M*Modal Internship

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M*Modal

Clinical Documentation Improvement (CDI)

Uses real-time automated feedback and natural language understanding technology on medical documentation to prevent errors and improve quality when the information is being put in

Non-disruptive to workflow

Minimizes queries

Fluency Direct

- Dictation assistant for doctors
- Built for many Electronic Health Records
- Improves in accuracy over time

"EHRs are widely believed to slow physicians down while not capturing the full complexity and uniqueness of the patient encounter"

"speech recognition technology can provide the flexibility, convenience, and efficiency clinicians need to document the record completely and directly in the EHR"

Structure Annotation

Related items are put into single blocks, often with sub-blocks (A, B, C, D)

Blocks are then tagged

Certain items may be marked with specific features (listitems, table header, tables, metadata, or unknown)

The whole document must be annotated

Structure

- History

- Subjective

- Objective

  - Vital Signs

  - Labs

- Assessment

- Plan

- Findings

- Impression

- Physical Exam

  - General

Named Entity Recognition

Appropriate items are marked as person (someone's name), organization, or location (address information, states, etc.) and nothing else is annotated

More straight-forward than Structure Annotation, but requires a keener eye

Search function is useful but limited

There is occasionally Spanish documents as well

Example Document

"There was nothing about this storm that was as expected," said Jeff Masters, a meteorologist and founder of Weather Underground. "Irma could have been so much worse. If it had traveled 20 miles north of the coast of Cuba, you'd have been looking at a (Category) 5 instead of a (Category) 3."

Person **Organization** **Location**