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# INTEGRATING COVID-19 DIAGNOSIS, PREVENTION AND CARE INTO ROUTINE HEALTHCARE SERVICES

# Problem Statement

The COVID-19 pandemic required the healthcare system to make significant changes to its operations. These included testing for SARS-CoV-2 infection in symptomatic patients and ensuring negative COVID-19 status for all patients being admitted to hospitals for other reasons. Isolation wards and separate facilities were established for persons under investigation and SARS-CoV-2 positive patients. Sites were also created for vaccination against SARS-CoV-2 infections and occupational health measures were scaled up to protect the healthcare workforce. These demands on the health system required additional resources and diverted staff from their normal duties, compromising service delivery for other conditions, including HIV, TB, maternal and child health, and non-communicable diseases. In addition, the provision of COVID-19 immunization services in a vertical fashion means that opportunities to provide these vaccines to at-risk groups attending health services for routine care are being missed.

Acknowledging that SARS-CoV-2 is still circulating and that new variants of concern are constantly evolving, should the health system continue to operate as it currently does or should diagnostic, therapeutic and preventive measures be integrated into routine healthcare services, where feasible? If so, what changes should be implemented to enable this integration?

### **Background/ Current Information**

SARS-CoV-2 is becoming endemic, characterized by ongoing transmission and periodic (perhaps seasonal) upsurges in incidence. Both acute and Long COVID disease (refer to the MAC on COVID-19 advisory on *Diagnosis, Treatment and Management of Long COVID*<sup>1</sup>) present with a spectrum of symptoms and severity which can be managed in existing services at primary care or hospital level. It is therefore prudent to integrate COVID-19 pandemic preparedness and response functions into routine health systems and services. Whilst the integration of COVID-19 services into the provision of health care at all levels is essential, this can only be effective and sustainable with the simultaneous initiation or augmentation of broader policy actions that address more fundamental systemic issues. Given the current priorities and urgency of interventions required, this advisory focuses on immediate interventions, including mainstreaming COVID-19 vaccination services, testing and treatment. Further interventions will be required in the mid- to long-term, which are beyond the scope of this advisory (e.g. building dedicated emergency preparedness human resources and structures, strengthening infection prevention and scaling up other initiatives towards health systems resilience and universal health coverage). A balance is needed between responding specifically to COVID-19 during surges of infection and maintaining the safe and effective delivery of

other health services and public health functions. Some adaptations made in service delivery during the COVID-19 pandemic may no longer be required, others may need to continue for a limited period, and others that are found to be effective, safe and beneficial may need to be incorporated into routine practice, contributing to long-term health systems strengthening. Mainstreaming COVID-19 services demands clear communication with the public.

## Evidence Review

- Country-wide outbreaks including from COVID-19 can have indirect impacts on access to, as well as provision and utilization of routine preventive and curative health services, with negative outcomes, especially in vulnerable populations.<sup>2,3,4,5,6,7</sup>
- Regarding COVID-19, investing in hospital services for improved response, designating some facilities exclusively for COVID-19 and repurposing health workers to COVID-19 had implications for provision, and impacted negatively on the provision of essential services.<sup>5,8</sup>
- It is now evident that it may be impossible to entirely eliminate SARS-CoV-2 infection globally and that the virus will probably continue to circulate indefinitely, resulting in endemicity and periodic outbreaks.<sup>9</sup>
- SAR-CoV-2 infection is likely to remain a challenge in the country as drivers of high transmission are likely to persist for a long time. These include viral evolution resulting in more transmissible variants, lack of immunity due to vaccine hesitancy or incomplete vaccination and /or waning immunity/breakthrough infections, as well as inconsistent or inadequate use of public health and social measures. In addition, misinformation and hesitancy undermines the effectiveness of proven public health and social measures, vaccines and therapeutics.
- COVID-19 may have high negative impact on outcomes for those infected when there is low vaccination coverage, lack of access to diagnosis, delayed entry into clinical care, and lack of access to life saving tools such as oxygen and other therapeutics.
- As the proportion of cases requiring hospitalization and intensive care declines, there is a need to balance the focus on COVID-19 against addressing other health priorities, particularly for those diseases whose mortality rate and incidence have increased during the COVID-19 pandemic.<sup>10</sup>
- There is a need to transition from the acute response to a sustainable strategy of integrating the prevention, detection and management of COVID-19 with other health and social priorities. This includes investment in people, equipment and technologies to strengthen capability to counter the threat of infectious diseases such as HIV, TB, antimicrobial resistance and potential future pathogens.<sup>11</sup>
- Integration of COVID-19 management into primary health care and hospital services should include a comprehensive toolkit approach, addressing three major areas:<sup>12</sup>
  - 1. preventative measures (public health, infection prevention and control, and social measures, as well as vaccines);
  - 2. patient care (testing and treatment for outpatients, as well as testing, oxygen support and treatment for inpatients); and
  - 3. personal protective equipment for the health care workforce.
- Whilst ongoing surveillance for new variants that may be associated with more severe disease is essential, the benefit of testing asymptomatic individuals to reduce transmission is questionable.<sup>13,14</sup> Resources may be better allocated to supporting diagnosis of symptomatic disease and surveillance initiatives.<sup>8</sup>
- Developing an effective evidence-based communication strategy to engage various stakeholders, from individuals to policy implementers, about the changing nature of the pandemic and subsequent recommendations is critical to ensure a common vision, address

some of the gaps identified above and counter hesitancy and misinformation.<sup>15,16</sup>

 COVID-19 hastened the development of new or improved health information systems or modules to track both the disease and health system inputs and responses. For example, realtime reporting of incident cases, hospitalizations and mortality was enabled, including weekly estimates of the number of excess deaths associated with the pandemic<sup>7</sup>.

### Recommendations

- The equitable provision of COVID-19 tools should be accelerated, including vaccines, diagnostics and therapeutics, with availability across all appropriate facilities of the health sector.
- The capacity of the health system should be sustained to ensure the continued provision of other essential services. The health system needs to be flexible, responsive and dynamic. A mitigation approach is needed, with the ability to pivot to a more interventional stance if needed, as referred to in the MAC on COVID-19 advisory on *Monitoring COVID-19 Between Acute Outbreaks and Deciding on Appropriate and Timely Responses.*<sup>17</sup>
- Policies should be developed and available to protect and safeguard all healthcare workers and support staff including the effective implementation of appropriate infection prevention and control (IPC) by trained IPC professionals, the provision of adequate personal protective equipment and vaccination of healthcare workers, mental health and psychosocial support.
- As the country transitions from a pandemic response to the means of managing COVID-19 as an endemic disease, one of the key tasks will be to retain what has been most useful in health information systems and other innovations, and to ensure that these continue to contribute to the unfinished agenda of universal health coverage.

# Screening, Triaging and Testing

- Routine screening and triaging of all patients prior to admission to healthcare facilities, based on symptoms suggestive of COVID-19, should stop. However, non-pharmaceutical interventions (NPIs) such as mask-wearing in public indoor areas, social distancing, and hand hygiene as part of routine infection prevention and control should continue.
- Triaging of patients should continue according to clinical department or clinical discipline protocols and should <u>not</u> be based on COVID-19 suspicion alone.
- Only individuals with severe symptoms suggestive of COVID-19 should be tested.
- Antigen testing is the first line diagnostic intervention for symptomatic outpatients.
  - Self-testing can be considered.
  - This should be specifically encouraged for high-risk individuals (immunocompromised, multi-morbidity, those with vaccination contraindications, transplant patients).
- If symptoms are severe enough to warrant hospitalization, a full respiratory virus panel should be considered if available. If a full respiratory virus panel is not available, SARS-CoV-2 antigen testing or SARS-CoV-2 PCR testing should be used.
- Patients admitted to hospital for reasons other than suspected COVID-19 should only be tested if the symptoms suggestive of COVID-19 are reported. Asymptomatic individuals, including known contacts, should not be tested.

# Isolation and Infection Prevention and Control (IPC)<sup>18,19</sup>

- Key improvements in IPC achieved during the pandemic should be maintained. There must be strengthening, maintenance of IPC operation readiness for a resurgence of cases.
- IPC specialists or trained staff should be appointed to appropriate healthcare institutions.
- IPC committees should be established in all facilities to ensure safety of patients and staff.

- Personal protective equipment should be made available and used optimally.
- Healthcare facilities should be made safer and more compassionate places through stronger IPC/NPI implementation where families can be allowed to be close to their loved ones during clinical care.
- Transmission-based precautions such as droplet or airborne precautions be instituted according to National IPC Strategic Framework.
- Hand hygiene should be reinforced with alcohol-based hand rub next to each bed and the frequency of environmental cleaning and disinfection should be performed according to National IPC guidelines. Fogging of facilities should be stopped.
- Healthcare workers need to be reminded of good IPC practices by a designated IPC focal person who should provide support and training to the health force continuously. Audit and monitoring of IPC interventions should take place, including adequate ventilation, administrative and engineering controls, bed spacing, cohort accommodation, healthcare waste disposal and appropriate use of personal protective equipment.
- Separate wards for COVID-19 are not warranted when there are only sporadic cases. However, they might be activated once there is an increase in cases which overwhelms the current bed capacity. Thus, all health establishments should remain in a state of preparedness.<sup>17</sup>
- Separate services to manage Long COVID patients either in primary care or hospital services are not recommended, but patient management should be determined by the presenting symptoms and diagnosis (refer to the MAC on COVID-19 advisory on *Diagnosis, Treatment and Management of Long COVID*<sup>1</sup>).

# **COVID-19 Vaccination**

- COVID-19 vaccination should be integrated into primary health care services, disease specific outpatient services, HIV and TB clinics, as well as antenatal services. This provides unique opportunities to reach high risk populations, including those over 60 years, those with comorbidities, the immunocompromised including people living with HIV, and pregnant women.
- COVID-19 vaccines should be offered to adult caregivers accompanying children attending primary healthcare facilities for different services including expanded programme on immunization.
- In the event that a new acute outbreak occurs requiring a booster, strategies should be developed to rapidly increase population-based delivery including the use of school and private sector outlets.
- Promoting and maintaining high levels of vaccine protection using currently recommended schedules for healthcare workers and the general population remain critical.

# Communication

- A clear communication strategy is required for the success of this endeavor. Engaging key stakeholders, such as public figures, scientists and health professionals, policy implementers, across multiple sectors in addition to the health sector is important to obtain buy in and support for integration.
- Ongoing monitoring and evaluation of public perception are necessary to ensure feedback/listening and revision of communications as needed to rebuild trust and confidence in the health care system.

### Rationale for Recommendations

- It is now evident that COVID-19 will remain for the long term, with the best scenario being that future variants will cause mild disease, and worst scenario being that the virus will mutate to cause severe disease against which current vaccines become less effective.
- There is a need to transition from an emergency response mode towards a long-term sustainable strategy of managing COVID-19, which requires deployment of resources over time, and balancing ongoing COVID-19 commitments against the many other priorities that were put on hold to deal with the pandemic. For example, synergies need to be maximized between investment in pandemic preparedness and investment in fighting existing diseases such as HIV and TB.
- Vertical COVID-19 vaccination services are not sustainable, and the primary aim of immunization is to prevent severe disease and hospitalization.
- While vaccines remain a critical tool, there is a parallel need for ongoing testing to monitor resurgence, genomic surveillance and the development and availability of effective treatments, including for outpatients.

Thank you for consideration of this advisory.

Kind regards

Janos

Marian Jacobs

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CC:

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