## Global spotlight 7.1: Key additions for the first half of July 2021



There are five newly added evidence syntheses and nine updates to living evidence syntheses that are already included in the public-health measures parts of the COVID-END inventory of 'best' evidence syntheses\*, nine newly added evidence syntheses and 13 updates to living evidence syntheses that are already included in the clinical management parts of the inventory, and three newly added evidence syntheses in the economic and social responses part of the inventory.

\*COVID-END assigns 'best' status to evidence syntheses based on an assessment of how up-to-date they are (i.e., the date of the last search, with priority given to living reviews), quality (using the AMSTAR tool), and whether there is an evidence profile available (e.g., GRADE).

| Taxonomy section          | Title  | Type of                    | Crite                     | eria for best evidence synthesis               | dence synthesis |
|---------------------------|--|----------------------------|---------------------------|--|-----------------|
|                           |  | synthesis                  | search (AMSTAR) (e.g., GR | Evidence profile<br>(e.g., GRADE)<br>available |                 |
| Public-health<br>measures | Evidence shows that prolonged PCR positivity<br>may lead to a higher presence of IgG antibodies,<br>which could indicate that milder infections do not<br>initiate a strong immune response; age, sex, BMI<br>and length of stay were not associated with an<br>increased risk of repeated positivity [Review of<br>studies of unknown quality and important<br>heterogeneity among their findings]                                  | Newly added<br>full review | 2021-04-05                | 8/11   | No              |
| Public-health<br>measures | <u>A variety of machine learning and deep learning</u><br><u>techniques have been used to detect COVID-19</u><br><u>using X-rays, CT images, RT-PCR and clinical</u><br><u>blood data showing promising early diagnostic</u><br><u>accuracy [Review of studies of unknown quality]</u>   | Newly added<br>full review | 2021-03-16                | 5/10   | No              |
| Public-health<br>measures | Evidence suggests that non-pharmaceutical<br>interventions for reducing COVID-19 appear to<br>be more effective when used as a combination of<br>multiple measures (social distancing, isolation and<br>quarantine, and workplace distancing); a number<br>of major enablers and barriers that impact the<br>effectiveness of these interventions have been<br>identified [Review of observational studies mainly<br>of low quality] | Newly added<br>full review | 2021-03-12                | 6/9  | No              |
| Public-health<br>measures | A review exploring factors influencing the efficacy<br>of COVID-19 vaccines found that type of the<br>vaccine technology (e.g., mRNA versus<br>adenovirus), age, sex and the infection rate in the<br>population did not influence vaccine efficacy  | Newly added<br>full review | 2021-02-08                | 8/11   | No              |
| Public-health<br>measures | [CT scan] CT scan assisted by artificial intelligence<br>algorithms has shown to have a 90% pooled<br>sensitivity and specificity [Review of studies of<br>unknown quality and heterogeneity among their<br>findings]  | Newly added<br>full review | 2021-01-01                | 6/11   | No              |
| Public-health<br>measures | [BioNTech/Fosun Pharma/Pfizer vaccine (age-<br>group analysis available)] Compared to placebo,<br>vaccination with BNT162b2 probably reduces the<br>incidence of symptomatic cases of COVID-19<br>substantially, although there remains uncertainty  | Update to<br>living review | 2021-07-09                | 10/11  | Yes             |

|   | about the effect on mortality or severe disease, and  |                                     |            |       |     |
|---|---|-------------------------------------|------------|-------|-----|
|   | the incidence of adverse events   |                                     |            |       |     |
| Public-health<br>measures   | [Novavax vaccine] The effects of vaccination<br>against COVID-19 with the Novavax vaccine are<br>currently uncertain; it probably slightly increase<br>the risk of any adverse events   | Update to<br>living review          | 2021-07-09 | 10/11 | Yes |
| Public-health<br>measures   | The risk of re-infection has found to be relatively<br>low for at least ten months post-infection, whereas<br>immune memory responding to SARS-CoV-2<br>infection has been found up to nine months post<br>infection; important uncertainty exists about the<br>role that natural infection and vaccination might<br>play in the context of variants of concern [Review<br>of studies of low to moderate quality] | Update to<br>living review          | 2021-05-04 | 5/9   | No  |
| Public-health<br>measures   | [BioNTech/Pfizer against variants of concern]<br>BioNTech/Pfizer vaccine probably prevents<br>infection from the Alpha, Beta Gamma and Delta<br>VOCs, and probably prevents severe disease from<br>the Alpha VOC  | Update to<br>living rapid<br>review | 2021-07-07 | 7/9   | No  |
| Public-health<br>measures   | [Johnson & Johnson against variants of concern]<br>Johnson & Johnson vaccine probably prevents<br>infection from the Beta VOC   | Update to<br>living rapid<br>review | 2021-07-07 | 7/9   | No  |
| Public-health<br>measures   | [Moderna against variants of concern] Moderna<br>vaccine probably prevents infection from the<br>Alpha VOC, and it may prevent infection from the<br>Beta and Gamma VOCs  | Update to<br>living rapid<br>review | 2021-07-07 | 7/9   | No  |
| Public-health<br>measures   | [Moderna against variants of concern] One dose<br>of Moderna vaccine may prevent symptomatic<br>infection from the Delta VOC  | Update to<br>living rapid<br>review | 2021-07-07 | 7/9   | No  |
| Public-health<br>measures   | [Novavax against variants of concern] Novavax<br>vaccine probably prevents infection from the<br>Alpha VOC, and it may prevent infection from the<br>Beta VOC   | Update to<br>living rapid<br>review | 2021-07-07 | 7/9   | No  |
| Public-health<br>measures   | [Oxford/AstraZeneca against variants of concern]<br>Oxford/AstraZeneca vaccine probably prevents<br>infection from the Alpha and Delta VOCs, and it<br>probably does not substantially prevent infection<br>from the Beta VOC   | Update to<br>living rapid<br>review | 2021-07-07 | 7/9   | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | Variable estimates of pulmonary aspergillosis<br>incidence among critically ill COVID-19 patients<br>in the ICU have been reported (pool estimate<br>10%) [Review of studies of unknown quality and<br>important heterogeneity among their findings]  | Newly added<br>full review          | 2021-04-04 | 4/11  | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | The prevalence of COVID-19 among people<br>living with HIV/AIDS could range from 0.8 to<br>9.7%, while chronic kidney disease, diabetes,<br>hypertension and chronic cardiac disease have<br>been identified as factors explaining worse<br>prognosis among these patients [Review of studies<br>of low to moderate quality with important<br>heterogeneity among their findings]                                 | Newly added<br>full review          | 2021-03-09 | 7/11  | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | While neuropsychiatric symptoms are common<br>after recovery from COVID-19, sleep disorders<br>and fatigue are the most frequent (25% of the<br>patients), followed by cognitive impairment,<br>anxiety, post-traumatic symptoms, and depression<br>[Review of studies of low to moderate quality with<br>important heterogeneity among their findings]   | Newly added<br>full review          | 2021-02-20 | 8/11  | No  |

| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | Chinese herbal medicine has benefits for reducing<br>the rate of COVID-19 aggravation, but it may not<br>have an effect on gastrointestinal symptoms and<br>liver function   | Newly added<br>full review | 2021-02-09 | 9/11  | Yes |
|---|--|----------------------------|------------|-------|-----|
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | <u>Co-infection with other pathogens has been</u><br><u>estimated in 19% of the patients with COVID-19</u><br><u>infection, while 24% of them had superinfection</u><br>[Review of studies of moderate quality with<br>important heterogeneity among their findings]   | Newly added<br>full review | 2021-02-08 | 8/11  | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | Subacute thyroiditis may be present as a symptom<br>during or after COVID-19 infection, which could<br>be facilitated by direct viral injury and post-viral<br>inflammatory reaction [Review of mainly case<br>series of unknown quality]  | Newly added<br>full review | 2021-02-03 | 4/9   | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | <u>A highly variable frequency of long COVID-19</u><br>symptoms has been found, whereas the most<br>common persistent symptoms are chest pain,<br>fatigue, dyspnea, cough and sputum production  | Newly added<br>full review | 2021-02-01 | 9/10  | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | Patients who are male, obese, older, and have a<br>history of smoking face higher risk of developing<br>severe COVID-19; comorbidities that also explain<br>a worse prognosis are hypertension, diabetes,<br>chronic kidney disease, coronary heart disease,<br>chronic obstructive pulmonary disease,<br>cerebrovascular disease and chronic liver disease<br>[Review of studies of moderate quality and<br>heterogeneity among their findings] | Newly added<br>full review | 2021-02-01 | 8/11  | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | The occurrence of hearing loss, tinnitus, and<br>dizziness have been associated with COVID-19<br>infection [Review of studies on low to moderate<br>quality with important heterogeneity among their<br>findings]  | Newly added<br>full review | 2021-01-01 | 7/11  | No  |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Azithromycin + hydroxychloroquine] In<br>hospitalized COVID-19 patients, azithromycin +<br>hydroxychloroquine may not have an effect on<br>clinical improvement and disease progression,<br>while it may lead to an increase in adverse events  | Update to<br>living review | 2021-07-09 | 10/11 | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Hydroxychloroquine] Hydroxychloroquine may<br>not reduce mortality in mild and hospitalized<br>patients, probably does not have an important<br>effect on viral negative conversion (among mild<br>outpatients), clinical improvement and disease<br>progression (among hospitalized patients); it<br>probably increases the risk of adverse events in<br>hospitalized patients   | Update to<br>living review | 2021-07-09 | 10/11 | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | In hospitalized patients, adding convalescent<br>plasma to standard care probably does not have an<br>effect on mortality at 28 days and clinical<br>improvement, while it may make little or no<br>difference in disease progression and it may<br>slightly reduce mortality at 60 days; it may not<br>increase serious adverse events, and it probably<br>slightly increases the frequency of any adverse<br>event                             | Update to<br>living review | 2021-07-09 | 10/11 | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Ivermectin] Adding ivermectin to standard care<br>may have no effect on clinical improvement in<br>mild outpatients or hospitalized patients, and it<br>probably does not increase the risk of adverse<br>events; in mild outpatients, it may not have an   | Update to<br>living review | 2021-07-09 | 10/11 | Yes |

|   | effect on mortality at 28 days, while the effects on other outcomes are uncertain   |                                       |            |       |     |
|---|---|---------------------------------------|------------|-------|-----|
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Remdesivir] in hospitalized COVID-19 patients,<br>remdesivir probably reduces disease progression,<br>probably makes little or no difference in mortality<br>and it may increase clinical improvement; it<br>probably does not increase the incidence of<br>adverse events   | Update to<br>living review            | 2021-07-09 | 10/11 | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | Among the 122 therapeutic options that have been<br>studied in clinical trials, evidence shows that<br>steroids, tocilizumab REGEN-CoV, sotrovimab<br>and baricitinib are the only alternatives that may<br>have an effect on mortality and other clinical<br>outcomes among COVID-19 patients; remdesivir<br>may improve time to symptom resolution, but its<br>effects on other outcomes may be of small<br>relevance, whereas more evidence is needed to<br>confirm the early effects shown by colchicine,<br>lenzilumab, tofacitinib and stem cells | Update to<br>living rapid<br>review   | 2021-06-22 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Bamlanivimab] Using bamlanivimab probably<br>does not have an important effect on time to<br>symptom resolution, and its effects on other<br>outcomes are uncertain  | Update to<br>living rapid<br>review   | 2021-06-22 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Bamlinivimab] Bamlinivimab probably decreases<br>the incidence of symptomatic infection among<br>exposed individuals   | Update to<br>living rapid<br>review   | 2021-06-22 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Sotrovimab] In patients with mild COVID-19<br>patients, sotrovimab probably reduces<br>hospitalization and improves time to symptom<br>resolution without increasing severe adverse<br>events  | Update to<br>living rapid<br>review   | 2021-06-22 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Tofacitinib] Tofacitinib may increase symptom<br>resolution or improvement, while it may increase<br>severe adverse events in hospitalized and severe<br>COVID-19 patients   | Update to<br>living rapid<br>review   | 2021-06-22 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | [Stem cells] Mesenchymal stem cells<br>transplantation may reduce mortality in severe to<br>critical COVID-19 patients  | Update to<br>living rapid<br>review   | 2021-06-18 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | Using intermediate or full dose of prophylactic<br>anticoagulation probably does not have a<br>difference in mortality  | Update to<br>living rapid<br>review   | 2021-06-18 | 7/10  | Yes |
| Clinical management<br>of COVID-19 and<br>pandemic-related<br>health issues | While age is the most important prognostic factor<br>for estimating the likelihood of hospitalization,<br>severe disease or death among COVID-19<br>patients, most comorbidities, male sex, non-white<br>ethnicity and deprivation are also important   | Update to<br>living rapid<br>review   | 2021-03-31 | 4/10  | No  |
| Economic and social responses   | Estimates of the prevalence of household food<br>insecurity in North America as a result of the<br>COVID-19 pandemic are currently uncertain  | Newly added<br>living rapid<br>review | 2021-05-05 | 8/9   | Yes |
| Economic and social responses   | Evidence suggests that non-pharmaceutical<br>interventions for reducing COVID-19 appear to<br>be more effective when used as a combination of<br>multiple measures (social distancing, isolation and<br>guarantine, and workplace distancing); a number<br>of major enablers and barriers that impact the<br>effectiveness of these interventions have been   | Newly added<br>full review            | 2021-03-12 | 6/9   | No  |

|                     | identified [Review of observational studies mainly<br>of low quality] |             |            |      |    |
|---------------------|---|-------------|------------|------|----|
| Economic and social | Estimates of the prevalence of anxiety among                          | Newly added | 2021-01-01 | 6/10 | No |
| responses           | teachers during the COVID-19 pandemic range                           | full review |            |      |    |
|                     | from 10% to 50%, while depression ranges from                         |             |            |      |    |
|                     | <u>16% to 29% [Review of studies of unknown</u>                       |             |            |      |    |
|                     | <u>quality]</u>   |             |            |      |    |