Corporate Technology Brief

M*Modal
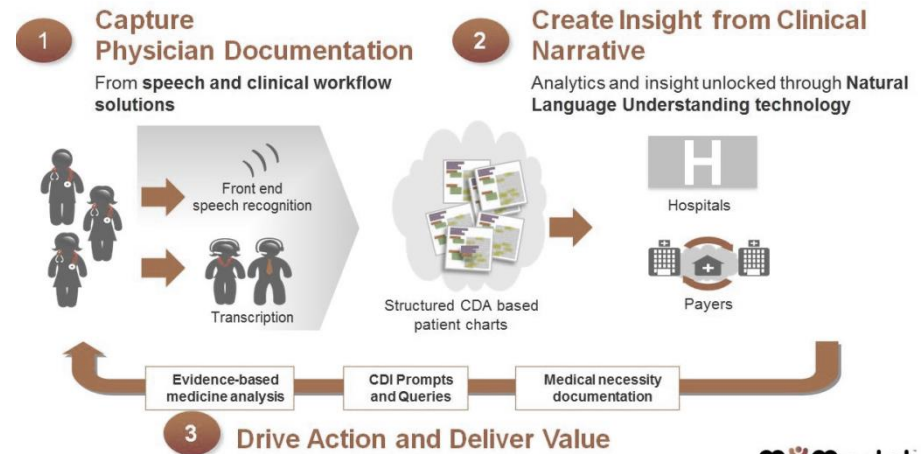
Detlef Koll

V. "Juggy" Jagannathan

Jason Kolinosky

- M*Modal research and commercial focus is on
  - speech recognition for both conversational dialog, and computer directed speech
  - natural language understanding to build deep semantic models from a combination of structured and unstructured information
- Primarily in the domain of healthcare documentation
  - E.g.: build clinical model of a medical condition with symptoms, medications, treatments, outcomes from narrative physician notes

Transforming Words Into Insight and Action

1 Capture Physician Documentation
From **speech and clinical workflow solutions**

2 Create Insight from Clinical Narrative
Analytics and insight unlocked through **Natural Language Understanding technology**

Front end speech recognition

Transcription

Structured CDA based patient charts

Hospitals

Payers

Evidence-based medicine analysis

CDI Prompts and Queries

Medical necessity documentation

3 Drive Action and Deliver Value

Capabilities

- SR and NLU at scale:
  - ½ billion minutes of physician dictation recognized per year;
    100 million clinical documents deeply structured into HL7 CDA XML
  - Over 200,000 physician users
  - Broad application of NLU across dozens of use cases (computer assisted coding, live clinical documentation improvement, abstraction, decision support, …)

- M*Modal's speech recognition solutions are used for:
  - Cloud based, desktop based, and on-device recognition on mobile devices
  - Meeting transcription, call center support systems, back end transcription of dictated notes, front end speech recognition, etc.
  - In production: US/UK/Australian English, German,
                          Japanese, Thai
    Experience with: Arabic, Korean, Mandarin Chinese

- Full NLP stack for clinical data abstraction.
  Semantic modeling and reasoning layer.

- Our group is interested in partnering in this context with companies with experience in:
  - Multi-lingual information retrieval
  - Summarization
  - Translation
  - Broad domain semantic modeling

- Generally with any organization that can effectively utilize our speech and NLU technologies in a healthcare domain.

Contact Information

- Name: Detlef Koll
- Title: CTO
- Organization: M*Modal
- Email address: detlef.koll@mmodal.com
- Phone number(s): (412) 422-2002 Ext 7211
- url: www.mmodal.com