Summary of ICODA Scientific & Strategic Advisory Council Meeting – December 2021

Date: 14 December 2021

Chair: Agnes Binagwaho and Martin J Murphy

Attendees: Trudie Lang
           Nicky Mulder
           Frank Rockhold
           Steve Kern
           Andrew Morris (HDR UK)
           Névine Zariffa (DP1 lead)

1 Welcome & Introductions

AB thanked the ICODA team and the SSAC members for their continued input and support of the initiative. She reminded Council members of the importance of ICODA’s mission of sharing data, especially in the context of the unnecessary travel bans placed on South Africa after their rapid and early discovery of the Omicron variant.

2 Session 1: ICODA Update

Andrew Morris (AM) reminded the Council of ICODA’s mission and vision: to unite global health research data to enable research discoveries through an open, scientifically-led international alliance and a data ecosystem that demonstrates trustworthiness and enables collaboration at scale. He also emphasized that, while ICODA’s initial focus is COVID-19, the ultimate goal is to expand its work and approach to address other global health challenges.

AM provided the Council with some progress highlights since the last meeting, which included the following:
- ICODA has garnered greater visibility through the G7 and G20 meetings, as well as through the Minderoo and Bill and Melinda Gates Foundation’s support of 10 new Grand Challenges ICODA driver projects.
- There are currently 12 driver projects, involving over 130 researchers from 19 countries, sharing data across 42 countries. As a point of reference, in July of last year, there were only 2 driver projects.

A spotlight on a Grand Challenges ICODA Driver Project: The Impact of COVID-19 on Chronic Care Patients’ Healthcare Utilization and Health Outcomes in Haiti, Malawi, Mexico and Rwanda was shared by Dale Barnhart (DB), the principal investigator from Partners in Health (PID) via pre-recorded video. Through a retrospective cohort study, the team are using existing clinical data sources and comparing outcomes before and after COVID-19 for HIV, diabetes and cardiovascular disease patients. The data was collected in OpenMRS based electronic medical records for chronic care patients. The team combined and harmonized this data from sites supported by PIH in Haiti, Malawi, Mexico and Rwanda.

DB emphasized this was the first time PIH has combined data from multiple sites and explained that this research leveraged the new COVID-19 research network built within PIH to answer some common questions. This network brings together researchers from 8 countries and is a major change in approach, as research used to be done independently in each country. Given that the COVID-19 pandemic has likely interrupted the care of chronic disease patients, this research will help identify gaps, as well as novel strategies that could mitigate these effects.

This session was followed by Q&A and confirmation that all the driver projects were producing such videos to be shared on the ICODA website about their work.

### 3 Session 2: Driver Project 1 - Integrating evidence base for COVID-19 therapeutics

Presentation from Driver Project 1 team Névine Zariffa (NZ), Japp Mandema (JM) and Jonas Haggstrom (JH).

NZ reminded the Council of the focus of DP1, which is on establishing the boundaries of summary-level data to inform knowledge from aggregate data and explore the efficacy of COVID-19 therapeutics. The team have created an ICODA data dictionary for summary level data from randomised clinical trials (RCTs) and curated data from publicly available sources: this has involved a wider community of advisors, data science experts and clinicians. Multi-disciplinary research teams were formed and accredited, analysis plans were developed, analysis conducted, and preliminary outputs were generated within a short period of time.
Core research questions for DP1: Context: Randomised Controlled Trials (RCTs) and Real-World Data (RWD) sources are key to the evaluation and uptake of repurposed drugs and other therapeutic agents for use during the pandemic. Synthesis of knowledge across individual studies is desirable for comprehensive assessments and a number of key research questions are being addressed through these studies:

1. Are the results the same in RWD and RCTs?
2. What is a reliable real-time synthesis strategy for trials as data accumulates?
3. Can RWD and RCT be combined to accelerate the evaluation and regulatory action for therapeutics?

JM provided an update on results so far. NZ and JM identified the research team’s next steps. This session was followed by Q&A.

### Session 3: Progress on HDR Global

TL informed the Council of plans to expand the focus of ICODA beyond COVID-19, with the support of the Bill and Melinda Gates Foundation. TL summarised the goals of this new programme, HDR Global, as follows:

- To enable and support research that tackles locally-set, priority health challenges by improving capture and analysis of all forms of health-relevant data
- To address inequity in where data is collected and who benefits from the evidence
- To connect expertise and share technology, standards, policies, and solutions that work between different projects, teams and networks in the Global South

TL explained that this work will be based in the Global South, led by three long-standing partner organisations with The Global Health Network, forming a federated Global Alliance. These three partners are Africa CDC, The Osvaldo Cruz Foundation and the International Centre for Diarrhoeal Disease Research, Bangladesh. This foundational programme seeks to:

- Support development of new health research and data science capabilities at scale
- Generate new evidence and knowledge from existing data sets, and increase data access, reuse and sharing across the global network
- Strengthen research and data science environments
- Establish a federated global partnership that fosters equity, creates critical mass and is enabled through good governance and agile administration systems.