

# COVID-19 Core Outcomes Set Project

Core outcomes for people with suspected or confirmed COVID-19

Cochrane Webinar Thursday 11<sup>th</sup> June

CONFIDENTIAL



## COVID-19-COS Steering Committee and Investigators

Steering Committee: Jonathan Craig, Julian Elliott, Pedro Póvoa, John Marshall, Steve Webb, Sally Crowe, Paula Williamson, Lilia Cervantes, Tom Snelling, Yasser Sakr, Andrew Conway Morris, Ivor Douglas, Antoni Torres, Saad Nseir, Peter Horby, Luciano Azevedo, Sangeeta Mehta, Jaehee Lee, Derek Chew, Andrew Bersten, Alan Smyth, Anne McKenzie, Ella Flemyng, Tari Turner, Ning Shen, Mervyn Mer, Giovanni Strippoli, Laila Woc-Colburn, Eduardo Lorca, Deena Lynch, Mark Reid, Armando Teixeira-Pinto, Martin Howell, Junhua Zhang, Allison Tong

Investigators: Samaya Anumudu, Amanda Baumgart, Amelie Bernier-Jean, Sebastian Cabrera, Simon Carter, Yeoungjee Cho, Tess Cooper, Amanda Dominello, Nicole Evangelidis, Sally Green, Chandana Guha, Elyssa Hannan, Camilla Hanson, Sophie Hill, Tess Harris, Yen Ho, Ayano Kelly, Rabia Khalid, Katharina Kohler, Yong-Lim Kim, Emma Liu, Karine Manera, Andrea Matus, Charlie McLeod, Patrizia Natale, Emma O'Lone, Sarah Rowan, Benedicte Sautenet, Nicole Scholes-Robertson, Jenny Shen, Valeria Saglimbene, Anneliese Synnot, Rhiannon Tate, Andrea Viecelli, Angela Wang, Germaine Wong, David Wheeler







"Most researchers are focussed on the viral load but what matters most to patients may not **just** be viral load."



## Process: outcome domains

#### PHASE 1 Systematic

review

PHASE 2 International Delphi survey

#### PHASE 3

4 consensus workshops

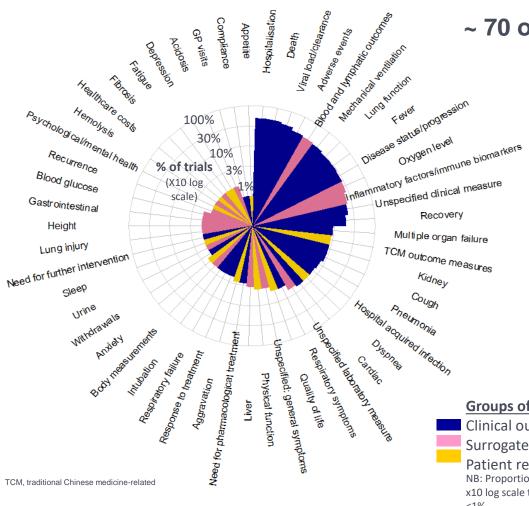
#### **STEP 2: MEASURES**











### ~ 70 outcome domains reported across 182 trials in COVID-19

| Outcome                       | N (%)     |  |  |  |
|-------------------------------|-----------|--|--|--|
| Hospitalisation               | 89 (48.9) |  |  |  |
| Death                         | 88 (48.3) |  |  |  |
| Viral load/clearance          | 81 (44.5) |  |  |  |
| Adverse events                | 67 (36.8) |  |  |  |
| Haematological (blood)        | 64 (35.1) |  |  |  |
| Mechanical ventilation        | 60 (32.9) |  |  |  |
| Cough                         | 16 (8.8)  |  |  |  |
| Dyspnea (shortness of breath) | 12 (6.6)  |  |  |  |

#### Groups of outcome:

**Clinical outcomes** 

Surrogate outcomes

Patient reported outcomes NB: Proportion are expressed in a

x10 log scale to display proportion







# Participants

| Group  | English    | Chinese | Italian | Spanish | Portuguese | TOTAL |
|--|------------|---------|---------|---------|------------|-------|
| People with suspected/<br>confirmed COVID-19 &<br>family members | 584        | 49      | 59      | 47      | 37         | 776   |
| Health professionals   | 3004       | 1075    | 253     | 298     | 252        | 4882  |
| Public   | 2339       | 356     | 362     | 307     | 267        | 3631  |
| Total  | • <u> </u> | 1480    | 674     | 652     | 556        | 9289  |

# 9289 111 countries



20<sup>th</sup> April 2020



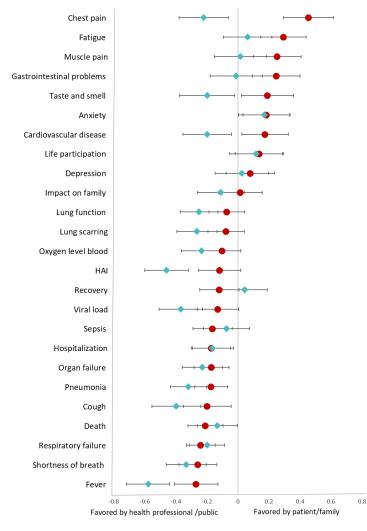
In all groups: mean  $\geq$  7.5, median  $\geq$  8, proportion rating as critically important  $\geq$  75%

| OUTCOME                   | Patients/caregivers<br>n=776 |        |    | Health Professionals<br>n=4,882 |        |    | Public<br>n=3,631 |        |    |
|---------------------------|------------------------------|--------|----|---------------------------------|--------|----|-------------------|--------|----|
|                           | Mean                         | Median | %  | Mean                            | Median | %  | Mean              | Median | %  |
| Death                     | 1                            | 9.0    | 81 | 1                               | 9.0    | 87 | 1                 | 9.0    | 82 |
| Respiratory failure       | 2                            | 9.0    | 86 | 2                               | 9.0    | 92 | 2                 | 9.0    | 89 |
| Pneumonia                 | 3                            | 9.0    | 83 | 3                               | 9.0    | 87 | 3                 | 9.0    | 87 |
| Organ failure             | 4                            | 9.0    | 81 | 4                               | 9.0    | 85 | 5                 | 9.0    | 83 |
| Lung function             | 5                            | 8.0    | 81 | 5                               | 8.0    | 83 | 4                 | 9.0    | 84 |
| Lung scarring (fibrosis)  | 6                            | 8.0    | 77 | 8                               | 8.0    | 81 | 7                 | 9.0    | 81 |
| Sepsis / septic shock     | 7                            | 9.0    | 77 | 7                               | 9.0    | 80 | 10                | 9.0    | 74 |
| Shortness of breath       | 8                            | 8.0    | 77 | 6                               | 9.0    | 81 | 6                 | 9.0    | 81 |
| Oxygen level in the blood | 9                            | 8.0    | 76 | 10                              | 8.0    | 80 | 8                 | 8.0    | 79 |
| Hospitalisation           | 10                           | 8.0    | 75 | 9                               | 8.0    | 80 | 7.7               | 8.0    | 76 |

20<sup>th</sup> April 2020







Mean diff Health Professional (Patient/Family)

Patients/family members gave higher priority to many patient-reported outcomes compared with health professionals.

The high prioritization of impact on family, depression and anxiety reflected angst about isolation and profound guilt of infecting others.





Capturing different care environments

Responding to the immediate crisis "I was in the hospital briefly, but not hospitalized per se. Multi-organ failure and sepsis weren't an issue for me, but the shortness of breath, the breathing issues." – patient

events

"It's about ability to function afterwards. What is worrying me now is post viral fatigue and recovery, because it's been a very long time since I've spent two weeks in bed, and I'm showing no signs of being strong enough to even function in the house, never mind go back to work. That's what's concerning me about a long-term recovery is that kind of post viral thing." – patient

Encompassing the spectrum of disease severity and trajectory

#### wellbeing





## **COVID-19-COS OUTCOMES**

