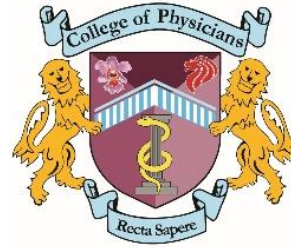




**ACADEMY OF MEDICINE  
SINGAPORE**



**CHAPTER OF RHEUMATOLOGISTS  
COLLEGE OF PHYSICIANS, SINGAPORE**

**SPECIALTY SPECIFIC GUIDANCE**

# **TELEMEDICINE**

## **RHEUMATOLOGY**

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*Developed by*

**CHAPTER OF RHEUMATOLOGISTS  
COLLEGE OF PHYSICIANS, SINGAPORE**

## 1. Whether first specialists' consultations must be conducted in-person for all conditions, OR if there are specialist conditions which can be managed solely over telemedicine.

Telemedicine has been in the pipeline for several years across the globe and the COVID-19 pandemic has dramatically accelerated its use (1). Likewise, for Rheumatology, telemedicine has been a means to provide stable patients access to remote consultations with their healthcare providers. Presently, there is evidence to suggest that telemedicine with video consultation is a viable modality with acceptable diagnostic accuracy and patient/ physician satisfaction for stable patients with inflammatory arthritis on follow-up appointments (2,3).

Pre-existing models for video consultation have been piloted and are already in practice in Rheumatology centres in Singapore, prior to the pandemic. The aim of this workgroup was to address the queries on specialty specific guidelines.

Carefully selected new cases may be deemed suitable for video consultation, e.g., triaging a patient and/or ordering diagnostic investigations, prior to in-person review. The new case video consultations are not for initiating treatment. All new case video consultation must comply with institutional and current Ministry of Health (MOH) regulations and be followed with in-person consultation to ensure appropriate communication of the investigation results and for treatment.

The communication of a new diagnosis should be done through an in-person consultation. However, physicians may consider communicating a new diagnosis over teleconsultation taking into consideration the severity and nature of the condition, and the patient's context. For example, diagnosis of a simple acute conditions can be safely communicated via teleconsultation. Conditions/diagnoses that are (i) life-threatening, (ii) life-changing, (iii) stigmatizing, and/or (iv) requiring significant medical treatment must not be communicated over teleconsultation. As a good practice, the physician should seek patient's consent on the communication of the diagnosis over teleconsultation prior to diagnostic tests/procedures, and clearly document this.

There needs to be provision within telemedicine standard operating procedures (SOPs) to bring patients back for a face-to-face consultation where indicated (4).

## 2. Whether there are any additional patient inclusion/exclusion criteria for specialists use of telemedicine (for first, or follow-up consults).

### Inclusion Criteria –

#### Disease factors:

- The follow-up of patients with stable, mildly active, or non-complex (no major organ involvement) rheumatological conditions.
- Patients with active rheumatological conditions who are undergoing titration of therapy may also be included and followed up via telemedicine.
- The patient's treating rheumatologist will triage and make the decision as to whether telemedicine is appropriate form of consultation for these patients depending on the condition, level of disease activity and systemic involvement.
- Patients are required to maintain regular blood test monitoring as prescribed by their doctors prior to the scheduled teleconsultation.

**Patient Factors:**

- Adequate IT literacy to use smart devices, and download / use applications, including video-conferencing and access to adequate Wi-Fi.
- Consent to video consultation after the appropriate counselling.

**Exclusion criteria –**

**Disease Factors:**

- Rheumatological conditions that are complex and/or evolving.

**Patient Factors:**

- Those with visual or hearing impairment, learning difficulties, impaired cognitive function or language barriers.
- Non-conducive home environment that precludes the ability of patients to speak freely for any variety of reasons.

**3. If so, are there additional patient notifications to help patients make an informed choice on their use of telemedicine;**

Patients with rheumatic diseases must be made aware of the advantages and disadvantages of telemedicine:

**Advantages:**

- The main benefit of telemedicine is convenience for patients and family members. It minimises delays and both patients and caregivers can dial-in from different locations to attend the appointment. There are also reductions in costs that can be accrued when visiting the hospitals e.g., loss of earnings, travel costs and childcare costs.

- A large number of patients with rheumatic diseases are immunosuppressed. Teleclinics can protect the patients by reducing the risk of exposure to infections at the hospital particularly in the context of a pandemic.

**Disadvantages:**

- Fluctuations in disease activity amongst rheumatic diseases are common. Whilst the healthcare workers will be able to use video consultation to carry out some of the examinations, patients must be advised that the healthcare worker will not be able to carry out a full physical examination during the video consults. A face-to-face consult may be required after the teleclinic appointment if the healthcare worker deems it necessary.
- Patients with rheumatic diseases often have complex medical needs and communication during the teleclinic appointment needs to be clear. Having poor Wi-Fi signal or telephone line may hinder the patient's understanding of the disease, medication and management plans.
- No recordings nor photography will be allowed from the patient and the healthcare worker to protect everyone involved.

**4. Whether there are any speciality specific clinical red flags where if observed, specialists should escalate patients for an in-person consultation or A&E where appropriate;**

Red flags to prompt in-person consultation or A&E referral:

- Patients who develop flare-ups of their condition
- Patients with any reactions to medication
- Patients with infective symptoms including fever

Where appropriate there are systems in place to determine if a video consultation is appropriate.

- This may include a screening phone call to the patient/carer, text alert to the patient/parent or carer to which they can respond or the evaluation of specific patient reported outcome measures which can be completed ahead of the appointment.
- This may be through a patient portal linking to the electronic medical record or making use of an app.
- Patients should be empowered to request for an in-person appointment if they experience a disease flare, are unwell, or have any other serious concerns.

**5. Whether there are any specific visual cues or other indications (e.g. tests or use of devices) that should be done/used when specialists manage patients over telemedicine.**

- Patients can be encouraged to provide basic vital parameters where available such as blood pressure readings, weight and temperature
- Limited visual clinical assessment, via standardised virtual joint examination format for video consultations (5) in those with inflammatory arthritis
- Patient reported outcome measures (PROMs) where applicable

Ideally in addition to the standard clinical documentation which includes mode of consultation (e.g., video or telephone), it is recommended that a written or verbal communication (read-back policy) of the management plan which includes any changes to medications, next steps such as subsequent appointment dates, laboratory tests be clearly communicated to the patient.

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