



Global Clinical Platform: Objectives, Results and the Future

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Case Management Country Readiness Strengthening WHO Geneva

WHO Global Clinical Platform: objectives



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Meet urgent needs for clinical data
to inform
preparedness, readiness, and response

Recognition and understanding of
emerging clinical phenotypes.

The First 110,593 COVID-19 Patients Hospitalised in Lombardy: A Regionwide Analysis of Case Characteristics, Risk Factors and Clinical Outcomes

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WHO Global Clinical Platform

Data for public health response

- Data to understand outbreaks
- Unique global position
 - Broad partnerships
 - Reach many facilities
 - Works under International Health Regulations (IHR)
 - WHO Ethics Committee Approval
- Rapid deployment, updates on the basis of need

I. CASE IDENTIFICATION/DEMOGRAPHIC DETAILS	
ECC number: [_____]	Site/facility name: [_____]
II. TREATMENT SUMMARY OVER ADMISSION	
Type	
<input checked="" type="checkbox"/> Investigational Interventions	<input type="checkbox"/> Administered under standard of care <input type="checkbox"/> Ad



Developed for COVID-19 disease

Expanding!

**WHO Global Clinical Platform
for Acute hepatitis of unknown aetiology**
Data for public health response

**WHO Global Clinical Platform
for Monkeypox**
Data for public health response

**WHO Global Clinical Platform
for Ebola virus disease**
Data for public health response

Data use and organization

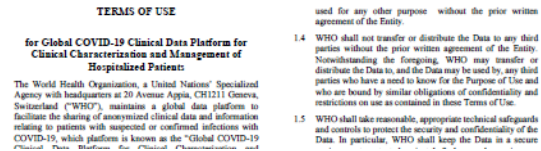
3 simple steps to contribute anonymized clinical data to the platform

1 Register online at WHO.int



2 Agree to the Terms of Use

Ensure local ethics permissions



3 Receive log-in credentials

Immediate access to upload + download

- Strict legal terms for data ownership gives users confidence
 - Health facilities
 - Research institutions
 - Networks (e.g. ISARIC)
 - Health ministries
- Flexible, agile, standardised platform
- Ethics for data collection
 - surveillance platform for data and not linked to specific study protocols
 - International Health Regulations 2005

Flexible and modular data collection

CORE VARIABLES

MODULE 1. Complete on hospital admission (within 24 hrs from hospital admission)

Country: _____

Date of admission: _____

INCLUSION CRITERIA

Presence of signs and symptoms consistent with COVID-19 (fever, cough, sore throat, loss of taste or smell, shortness of breath, chest pain, muscle aches, fatigue, headache, diarrhoea, vomiting, rash, conjunctivitis, etc.)

EXCLUSION CRITERIA

Confirmed COVID-19 infection by a laboratory test (PCR, antigen, or antibody test) performed within 7 days of admission.

THIS ADDITION OF MODULES IS FOR COVID-19

Demographic information: Age, Sex, Ethnicity, Religion, Marital status, Education level, Occupation, etc.

THIS ADDITION OF MODULES IS FOR COVID-19

Medical history: Pre-existing conditions, Current medications, Allergies, etc.

THIS ADDITION OF MODULES IS FOR COVID-19

Signs and symptoms: Fever, Cough, Sore throat, Shortness of breath, Chest pain, Muscle aches, Fatigue, Headache, Diarrhoea, Vomiting, Rash, Conjunctivitis, etc.

THIS ADDITION OF MODULES IS FOR COVID-19

Investigations: Laboratory tests, Imaging, etc.

THIS ADDITION OF MODULES IS FOR COVID-19

Treatment: Medications, Supportive care, etc.

THIS ADDITION OF MODULES IS FOR COVID-19

Outcomes: Clinical course, Complications, etc.

understand SPECIAL POPULATION

PREGNANCY MODULE

To be completed by the attending clinician or a trained health worker within 24 hours of admission.

Complete within 24 hours from admission.

PRENATAL STATUS (PREGNANCY)

Week of gestation: _____

Parity: _____

Maternal age: _____

Maternal weight: _____

Maternal haemoglobin: _____

Maternal blood pressure: _____

Maternal glucose: _____

Maternal renal function: _____

Maternal liver function: _____

Maternal thyroid function: _____

Maternal cardiac function: _____

Maternal neurological function: _____

Maternal psychological function: _____

Maternal social function: _____

Maternal environmental function: _____

Maternal genetic function: _____

Maternal immunological function: _____

Maternal endocrine function: _____

Maternal musculoskeletal function: _____

Maternal integumentary function: _____

Maternal sensory function: _____

Maternal motor function: _____

Maternal reproductive function: _____

Maternal excretory function: _____

Maternal circulatory function: _____

Maternal respiratory function: _____

Maternal digestive function: _____

Maternal urinary function: _____

Maternal lymphatic function: _____

Maternal immune function: _____

Maternal nervous function: _____

Maternal endocrine function: _____

Maternal musculoskeletal function: _____

Maternal integumentary function: _____

Maternal sensory function: _____

Maternal motor function: _____

Maternal reproductive function: _____

Maternal excretory function: _____

Maternal circulatory function: _____

Maternal respiratory function: _____

Maternal digestive function: _____

Maternal urinary function: _____

Maternal lymphatic function: _____

Maternal immune function: _____

Maternal nervous function: _____

investigate NEW PHENOTYPE

Global COVID-19 Clinical Platform: Case Record Form for suspected cases of Multisystem Inflammatory syndrome (MIS) in children and adolescents temporally related to COVID-19

Complete within 24 hours from admission.

PREVIOUS CASE (MIS)

Age: _____

Sex: _____

Ethnicity: _____

Religion: _____

Marital status: _____

Education level: _____

Occupation: _____

Pre-existing conditions: _____

Current medications: _____

Allergies: _____

Genetic history: _____

Immunological history: _____

Endocrine history: _____

Musculoskeletal history: _____

Integumentary history: _____

Sensory history: _____

Motor history: _____

Reproductive history: _____

Excretory history: _____

Circulatory history: _____

Respiratory history: _____

Digestive history: _____

Urinary history: _____

Lymphatic history: _____

Immune history: _____

Nervous history: _____

THIS ADDITION OF MODULES IS FOR COVID-19

MODULE 1. Complete this module for all children aged 0-18 suspected to have multisystem inflammatory disorder (even if all criteria in the case definition are not met - to capture the full spectrum of the condition). Complete the module at the time the diagnosis is suspected. Submit module when initial investigations included in case definition are available.

Case ID: _____

Date of admission: _____

Date of diagnosis: _____

Place of admission: _____

Place of diagnosis: _____

Referring clinician: _____

Referring hospital: _____

Referring specialty: _____

Referring department: _____

Referring unit: _____

Referring ward: _____

Referring room: _____

Referring bed: _____

Referring phone: _____

Referring email: _____

Referring website: _____

Referring social media: _____

Referring other: _____

Referring contact: _____

Referring address: _____

Referring postal code: _____

Referring country: _____

Referring region: _____

Referring district: _____

Referring sub-district: _____

Referring village: _____

Referring hamlet: _____

Referring street: _____

Referring lane: _____

Referring road: _____

Referring highway: _____

Referring expressway: _____

Referring airport: _____

Referring port: _____

Referring station: _____

Referring terminal: _____

Referring airport: _____

Referring port: _____

Referring station: _____

Referring terminal: _____

extend to cover NEW CLINICAL NEED

WHO Global Clinical Platform for COVID-19

Case Report Form (CRF) for COVID-19 sequelae (Post COVID-19 CRF)

To be completed by the attending clinician or a trained health worker within 24 hours of admission.

PREVIOUS CASE (COVID-19)

Age: _____

Sex: _____

Ethnicity: _____

Religion: _____

Marital status: _____

Education level: _____

Occupation: _____

Pre-existing conditions: _____

Current medications: _____

Allergies: _____

Genetic history: _____

Immunological history: _____

Endocrine history: _____

Musculoskeletal history: _____

Integumentary history: _____

Sensory history: _____

Motor history: _____

Reproductive history: _____

Excretory history: _____

Circulatory history: _____

Respiratory history: _____

Digestive history: _____

Urinary history: _____

Lymphatic history: _____

Immune history: _____

Nervous history: _____

THIS ADDITION OF MODULES IS FOR COVID-19

MODULE 1. Complete this module for all children aged 0-18 suspected to have multisystem inflammatory disorder (even if all criteria in the case definition are not met - to capture the full spectrum of the condition). Complete the module at the time the diagnosis is suspected. Submit module when initial investigations included in case definition are available.

Case ID: _____

Date of admission: _____

Date of diagnosis: _____

Place of admission: _____

Place of diagnosis: _____

Referring clinician: _____

Referring hospital: _____

Referring specialty: _____

Referring department: _____

Referring unit: _____

Referring ward: _____

Referring room: _____

Referring bed: _____

Referring phone: _____

Referring email: _____

Referring website: _____

Referring social media: _____

Referring other: _____

Referring contact: _____

Referring address: _____

Referring postal code: _____

Referring country: _____

Referring region: _____

Referring district: _____

Referring sub-district: _____

Referring village: _____

Referring hamlet: _____

Referring street: _____

Referring lane: _____

Referring road: _____

Referring highway: _____

Referring expressway: _____

Referring airport: _____

Referring port: _____

Referring station: _____

Referring terminal: _____

Referring airport: _____

Referring port: _____

Referring station: _____

Referring terminal: _____

e.g. pregnancy

e.g. MIS-C

e.g. Post-COVID

Special reports for subpopulations

children
pregnant women
people living with HIV
TB



Statistical Analysis Planning

- **Objectives**

- Description of clinical characteristics
- Systematic recording of therapeutic interventions, and the adverse events profile
- Exploration of the determinants of patient outcomes

- **Pre-defined subgroups (examples)**

- Age, sex
- Pregnancy
- HIV status
- Comorbidity
- Tuberculosis



Data use and uptake

Country level reports

- (1) Summarize demographic and clinical features and intervention
- (2) Characterize the variability in the clinical features;
- (3) Explore the risk factors associated with mortality and ICU admission



Jordan, Nigeria, Brazil, Zimbabwe, Ghana, Cameroon, Guinea, Burkina Faso, South Africa, India, Dominican Republic,..

Regional reports

Characterize **regional variations**

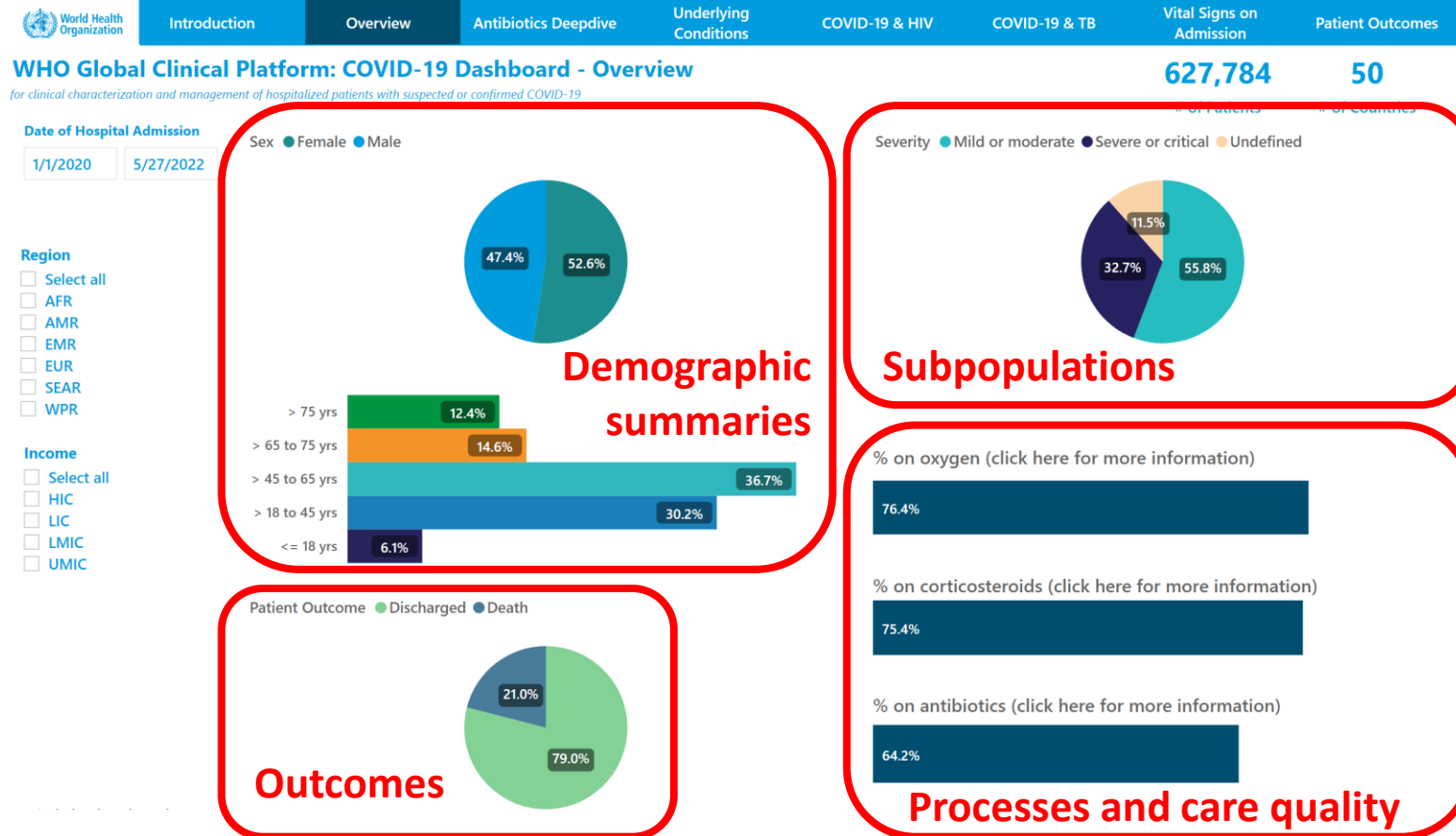
Includes descriptive and analytic component.

Training and Capacity Strengthening Activities

- Clinical and technical training provided on case report forms and platform access
- Data analysis

Dashboard – example from Covid-19

- Filter by region, income and others
- Allows detailed analysis on:
 - therapeutic use (O₂, corticosteroids, and antibiotics)
 - HIV and TB and COVID-19
 - Underlying conditions
 - Vital signs on admission
 - Patient outcomes



1000
VARIABLES

1000
HEALTH FACILITIES

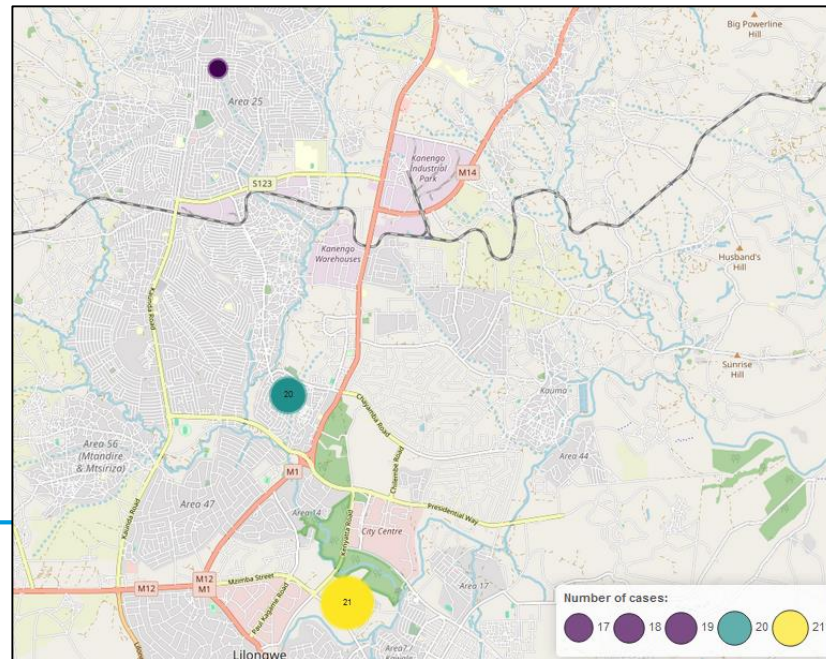
+65
COUNTRIES

Results and use-cases

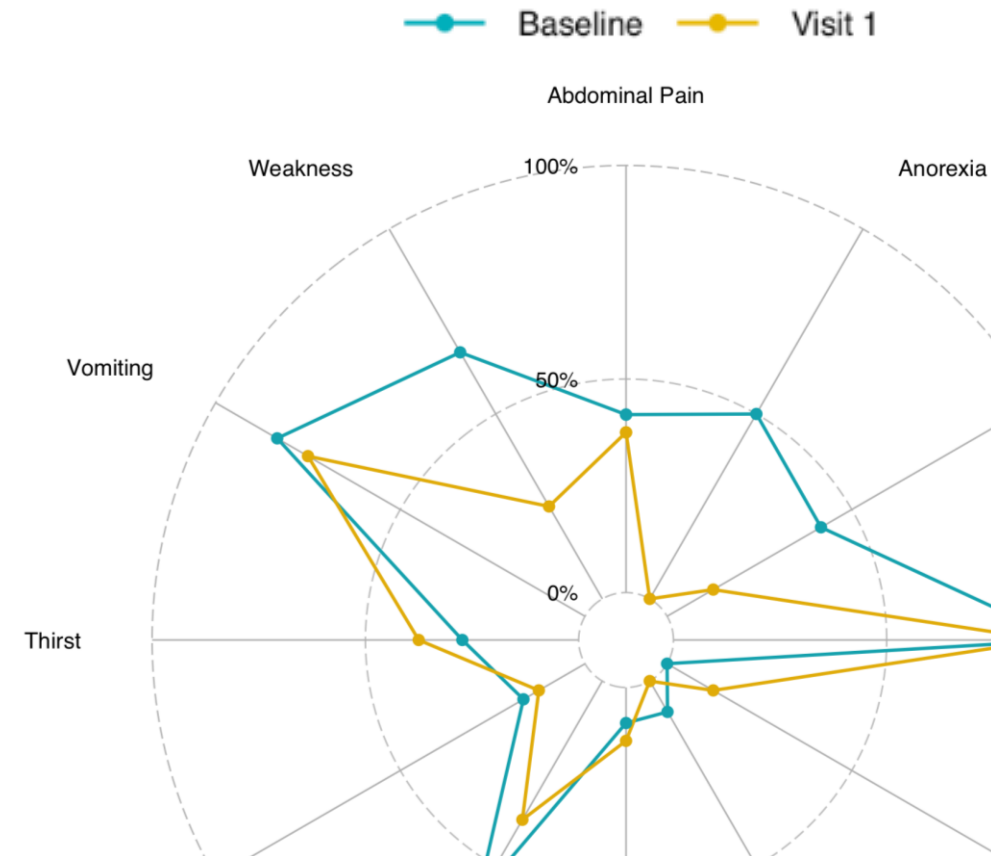
Adding value through clinical data collection - cholera

[Unpublished data]

- High prevalence of severe hypokalaemia in children with cholera (approximately 1/3)
- Significant treatment of fluid overload in cholera treatment centres (10%)

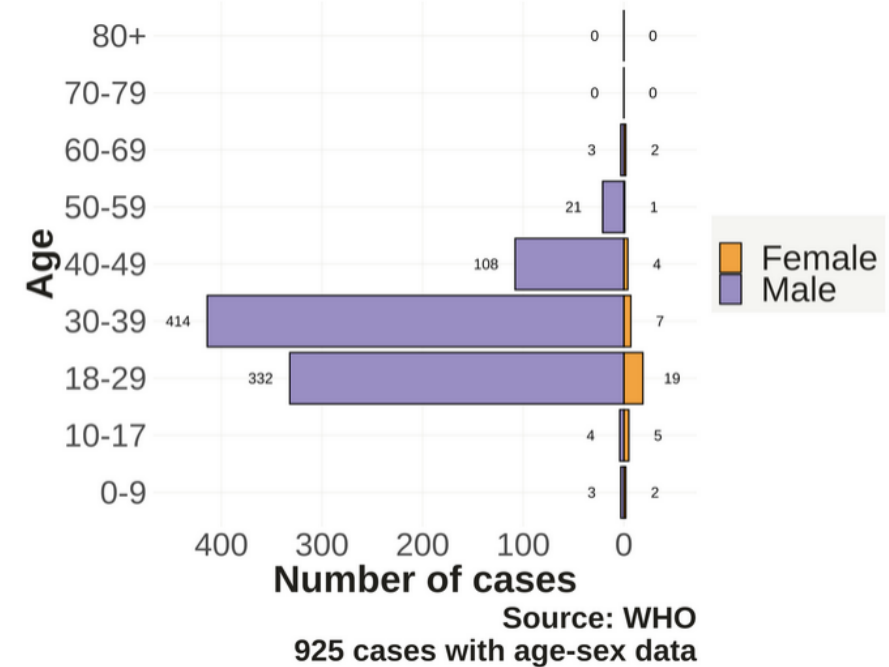
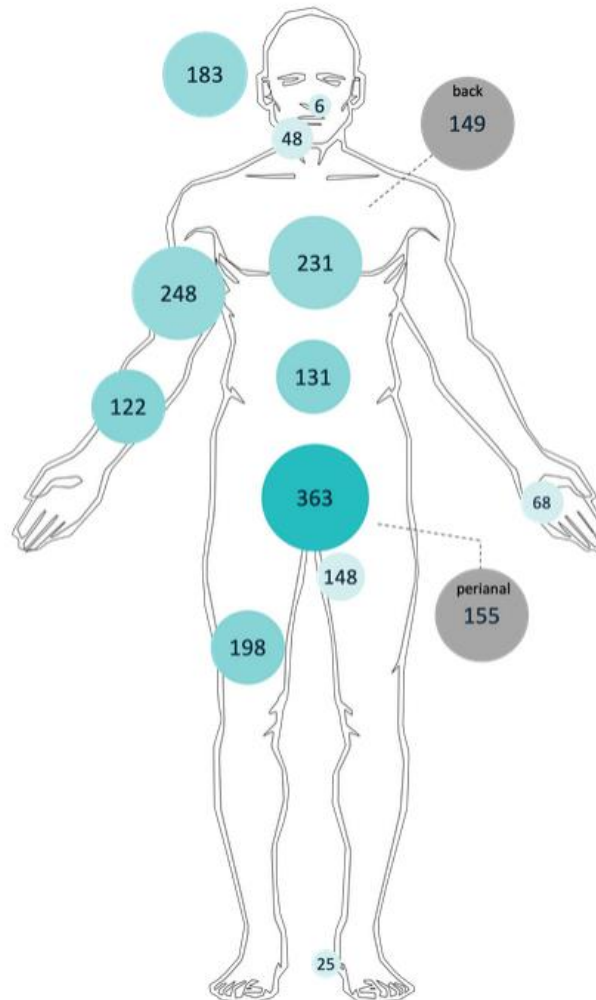


Symptoms and progression



Supporting uptake of data in outbreaks - mpox

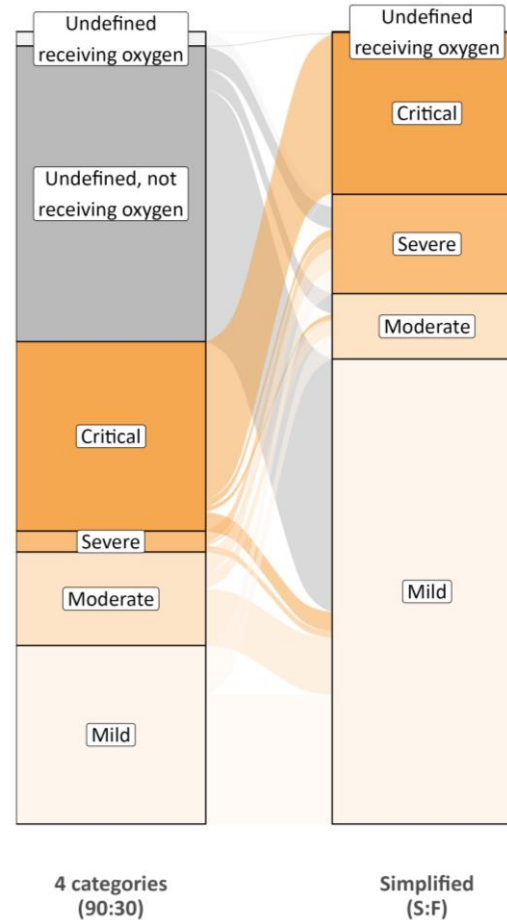
- Data on clinical characterization
 - Being written for publication by the Colombia team
- Supporting data collection outside of RCTs for promising therapeutics (tecovirimat)



Learning and refining definitions

Covid-19 severity classification and mortality

Current classification



Potential simplified classification based on $SpO_2: FiO_2$

[Unpublished data]

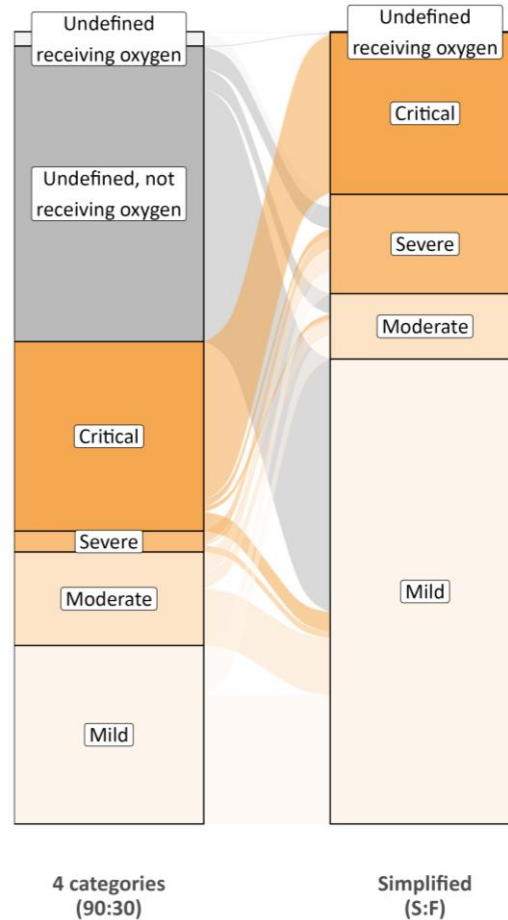
Learning and refining definitions

Covid-19 severity classification and mortality

Current classification

Patients receiving oxygen not properly classified because their SpO₂ is OK

Small proportion classified as mild



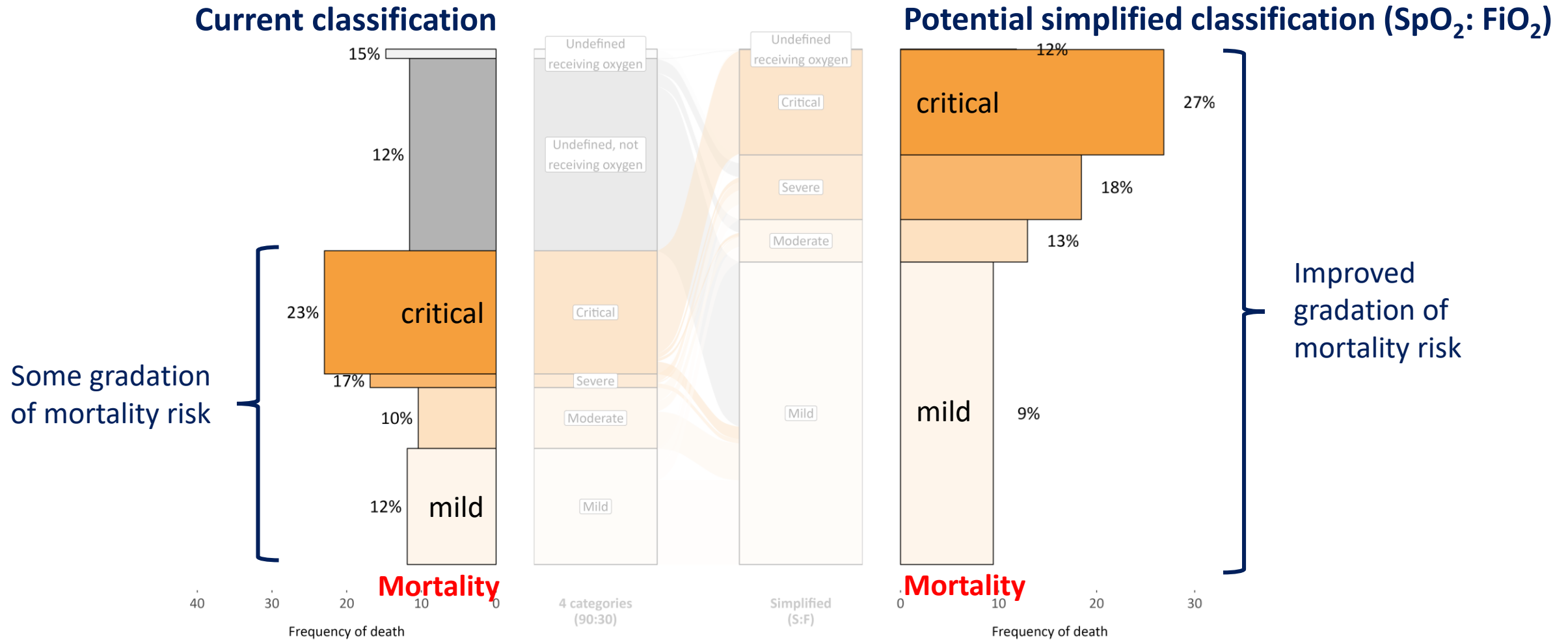
Potential simplified classification based on SpO₂: FiO₂

Complete classification

Higher proportion of mild disease

Learning and refining definitions

Covid-19 severity classification and mortality



[Unpublished data]

Future plans

Global Clinical Platform v2.0

- **Continuously available for clinical surveillance**

Clinical and facility descriptors which monitor disease severity in health facilities and provide early warning signal of increased load on health system

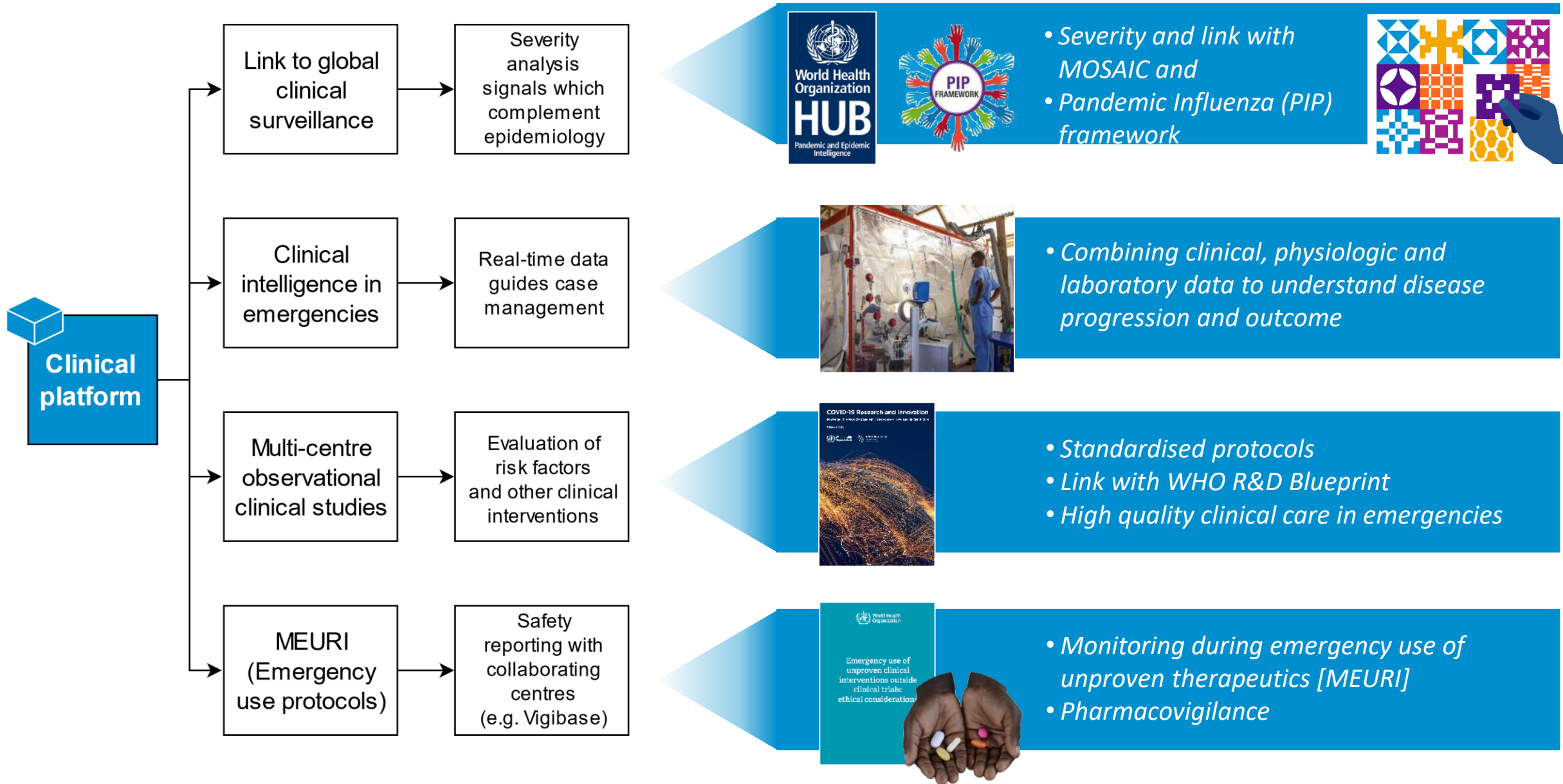
Target: Diseases which are endemic and of pandemic potential e.g. SARI

- **Quickly accessible for outbreaks**

Clinical and facility descriptions which drive improvement in clinical care

Target: overlooked disease areas: cholera, viral haemorrhagic fevers (Ebola, Marburg, Sudan viruses), Lassa fever, diphtheria, MERS, dengue

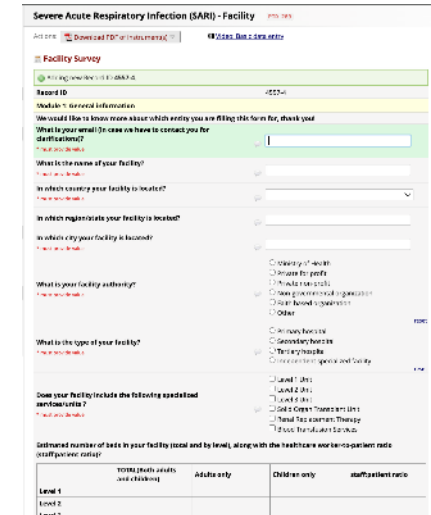
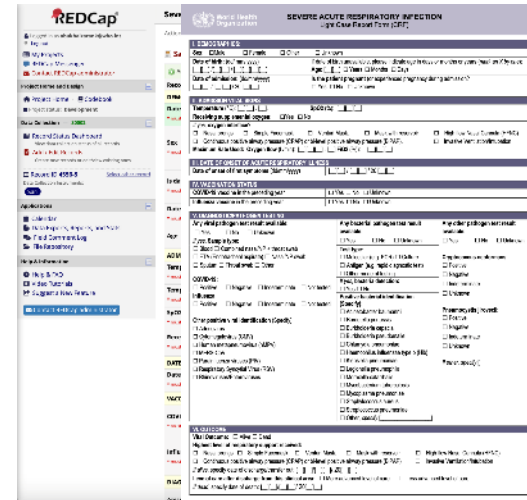
WHO Clinical Platform – future directions and use



New and future work

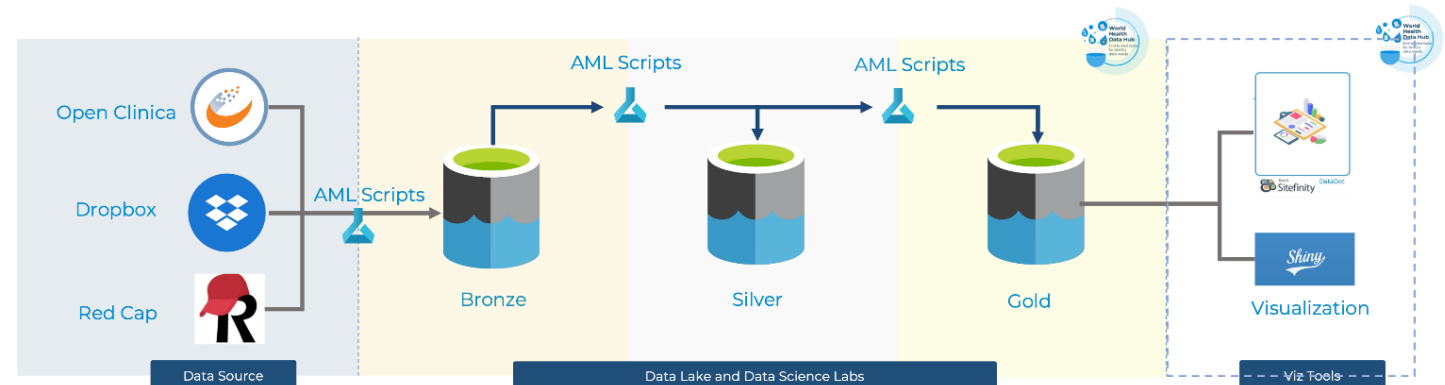
Clinical surveillance for Severe Acute Respiratory Infection (SARI)

1. Short Case Report Form (CRF) for SARI
2. Paired healthcare facility report form/indicators
3. Accessible dashboard with stratified detail



Using a new data system >>

- Secure
- Data Lifecycle Management
- Scaled Computational Capacity



Thankyou

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