

SHORT PAPER

Restructuring an academic dermatology practice during the COVID-19 pandemic

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Email: d.murrell@unsw.edu.au**Abstract**

Severe acute respiratory syndrome coronavirus 2 is a highly virulent positive-sense single stranded RNA virus that spreads rapidly via respiratory droplets, causing severe acute respiratory syndromes with significant mortality and morbidity. Currently 210 countries and territories are affected around the world with a reported 2.6 million confirmed cases. The coronavirus disease 2019 pandemic has changed the way patients attend their specialist appointments and receive medical care. While some specialist clinics have closed we have implemented strategies and restructured our academic practice in Australia to minimize the spread of disease while treating patients who need urgent care. We hope to share these strategies in the hope they may be useful to the dermatology community.

KEYWORDS

COVID-19 and dermatology, SARS-COV-2

1 | INTRODUCTION

Whether dermatology patients are at increased risk of becoming infected with coronavirus disease 2019 (COVID-19) is yet to be determined. However, it would appear that those who are elderly, immunosuppressed and have multiple co-morbidities are at increased risk. Given this uncertainty, all efforts should be made to ensure that dermatology patients are not neglected during this pandemic. By effective triaging, transitioning to teledermatology consultations, restructuring the workplace, and by implementing strict handwashing/wearing of face masks dermatology patients can be seen in an outpatient setting while minimizing the risk of virus transmission.

1.1 | Triage

High risk melanoma patients requiring digital dermoscopic monitoring, those requiring immediate surgery, patients on clinical trials, and severe undiagnosed new cases should be offered face to face consultations if

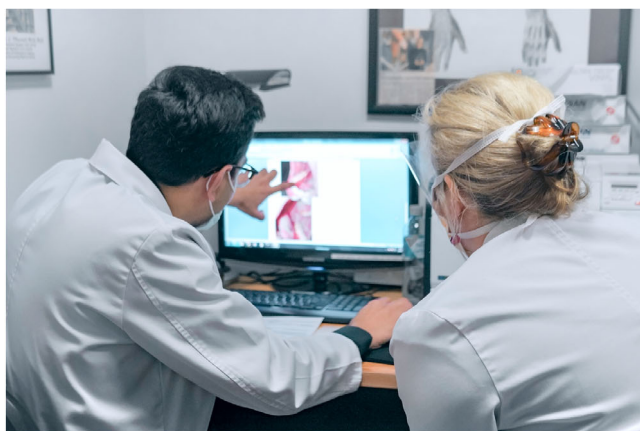
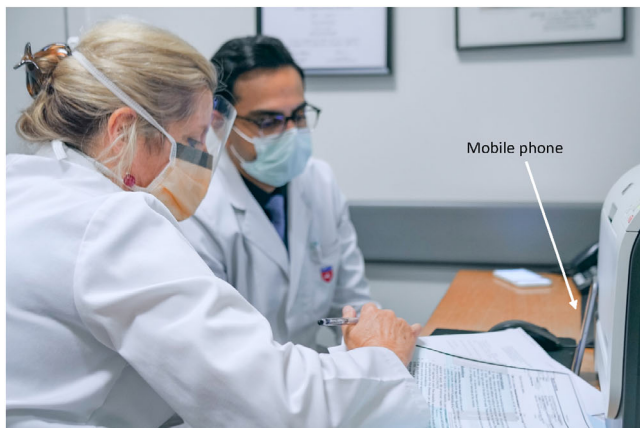
possible.¹ Appointments should be staggered to allow a maximum of four patients to be present at any one time in the practice or however many can safely wait in the waiting room maintaining 1.5 m social distancing. Routine follow up patients are offered a teledermatology consultation. A teledermatology consultation is a remote, video-based form of telemedicine used to provide dermatological diagnoses and management. There are numerous benefits and challenges of teledermatology (Table 1).

1.2 | Teledermatology

Where possible, consultations should transition to teledermatology via video conferencing mobile applications (Figure 1). In Australia, the majority of dermatology clinics are in the private setting. Prior to the pandemic, video consultations with specialists are funded by Medicare for patients who live far away or remotely, provided they are supervised by a general practitioner (GP) at their clinic. Currently no specific video conferencing software has been legislated. The traditional set up with the patient video-conferencing the specialist at

TABLE 1 Benefits and challenges of teledermatology

Benefits	Challenges
<ul style="list-style-type: none"> • Time efficient • Allows for appropriate triaging of patients • More convenient for patients who need to take time off work to attend appointments • Elderly, disabled, and nursing home patients are better served with less reliance on carers and transport services • Enhanced access to dermatology services in areas where geographic barriers limit a patient's ability to seek dermatologic care • Reduces risk of transmission of communicable diseases 	<ul style="list-style-type: none"> • Limitations in image quality may impact ability to diagnose conditions or lead to misdiagnosis • Dermoscopy may be limited unless dedicated dermoscopic photo capturing software is used by patients • Security and privacy breaches from lack of secure video conferencing software • Limitations in treatment options (eg, cryotherapy, surgical procedures, and laser therapy cannot be performed) • Lack of reliable reimbursement system

**FIGURE 1** Teledermatology using a mobile device (see arrow) and assessing emailed photographs

a GP practice is time consuming and less efficient due to issues with the software, network connection and punctuality of all parties. During the COVID-19 pandemic patients with referrals from general

practitioners can access teledermatology directly with specialists. This is more flexible and reliable.

Prior to the teledermatology consultation patients were asked to:

- Sign a telehealth consent form.
- Install video conferencing software such as Zoom, Microsoft teams, or WhatsApp.
- Nominate a pharmacy of their choice so prescriptions can be faxed/emailed and subsequently mailed to ensure medications are received promptly.
- Email high-resolution photographs to the practice email address to facilitate skin examination during the consultation (Figure 1).

During the consultation, patients on biologics or immunosuppressants were asked COVID 19 risk assessment questions (Figure 2) to determine whether change of therapy, treatment breaks, or changes to their existing medications, that may increase their risk for COVID 19, is needed. A letter is provided to the patient's general practitioner if urgent change of medications is recommended.

1.3 | In person consultation

For those requiring in person consultations a text message is sent several days before using VIP practice software to assess their risk of COVID-19. Those who exhibit coryzal symptoms (cough, fever, rhinorrhea, dyspnea, sore throat) or have been exposed to a suspected case are asked to reschedule and if possible be tested for SARS-COV-2 in accordance with state guidelines. It is mandatory for all patients to wear a surgical upon entry into the practice (Figure 3).² Non-touch temperature probes are also used to check temperatures upon entry. At reception they are to stand 1.5 m away from the receptionist on the designated cross (Figure 4). Relatives, carers, and parents of patients can be seated at designated seating in clinic or are asked to wait outside if not possible.

Alcohol based hand sanitizer and disinfection solution is present in every consulting room and at reception, and patients are asked to sanitize prior to entry and exit from the consulting room. Each dermatology fellow is assigned one consulting room and is to be wearing a sanitary mask at all times with frequent hand washing between each patient contact, exposure to bodily fluids, and before any aseptic procedure to minimize spread. Each fellow is also assigned a designated computer to present cases to the consultant outside their consultation room to minimize. Door handles, chairs, bedding, and all equipment are wiped down with alcohol-based wipes after each consultation. To prevent occupational skin diseases after repeated hand washing, use of a barrier cream or emollient after hand sanitization is recommended by a Cochrane Review on interventions for prevention occupational hand dermatitis.³

If dermoscopy is required the site should be cleaned with an alcohol wipe and the dermatoscope should be cleaned for

FIGURE 2 COVID-19 questionnaire for biologics patients

BIOLOGICS PATIENTS under COVID-19 QUESTIONNAIRE

Name:
(Initials):

Date:

Called by

- How are you feeling?
- Are you still working? From home or in the office?
 YES NO
- Have you had any infection?
- Any contact with a person with COVID-19?
- Any symptoms of COVID-19?

-Fever?	-loss of smell?
-Cough?	-loss of taste?
-Sore throat?	-runny nose?
-Shortness of breath?	-diarrhoea?
-Fatigue?	-headaches?
- How many people are you living with?
- Who do you live with?
- Have any of the household members been sick?
- Are you wearing a mask when outside?
- When is your next review booked? Don't forget to do your blood test a week before your appointment?
- Have you stopped or delayed any of your biologics?
- Are you taking ibuprofen or naproxen (tell patient to avoid)
- Are you taking any heart or blood pressure medication?
Which blood pressure medication?
(Discussed to cease ARB or ACE inhibitors)

1 minute prior.⁴ Disposable dermoscopic lens covers are also available or polyvinyl chloric (PVC) cling film wrap can also be placed between the dermatoscope lens and lesion.⁵ Other non-touch dermoscopic techniques have also been proposed that patients can do at home such as placing a drop of immersion fluid (ie, olive oil) and taking an enlarged photograph on a mobile phone or digital camera.⁶

2 | CONCLUSION

During these challenging times, efforts should be made to follow up dermatology patients. By implementing regular handwashing practices, wearing of masks, staggering appointments, restructuring the practice, and transitioning to teledermatology appointments can minimize the transmission of COVID-19 while treating patients.



FIGURE 3 Entry notice requiring wearing a mask upon entry



FIGURE 4 Reception with seating arrangements and floor markings

Challenges still persist however with regards to legislation of appropriate teledermatology software, appropriate reimbursements, and limitations in being able to offer certain treatments.

CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

INFORMED CONSENT

The authors have given written informed consent for use of their photographs.

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How to cite this article: Sheriff T, Murrell OGC, Murrell DF. Restructuring an academic dermatology practice during the COVID-19 pandemic. *Dermatologic Therapy*. 2020;33:e13684. <https://doi.org/10.1111/dth.13684>