COVID-19 Situation and Strategic Response

Maria Van Kerkhove, PhD on behalf of IMST
COVID-19 Health Operations and Technical Lead
World Health Organization, Health Emergencies Program
Science drives our understanding... Our guidance.... Our actions...

Translating technical knowledge...

...into coordinated action

...using appropriate methods.
Standard WHO guidelines are developed in 6 months up to 2 years, but during health emergencies this process is expedited through the development of:

**Emergency interim guidelines**
- Narrow scope and short shelf-life
- Can be based on indirect evidence, existing WHO guidelines or expert opinion
- Developed in weeks

**Rapid advice guidelines**
- Compressed and expedited process in response to public health emergencies
- Developed in 1 to 3 months

Emergency interim guidelines are developed when there is a need to have guidance available within weeks; rapid advice guidelines are the choice if a longer timeline is available.
Evidence generation

- Multiple studies and publication types, from multiple disciplines:
  - Epidemiology, biology and virology;
  - Social sciences (how people and communities respond);
  - Environmental science;
  - Engineering, environmental control and aerobiology;
  - Qualitative, quantitative, mixed methods, modelling, expert opinion
  - Peer-reviewed and pre-prints

Evidence synthesis and appraisal

- Rapid and non-rapid systematic reviews (WHE/Science Division)
- Review across studies
- Assessing risk of bias
- Grading quality of evidence and findings (GRADE/CerQual)

Quality assurance and peer review

- By:
  - PRC/GRC/ERC
  - External reviewers
- Input from:
  - International networks
    - Working groups from civil society and patients
    - Partner agencies
    - Peer review

Formulation of recommendations

- By:
  - PRC/GRC/ERC
  - External reviewers
- Technical networks or standing guideline panels

Central role of independent expertise

Dynamic publication and update of living guidance and information products

- Translation – 6 UN languages/50 languages for trainings
- International networks
- WHO regional and country offices
- WHO regional emergency directors
- Member State Briefings
- Operational and technical platforms
- Partner agencies
- Technical help desks
- WHO website (who.int)
- Open.WHO (learning platform)
- WHO Academy
- WHO Information Network for Epidemics (EPI-WIN)
- Social media
- Press briefings
WHO emergency guidelines are focused on emergency needs

• Challenges in developing guidance during a public health emergency often include urgency, limited resources and a lack of available data

• To address these challenges and to accelerate the guidance development process:
  • the scope of emergency interim guidelines is generally limited compared to standard guidelines (standard WHO guidelines often include multiple research questions)
  • the evidence to inform recommendations can be based on existing WHO guidelines or expert opinion instead of for example a systematic review

• Although the emergency interim guidelines development process is accelerated, it continues to be based on the WHO guidelines principles and the processes as described in the WHO guideline development framework*

* Health emergency interim guidelines: a WHO guideline development framework and toolkit
https://apps.who.int/iris/handle/10665/258982
Expedited WHO guidelines development process during the COVID-19 pandemic

Expedited WHO guidelines development process during a public health emergency

- Define scope of the WHO guidance*
- Compose guidelines development group (GDG) & external review group
- Manage any conflicts of interest of GDG members & external review group members
- Formulate research question(s)
- Retrieve, assess & synthesize the evidence
- Appraise certainty of the evidence
- Formulate recommendations, including consideration of benefits and harms, resource use, feasibility, health equity, human rights & sociocultural acceptability
- Implement & evaluate impact

* A WHO Steering Committee is formed, representing different WHO departments and regions to help determine the scope of the guideline and research questions.
Transforming evidence into living guideline

**Evidence generation**
- Type of study depends on research question
- RCTs gold standard for clinical questions
- Consider patient important outcomes
- Sufficient enrolment
- Geographies i.e. PLATFORM trials

**Evidence synthesis**
- Living network meta-analysis
- Prospective meta-analysis

**Draft recommendations**
- Assessing certainty of evidence and other considerations
  - GRADE/GRADE
  - CerQuAL
  - Benefits and harms
  - Values & preferences
  - Equity across subgroups
- Other evidence-to-decision considerations (feasibility, acceptability, cost, human rights)

**Dissemination**
- Publication platforms
- Educational platforms
- Tools for use

**Trigger:** likelihood to change practice, sufficient RCT data to inform high quality evidence synthesis (> 2000 patients, > 50 events), relevant to global audience
Ensuring speed doesn’t compromise quality

“The purpose of PRC is to ensure WHO delivers trusted high-quality, accurate and user-friendly Information”

- “ensure integration, alignment and coordination of relevant publication products across different teams”
- “ensure all published information is quality-assured by appropriate mechanisms, is up-to-date and relevant”
- “define appropriate and standardized processes and tools for products”

March 2020

WHO Publications Review Committee in the context of a public health emergency

Terms of Reference

Purpose
These operating procedures of the Publications Review Committee (PRC) are designed to ensure WHO delivers trusted high-quality, accurate and user-friendly Information Products produced in the context of a response to a specific public health emergency and meeting UN standards on human rights, ethics and equity.

These procedures have been approved by the Deputy Director-General and are intended to provide a framework within which the PRC will carry out its activities.

The PRC reports to the Executive Director, Health Emergencies Preparedness and Response.

The PRC reviews all information products (also referred to as ‘documents’ or ‘products’) related to the public health emergency for which it is convened within the scope outlined in Annex 1, recognizing that new product types may be developed in the course of the response.

The Terms of Reference of the Committee are:

- to ensure integration, alignment and coordination of relevant publication products among different teams across WHO divisions and all levels by reviewing the first and any subsequent versions of all documents listed in the timeline.
COVID-19 PUBLICATIONS REVIEW COMMITTEE (PRC)
Internal review following external review

“The PRC reviews all information products related to the public health emergency for which it is convened”

Independent
• Members appointed by and accountable to DDG

Impartial
• Regional and HQ membership
• Chair (HQ) and Co-Chair (RO)

Transparent
• Decisions and minutes circulated to RTOs and published on PRC Sharepoint within 24 hrs

Efficient
• Decisions rendered within 48hrs

- “ensure integration, alignment and coordination of relevant publication products across different teams”
- “ensure all published information is quality-assured by appropriate mechanisms, is up-to-date and relevant”
- “define appropriate and standardized processes and tools for products”
WHO COVID-19 publication analysis - 1 Jan 2020 to 8 April 2021

COVID-19 publications since January 2020:

990+ submissions
601 documents published including:

- 290 guidelines
- 91 implementation/ operational tools
- 171 external publications incl advocacy brief
- 66 policy briefs
- And 49 other (incl. Q&A, training material, etc.)

- 29% published in March 2020
- 86% published by HQ
- 71% through IMST

Emergency situational reports:

- 209 Daily sitreps (from 21/01 to 16/08/2020)
- 31 WEU (from 07/08/2020 to date)
- 43 WOU (from Apr 2020 to date)

NB: includes 16 documents published before the PRC creation and not added in the tracker afterwards.

Source: PRC publication tracker as of 18/02/2021
KNOWLEDGE−ACTION: DYNAMIC ADAPTIVE SYSTEM

Leverage evidence and expertise
• Expert networks
• Collaborating centres
• Strategic advisory groups
• Massive online consultations/meetings
• R&D Blueprint for Epidemics
• Multi country studies/trials (Solidarity, Unity)

Monitoring and Learning
• KPI driven Monitoring & Evaluation (M&E)
• Country case studies and reports
• Targeted operational research
• Infodemic monitoring and engagement
• Inter-action reviews (IARs) and SimEx support
• Regional Consultations and engagement with COs and MS

Authoritative, transparent, accessible guidance
• Rapid, constantly re-evaluated
• Multi-disciplinary
• Multi-lingual
• Multi-agency
• Adapted to different contexts
• Content shared through multiple channels

Implementation
• Digital transformation of knowledge into learning using innovative training platform: OpenWHO
• 150+ Country Offices and six regional platforms provide tailored operational and technical support
• Multi-agency Operational platforms surge people and material resources (UN supply chain; EMTs; GOARN, TECHNE)
Early actions related to advice and guidance:

5 January 2020
- EIS: https://extranet.who.int/ihr/eventinformation/event/2020-e000001

9-12 January 2020
- National capacities review tool (9 Jan)
- Disease commodity package for operational support and logistics for the novel coronavirus (9 Jan)
- Infection prevention and control (pub 10 Jan)
- Laboratory testing (pub 10 Jan)
- Risk communication and community engagement (pub 10 Jan)
- Surveillance case definitions (pub 11 Jan)
- Clinical management (pub 12 Jan)
- First PCR assay (pub 13 Jan)

Global Strategic Preparedness and Response Plan
- First SPRP of 4 February 2020; updated April 2020; Jan 2021
- Operational Planning & Partners Platform
WHO Information Network for Epidemics (EPI-WIN):

Innovative way to translate knowledge into action

**EPI-WIN COVID-19 INFODEMIC MANAGEMENT**

- Webinars: 87 (@60,000 participants)
- Slide-Set Updates: 55
- Digital Intelligence reports 52
- Videos and infographics: >100
- Myth busters and FAQ graphics >50
- Infodemic News Flashes

[WHO.int/epi-win](http://WHO.int/epi-win)
WHO has developed an innovative communication strategy that leverages all communications platforms and utilizes trusted channels to amplify evidence-based accurate information.
Role in Science and Technical Guidance

Key achievements: Science drives our understanding, our guidance, our actions

• Rapid generation of comprehensive technical guidance from early Jan 2020; continuous review/updating
  • Coordination and collaboration of 1000s of scientists in technical networks, working groups, TAGs, STAG-IH, advisory groups, etc.
  • Multidisciplinary, multi-agency, multi-lingual
  • Robust external and interview review process; expedited for emergencies; strong collaboration with Science Division
  • Living technical guidance documents (clinical management) updated on a rolling basis via formal GDG process

• SARS-CoV-2 full genome sequence available → first PCR Assay published within 2 days, development and shipment of PCR kits globally by end Jan/early Feb 2020

• Consolidation of evidence into know how and know how into how to:
  • Literature summaries, systematic reviews (Science Division/GOARN Research Group/commissioned reviews), seminars, Bringing together international experts and partners to advance discussion, understanding, policy and driving robust scientific discovery

Key challenges

• Proactive communication on sensitive emerging technical issues
• Internal coordination around various topics of significant importance