



Establishment of a Global Repository of Epidemiological Parameters

WHO Project Team



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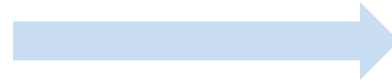


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Problem Statement and proposed approach

Problem Statement

There is currently no global repository of epidemiological parameters that the global modelling community can access, use, and contribute to.



Future State

A global repository of epidemiological parameters that is publicly accessible by modellers, epidemiologist, subject matter experts and decision makers to inform public health response.

Proposed approach (5 workstreams)

1. Prioritization of parameters

2. Extraction of parameters

3. Storage and use of parameters

4. Maintenance and validation of parameters

5. Scientific recognition and other incentives

Global repository of epidemiological parameters – Collaborative approach

- Expertise in evidence synthesis methodologies
- AI tools for parameter extraction



- Extraction of parameters for 9 priority diseases
- {EpiReview} package



Prioritization of diseases and parameters

Extraction of parameters

Storage and use of parameters

Maintenance and validation of parameters

Scientific recognition and other incentives

Epiverse
powered by **data.org**

GLOBAL
.hEALTH

Federated analytics

Epiverse
powered by **data.org**

- Analytical tools
- {Epiparameter} package

The Epiparameter Community

Multidisciplinary and Multisectoral Global Community



Epiparameter Community Building

[GitHub](#)

[Website](#)

Collaboratory

Pandemic and Epidemic Intelligence

EpiParameter Community

[About](#)[Community](#)[News](#)[Resources](#)[GitHub](#)

Community members

The epidemiological parameter community is an inclusive, interdisciplinary and multisectoral global network of mathematical modelers, epidemiologists, librarians, information specialists, disease experts, decision makers and software developers. Community members span academia, NGOs, industry, and national and international public health agencies. The goals of the community are to collaboratively develop a global repository of epidemiological parameters as well as tools to support their use in analytical pipelines.

How to join and contribute

We welcome you to join and engage with the community via our [GitHub](#). You can contribute by posing questions, participating in discussions as well as sharing ideas, tools, resources, and best practices. You can also contribute technically to specific workstreams (e.g., systematic reviews, parameters extraction, development of analytic packages, etc.). Please contact collaboratory@who.int if you wish to discuss specific technical contributions.

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Announcements

First Working Group meeting - 26 April 2022

PatriciaRose963

Workstream 1: Prioritization and definition of parameters

Standardization of parameters definitions

PatriciaRose963

Sort by: Latest activityLabelFilter: OpenNew discussion

is:open category:Workstream 1: Prioritization and definition of parameters

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Workstream 1: Prioritization and definition of parameters

This workstream will focus on the development of data taxonomy, data dictionary and model for the epidemiological parameter repository. Furthermore, we will identify priority parameters that are needed to inform decision making across various use cases as well as required contextual information for each parameter.

Which parameters should we prioritize for decision making?

PatriciaRose963 started 2 days ago in Workstream 1: Prioritization and definition of parameters

Workshop reports

Report: Second TWG Meeting on the Establishment of a Global Repository of Epidemiological Parameters

June 20, 2023
WHO Hub for Pandemic and Epidemic Intelligence

More than 50 participants from diverse backgrounds in public health intelligence and related fields convened for the second Technical Working Group (TWG) meeting on June 20, 2023. The focus of this meeting was to advance the establishment of a standardized data model designed to capture and present critical epidemiological parameters effectively. This initiative represents a crucial step forward in enhancing the consistency and accessibility of key epidemiological parameters for public health professionals, infectious disease modelers and researchers globally.

Report written by: Patricia Ndumbi, Megan Evans and Rebecca Lais
Formatting and Publishing: John Fess

Community Surveys

Patricia Ndumbi, PhD • You

Epidemiologist/Scientist at World Health Organization

10mo •

Attention epidemiologists, modelers, and decision makers! Your expertise is needed! Participate in our survey on epidemiological parameters and help us build a comprehensive database. Share your insights, shape public health strategies, and drive impactful decisions. Join now! #EpiParameters #PublicHealth

Global Epidemiological Parameters Database Survey

Thank you for your participation in this survey regarding the Global Epidemiological Parameters Database!

The purpose of this survey is to gather feedback on the proposed structure of the database. Our goal is to create a database that can effectively accommodate parameter estimates provided in various formats, while also establishing a template for future good-practice reporting.

We highly value the insights and expertise of the community which is why we are seeking your feedback on the proposed database structure. For every database field, we would like you to indicate one of the options:

- Required:** You believe this field should be included in the minimum required dataset and be completed for every submission to the database.
- Optional:** You believe this field is useful and should be included in the database as an optional field, but does not form part of the minimum required dataset.
- Remove:** You believe this field should not be included in the dataset.

You can skip fields if you are unsure about your answer. At the end of each section, we provide an opportunity for you to suggest additional fields that you believe should be included in the database. We also welcome any comments or general feedback you may have.

Global Epidemiological Parameters Database Survey

docs.google.com • 1 min read

Alpha Forma and 45 others

16 reposts

TWG virtual meetings

Outbreak analytics Hackathon

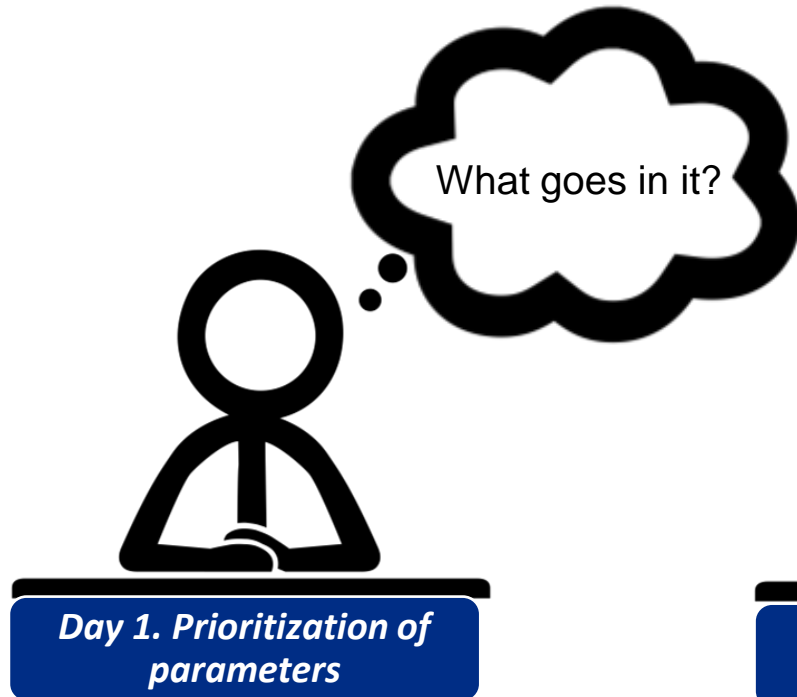
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Presentation Title

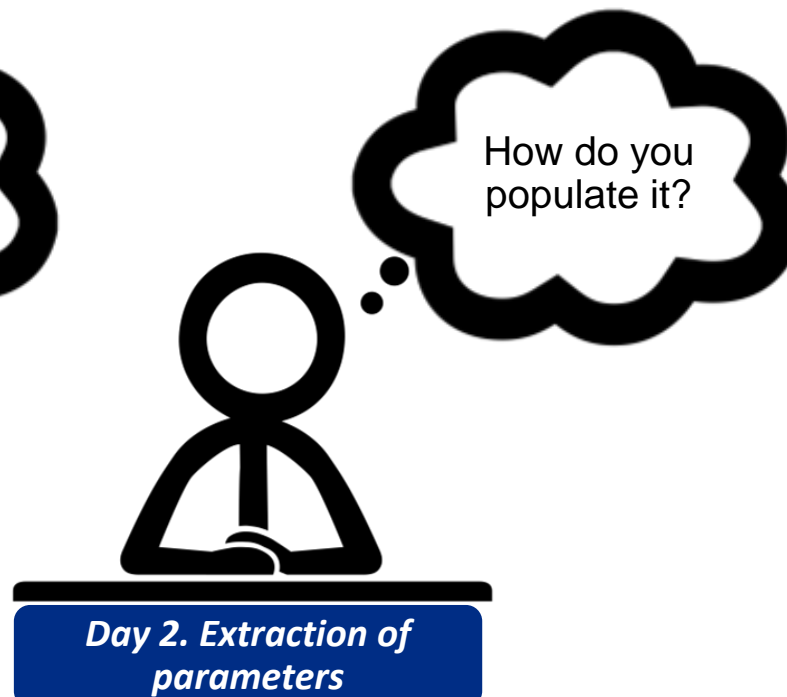
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Collaboratory

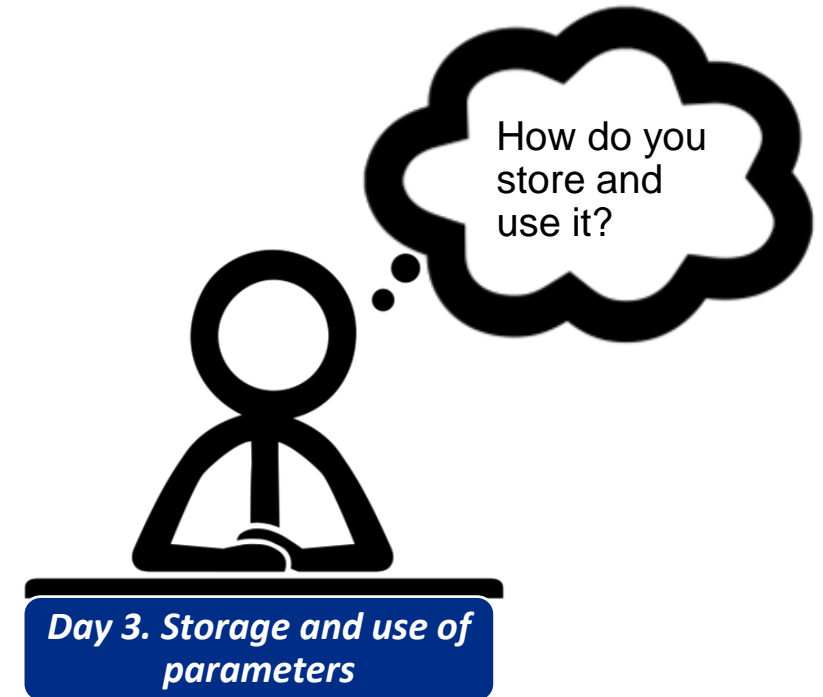
This week's workshop objectives



To develop and test public health use cases which will inform the GREP database schema



To identify main challenges and explore solutions related to parameters extraction



To enhance and develop solutions for parameters storage and use

Workshop output

1. Technical meeting report with summary of progress made during the workshop (Day 1-3)
1. “Blueprint” of GREP database schema incorporating participants input (Day 1)
1. Publication - Guidelines on parameters reporting (Day 2)
1. List of package development tasks or features request related to parameters store or use (Day 3)

Thank you