Background & Current State

Case Report Forms (CRFs)
- Objective: to preserve and maintain quality and integrity of data*
- Paper or electronic
- Standardized to address the needs of all users
  - Investigators, data entry personnel, medical coder and statistician, etc.

Conventional CRFs are completed by manual data abstraction
- Data collection costs scale linearly with # of patients

Automated CRF
- Data abstraction from electronic health records (EHR) using programmed queries.
- Could improve: Efficiency, Accuracy, Reproducibility, Auditability

Barriers to automated CRF
- EHR systems lack interoperability.
- Data collection schemas may not match what data are electronically recorded.
- Data completion guidelines may not be precise enough for non-clinician software programmers to implement.

Future State

Figure 1. An example CRF. This screenshot is from the World Health Organization’s Global COVID-19 Clinical Platform.

Figure 2. Recommendations to enable automatic CRF.