

Tele-medicine Requirements

1 MPA accepts fit-to-travel certificates issued by Singapore Medical Council (SMC)-fully registered doctors meeting all following requirements:

- The doctor conducting the assessment must have completed the tele-medicine e-training provided by Singapore Ministry of Health (MOH). A copy of the doctor's e-training participation statement must be submitted with the fit-to-travel certificate to MPA;
- The doctor must conduct the clinical assessment over real time video (i.e. no asynchronous video, voice calls or text will be permitted);
- The assessment of the crew should be based on the prevailing suspect case definition set out by the MOH (e.g. MOH Circular 119/2020), which includes:
 - i. History taking;
 - ii. Self-reported symptoms;
 - iii. Visual assessment of symptoms; and
 - iv. Real-time taking of temperature and SpO2 (Doctors should provide guidance on the proper use of such devices during the assessment).
- The doctor should also include, in his assessment of the crew's general health, his consultations with the captain/senior officer and the signing-off crew lead, taking into consideration the prevailing suspect case definition.

2 If any of the above requirements **cannot be met for any reason** (e.g. no proof of statement of participation, concerns that self-reporting is not accurate, crew meet the prevailing suspect case definition, technology issues such as poor video call quality, or no on-board thermometer/SpO2 device), a shipboard assessment of the crew by the doctor must then be done.

3 The doctor shall continue to take responsibility for the accurate completion of the fit-to-travel certificate regardless of the modality of assessment.

Technical advisory for enhancing the conduct of tele-medicine onboard ships

4 As the tele-medicine consultations require real time video and audio, it is recommended that users utilise **end-point devices** (laptops, smartphones, or tablets) equipped with the following:

- i. Devices with front-facing cameras or webcams;
- ii. Headphones/earphones with in-built microphones; and
- iii. Local 4G/LTE cellular connectivity, as on-board WiFi may not have sufficient bandwidth to support real time video and audio.

5 In terms of device settings, the device system clock's time zone should be set to Singapore Standard Time (GMT +8).

6 For the **conduct** of the tele-medicine consultations, the recommendations to enhance the user experience are as follows:

- i. Cell phone reception can be affected by the metallic structure of the vessel. Therefore, for consultations using cellular service, it should be conducted at the ship's bridge where the cellular connectivity is usually strongest.
- ii. Choose a location with sufficient lighting for the video session.
- iii. There should be minimal crowding so as to respect personal privacy and maintain social distancing.
- iv. Ambient noise should be kept to a minimum, e.g. turn down/off nearby air-conditioning units, reduce the volume of nearby walkie-talkies.
- v. Speak slowly and clearly, and refrain from speaking at the same time as the doctor.