OpenHIE Covid-19 Task Force Update

- Established April 2020
  - Co-Chairs - Garrett Mehl (WHO); Carl Leitner (Digital Square); Terry Cullen (Regenstrief)
  - Meetings - Mondays 11-12 Eastern Time (April 7, 13)

**Values**

- **Avoid the chaos** - platform for coordination across global goods deploying solutions, keep signal-to-noise ratio high
- **Utilize existing solutions** - looking at supporting and augmenting existing tools deployed in countries
- **Build towards digital health systems** - although not focused on humanitarian / emergency response, provide support so that these tools can integrate into national digital health infrastructures
- **Augment** - recommendations, guidance should be developed and implemented in ways that augment the short-term / humanitarian response needs as appropriate. It should not hinder these efforts
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- Terms of Reference (endorsed April 13, 2020):
  - Identifying and collating information relating to data standards and exchange relevant to the Covid-19 response
  - Identifying gaps in and establishing standards for data exchange priorities
  - Provide documentation and guidance (to both the global good community as well as proprietary software tools) to improve adherence to these standards
  - Ensure that rapidly deployed solutions can be integrated into the national digital health architectures

- Logistics
  - weekly calls
  - wiki = https://wiki.ohie.org/display/resources/COVID-19+Task+Force

- Potential Work streams (next slide)
Open HIE Covid-19 Task Force - Potential WorkStreams

Case reporting
- to district
- to regional
- to national
- to global

Contact tracing
- cross-platform
- cross-jurisdiction
- line lists

Labs
- Specimen Order and tracking
- Specimen transport
- Results notification

Self-care

Facility Management
- Inventory (PPEs, beds, equipment, cold-chain present, x-rays, staff knowledge)
- Organizational Functional-readiness
- WHO SARA - augmented for Covid-19

Care management
- at-risk populations
- immunocompromised

Supply Chain
- PPEs
- reagents / test kits

Health worker communication
- PPEs
- Updated clinical guidance
- Clinical care guidelines (e.g. computable)
- Staff knowledge

Telemedicine and Virtual Care
- Self-screening
- Self-reporting for patients - under quarantine
- Self-reporting for HWs - proactive symptom check
- Remote diagnosis & virtual health facility triage

Mortuary
- Reporting forms
- Mortuary Capacity (maybe in SARA)

Privacy
- What are current guidelines from different countries and how they are changing
- Cross Border

One Health Agenda
- Animal
- Human
- Plant
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- Draft work plan(s) based on use cases
  - DRAFT Generic COVID 19 Workplan
  - Frameworks and Approaches
    - Data Set
    - Semantic and syntactic standards
    - Normalize standards when possible
    - Develop FHIR IG when possible-- collaborate with others
  - Identify additional individual and /or organizational representation/ coordination
  - Self assignment to Workstream

- Prioritization- Case Reporting/Contact Tracing- Initial Workstream Meeting April 16
  - Second tab in draft generic COVID 19 Workstream
  - Initial Identified Data Models
    - WHO
    - SORMAS
    - DHIS2
    - OpenMRS
    - CommCare
    - OpenEHR
    - Liberia IDSR
    - Logica FHIR IG

- Potential for other workstreams based on interest/ LOE/ timing
Resources - to be expanded

- PEPFAR Technical Guidance

- Collation of Data Models (Google sheet)
  - Includes LOINC, ICD, SNOMED, etc.
  - To-dos: add in CHT models, update DHIS2 w/ WHO mapping, ICD-ll, normalize when possible; add
    [https://www.healthit.gov/techlab/ig/node/4/submission/3206](https://www.healthit.gov/techlab/ig/node/4/submission/3206)

- HL7 Resources and Activities for Covid-19

- FHIR Implementation Guide for health facility situational awareness
  [http://build.fhir.org/ig/AudaciousInquiry/saner-ig/](http://build.fhir.org/ig/AudaciousInquiry/saner-ig/)
  - Implementation Guides are a good way to package task force recommendations

- FHIR implementation guide for Initial Case Report
  [https://build.fhir.org/ig/HL7/case-reporting/](https://build.fhir.org/ig/HL7/case-reporting/)
  - US centric, structural basis for Covid-19 case report?
  - To-dos: map to global good data case report models

- FHIR implementation guide for Covid-19 demographics and vitals
  [https://covid-19-ig.logicahealth.org/](https://covid-19-ig.logicahealth.org/)

- FHIR Chat Group

- FHIR synthetic data with Synthea
  [https://github.com/synthetichealth/synthea/issues/679](https://github.com/synthetichealth/synthea/issues/679)
  - Is the dataset feasible in LMICs? Should we look at a more constrained dataset matching the global good models

- Synthetic Data Sets for Covid-19 (US Centric)
  [https://github.com/synthetichealth/synthea/pull/683](https://github.com/synthetichealth/synthea/pull/683)
Standards based data workflows in computable care

- **input streams**
  - PoS w/ FHIR-sync
  - PoS w/ IHE-CDA
  - CSV
  - DB connection
  - mobile app
  - SMS, FLOIP, etc.

- **templating**
  - ingestion layer
  - templating engine

- **processing**
  - FHIR-data warehouse
  - FHIR-CQL Engine
  - FHIR Bundle
  - FHIR Library
  - NOTICE D

- **secondary data use**
  - Decision Support
    - FHIR Implementation Guide (CPG)
  - Case Reporting
  - TBD
  - HMIS
    - mADX: FHIR MeasureReport
Questions