

## 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 statisticians, 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.

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

## Future State

Figure 2. Recommendations to enable automatic CRF.

