

Ongoing Development and Implementation of a Global Digital Operative Encounter Registry

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INTRODUCTION: The G4 Alliance for Surgery, Obstetrics, Trauma and Anaesthesia Operative Encounter Registry (OER) Working Group, partnering with the WHO Department for Integrated Health Services and others supported by World Health Assembly Resolutions 68:15; 70;22 76.2 (ECO Resolution of May 2023) has for some years been creating a **minimum operative dataset** through a global consensus process, to achieve a widely available digital platform to routinely prospectively collect operative encounters. This will enable audit, quality improvement, and over time build data-driven foundations for local, national, and global decision-making and prioritization. This will be the first time that prospective operative care data has been collected globally.

DEVELOPMENT METHODS:

Initial Delphi rounds → extensive consultation → finalisation of the database.

Guiding principles: the database needs to:

- Be simple to allow easy entry of data even in Level 1 health centres
- To provide incentive for use,
- Have interoperability
- Allow de-identified information to be used by MoH and WHO to improve SOTA care.

• A 'Demonstration Project' was conducted across 3 geographical sites in 2023 using 'JotForm' to test the appropriateness and 'collectability' of **28 core and 10 extended variables**.

- Collected data was analysed – centres assessed with a questionnaire
- A WhatsApp group was developed to support sites as a forerunner to a 'Community of Practice'

RESULTS:

- Data collected from 136 cases in Kenya, 271 in Pakistan and 50 in Laos.
- Most variables adequately collected, including patient demographics, co-morbidity data (84% recorded ASA rating).
- Other variables, such as the use of monitoring (37%) and the surgical safety check list (57%) were not as well collected.

Importantly, as a result of the demonstration project, one site in Pakistan has continued to collect data for over 2,500 cases demonstrating that use of the OER can lead to significant quality improvement – e.g. Surgical Safety Check List now recorded in 99%.



NEXT STEPS:

- Definitions for the variables refined, audit filters and visualisations developed.
- OER Digital Platform (to be housed on a secure WHO server) has been built.
- OER Pilot Project planned for later in 2024 across all WHO regions.
- **Interested sites are being sought.**

- Ultimate aim: The first available free access, digital registry to prospectively collect operative data and upload when internet connectivity is available.
- Ultimate effect: Quality improvement at the local level and meet the de-identified reporting requirements of Ministries of Health, required by successive WHA resolutions → to allow Emergency, Critical and Operative Care Implementation Strategies within Universal Health Coverage.