



Advancing the COVID-19 clinical care pathway for acute COVID-19 and post COVID-19 condition: Patient centered clinical research

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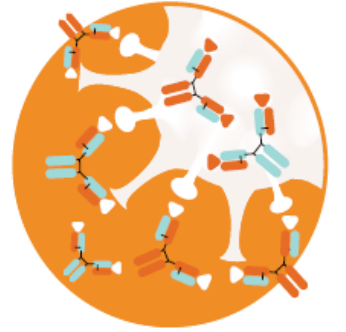
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Advancing the COVID-19 clinical care pathway

Effective therapeutics and evidence based clinical interventions



- Bringing evidence generation to global clinical management guidelines in real time to save lives.
 - **Corticosteroids** prioritized early 2020, tested in multiple trials, including large platform trial (**RECOVERY**); simultaneous prospective meta-analysis (**WHO REACT**) leading to 1st WHO Living guideline: Therapeutics and COVID-19 in Sept 2020.
 - To date 8 versions of the living guideline; including **corticosteroids, IL6 RB, baricitinib, casirivimab/imdevimab, sotrovimab** in the toolbox for effective COVID-19 treatments. Updating guidelines within **8-10 weeks from data availability**.



Advancing the COVID-19 clinical care pathway

Understanding natural history and spectrum of disease

- Rapid publication of tools for standard patient data collection.
 - **Case Record Forms (CRF)** for acute COVID-19, MISC, pregnant woman and post COVID-19 condition, **minimal common data set, core outcome set (COS)** and COVID-19 **severity classification system** (published by May 2020).
- Simultaneous large data registries available to pool individual patient level data.
 - **WHO Global Clinical Data Platform** and **Dashboard** (launched April 2020) now with **570,172** individual patient records and ISARIC includes **> 500,000** entries.
- Ongoing prospective data collection for:
 - Severity study in **children with COVID-19**, **post COVID-19 condition** and **maternal, pregnancy and neonatal outcomes** for women and neonates infected with SARS-CoV-2.

Advancing the COVID-19 clinical care pathway



Improving access to oxygen therapy

- **Global inequities in oxygen, advanced respiratory support devices and basic emergency and critical care**
 - WHO launched **O2COV2 study** to assess availability and use of oxygen for COVID-19 (September 2021) and will serve to launch a platform study to assess non-invasive interventions for those with severe or critical COVID-19. Currently is onboarding **36 study sites across 24 LMIC**.
 - WHO is leading the development of **Global Oxygen investment KPIs** that capture oxygen from procurement to patient care to inform research, clinical operations and advocacy using delphi methodology.



Patient Centred Clinical Research



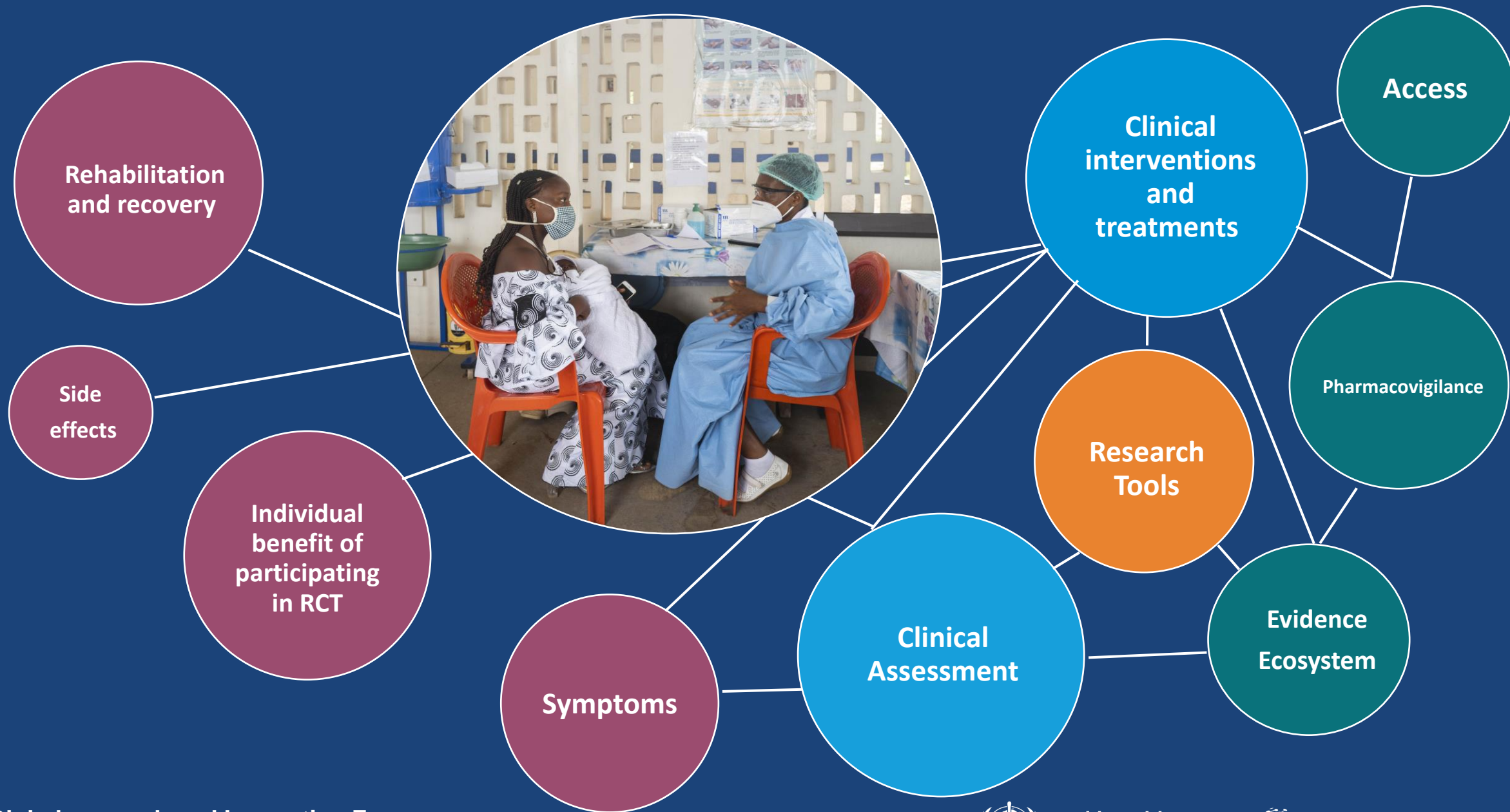
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Outstanding Clinical Research Priorities

Advancing the COVID-19 clinical care pathway



Outstanding research priorities

- **Post COVID-19 condition** (long covid)—from burden of disease, symptom, natural history, recognition, pathophysiology, clinical management, therapeutics and service delivery.
- **Evaluation of supportive care and clinical management interventions**, to improve outcomes in severe or critical COVID-19 in LMIC.
- Develop and validate **prognostic models** to better describe high risk patients.
- Establish reliable approach to **update severity classification** and define **disease severity with VOCs**.
- **Prospective antiviral resistance and safety monitoring** with introduction of new therapeutics.



Standardized tools and data registries

COVID-19 lessons for the future response

Standardized tools and global data registries to inform clinical guidelines for all disease of outbreak potential



- Establish **standardized patient data toolkit** for COVID-19 and beyond; including mid- and long-term impacts. Minimal core outcome set, case record forms.
- Sustain **global clinical data registries** that allow IPDA aggregation.
- **Sustain WHO global clinical data platform and dashboard** for rapid analysis to inform clinical and public health interventions; such as severity, clinical interventions and uptake, resource requirements, effectiveness.



Knowledge uptake

Knowledge Uptake

Taking guidelines to the bedside

- Sustain innovations for trustworthy rapid **evidence synthesis and guideline development** (LNMA, PMA, and living guidelines).
- Establish methodology of rapid **country implementation** of evidence-based guidelines.
- Conduct **operational research** on effectiveness of therapeutics, post guideline monitoring, safety and resistance monitoring, access.





Strengthen research capacity in LMIC



Priorities to expand research capabilities

Strengthen research capacity in LMIC

- **Funding** for research in LMIC.
- Building partnerships in **platform trials** at sites in LMIC.
- Identifying/engaging local researchers/research networks in LMIC sites.
- Expanding **WHO collaborating centers** in LMIC to include **clinical research**.
- **Strategic partnerships** to create an agile evidence ecosystem to ensure patient impact.



Future steps



- WHO to invest in maintaining and expanding strategic **clinical research networks globally**.
- WHO to establish **priority clinical research tools, questions and protocols** that are part of **outbreak readiness** package to allow rapid scale up of research during next emergency.
- Expand **patient-led and community-based participatory research**, including qualitative research methodology.

Many thanks to the over 300 experts involved our working group and its subgroups

Clinical characterization & management working group & sub-working groups

- WHO REACT (Heparin, IL6 RB, steroids)
- Respiratory studies, O2COV2 study and International SC
- Post COVID-19 steering committee (case definition, COS)
- Severity classification in COVID-19
- Severe COVID-19 in children study
- MISC expert working group
- A prospective cohort study investigating maternal, pregnancy and neonatal outcomes for women and neonates infected with SARS-CoV-2
- Neurology and COVID-19 forum
- COVID-19 Therapeutic guideline development group
- Methods-MAGIC collaboration group



COVID-19 CLINICAL CARE PATHWAY



Confirm Assess Respond Evaluate



Thank you

[Health Care Readiness \(who.int\)](https://www.who.int/health-care-readiness)

[Therapeutics and COVID-19 \(who.int\)](https://www.who.int/therapeutics-and-covid-19)

[The WHO Global Clinical Platform for COVID-19](https://www.who.int/global-clinical-platform-for-covid-19)

[COVID-19 Clinical Care Pathway \(who.int\)](https://www.who.int/covid-19-clinical-care-pathway)

[A living WHO guideline on drugs for covid-19 | The BMJ](https://www.bmj.com/clinical-guidelines/covid-19)

[Therapeutics and COVID-19: living guideline \(magicapp.org\)](https://magicapp.org/therapeutics-and-covid-19)

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