one screen
- No good way to import data from OMR
- Lack of review of prior information (alerts regarding prior precautions e.g. aspiration precautions, prior dietary information)

Accuracy:

- Over-reliance on copy pasting increases chances of errors being carried over
- Essential information is not available digitally to be imported e.g. medication administration, vital signs, leaving room for error and/or redundancy
- Inability to view information and trends reduces ability to discern clinical trends
- Over-reliance on free text increases variability in quality of notes

Compliance:

- No support to indicate compliance requirements
- No integration with ICD-based billing codes
- No differentiation between inpatient and observation documentation

Education:

- Lack of decision support in current notes system
 - Hyperlinks to standardized protocols, decision support
 - Automatic problem list generation could curate required information
- Lack of patient safety pop-ups (e.g. if some comes with falls, is he on fall precautions etc.)
- No platform for robust data-viewing or trend generation

The Future: Suggested Improvements

To optimise physician clinical documentation, notes of the future should:

- Collect and store recurring information (medication reconciliation, social/family history etc) in one electronic location viewable by all providers, allowing for editing to be incorporated into notes
- Auto-populate physician-selected vitals, relevant lab data, medications, and prior treatment history into notes
- Provide links for decision support
- Incorporate a smart problem list which automatically populates relevant clinical information (e.g for sepsis: microbiology data, antibiotics, need for PICC line etc. could be imported)
- Allow data-viewing and vital sign/lab data graph creation on the same screen as the note platform to enhance decision making
- Incorporate more patient safety prompts (e.g if patient has aspiration pneumonia, need for aspiration precautions could be imported)
- Electronic medical administration data can be incorporated and automatically imported

For more information, contact:

Haider Javed Warraich, MD, PGY-3, Medicine,
hwarraic@bidmc.harvard.edu

