

Editorial The COVID 19 pandemic has materially changed my pediatric nephrology practice and medical school clinical supervision. Baghchechi and Jacob offered valuable and timely suggestions for scheduling care when supervising resident training.
T.L. Vasylyeva MD PhD, Managing Editor.

THE NEW FACE OF MEDICINE – CARE FLOW STRATEGIES DEVELOPED DURING COVID

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Abstract: The COVID-19 pandemic has redefined the practice of medicine. Adaptive care models to sustain access through integration of virtual and in person essential services have been implemented. Utilization of novel scheduling protocols can create a safe and efficient clinic experience for children and staff in this pandemic time.

Keywords: COVID-19, public health, telemedicine, dermatology, prevention

BACKGROUND The coronavirus pandemic has offered a major opportunity to restructure access maintenance to medical care in the United States. There has been a dramatic drop-off in face-to-face patient care visits to medical practices since March 15th, as the coronavirus spread worldwide. As of June 10, the worldwide case total has eclipsed over 7 million with >400,000 deaths [1]. The US continues to lead the world with 1.9 million total cases and >110,000 deaths (Figure 1) [2].

Pediatric manifestations

Early on, children were believed to be at lower risk for COVID-19 related consequences [3]. More recent reports have identified clusters of cases of a Kawasaki-like disease associated with COVID-19, currently being named pediatric multisystem inflammatory syndrome (PMIS) [4-6]. These children presented with high fevers, desquamating rashes, and coronary aneurysmal disease [4]. Serology testing in multiple patients were positive for prior COVID-19 infection, suggesting a possible hyper stimulated inflammatory reaction in children exposed to the virus. Another presentation seen in children are pernio-like acral lesions, which are being referred to as 'COVID-Toes' [7-9]. Other presentations range from non-specific erythematous rashes, vesicular chickenpox like

rash, and livedo reticularis [10-12]. Identification of dermatologic findings in children can help with early recognition and diagnosis and avoid delayed diagnosis due to atypical findings. Early recognition of these presentations is vitally important in reducing COVID-19 transmission through appropriate triage and allowing for early intervention.

Access to Care in COVID-19

There has been a decrease in face-to-face dermatology care visits as individuals have stayed away from medical offices, fearful of contracting COVID-19. The response from the medical community has been to substantially increase access through telehealth and to utilize virtual care to rapidly assess patients for COVID-19. This has been hailed by public health authorities, the Center for Disease Control (CDC) and the American Academy of Dermatology (AAD) as a critical initiative that should be sustained [13-14]. The provision of telecare in the academic training setting requires a redesign in the base model of care and teaching, in addition to a significant change in management oversight [15-16].

Herein, we outline a model for integrating face-to-face essential care and telecare visits (Table 1). Appointment slots are staggered between virtual and in-person care between the resident physicians and attending.

Care flow strategy

The resident connects virtually with the patient/caregiver and initiates the visit (attains chief complaint, pertinent

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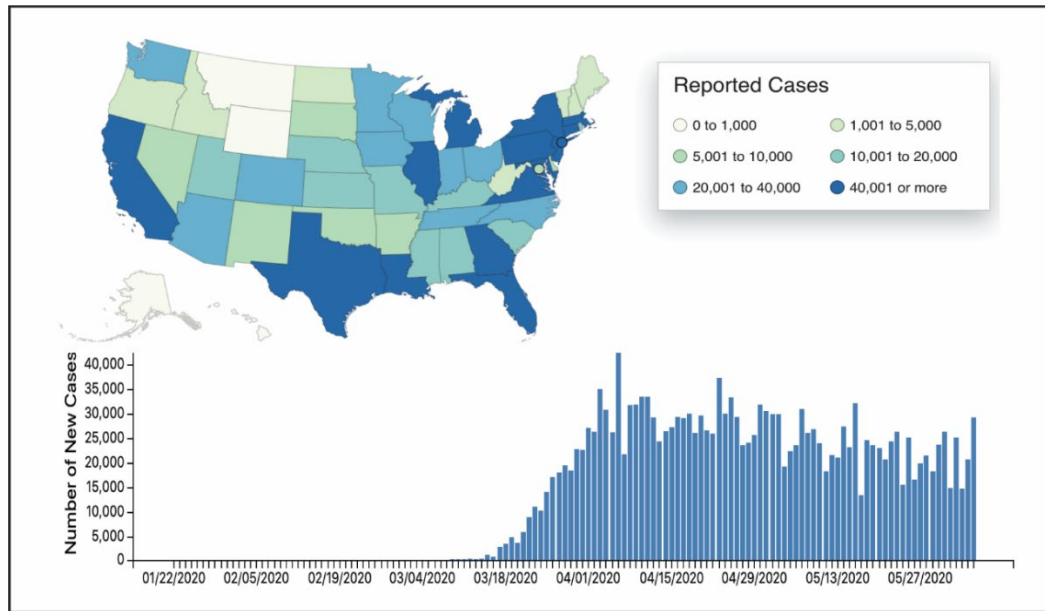


Figure 1. COVID-19 pandemic case tracker across the United States [Reproduced with permission from the World Health Organization].

| Initiation of Care: | | | Time Attending Enters: |
|----------------------|-------------------|--|----------------------------|
| Resident w/PT | | | |
| Time | Patient (Virtual) | Resident (x,y,z) | Available to chief virtual |
| 8:00 | Hold | Res Z - Virtual Urgent seen directly w/attending | |
| 8:00 | A | Res X | 8:10 |
| 8:10 | B | Res Y | 8:20 |
| 8:20 | C | Res Z | 8:30 |
| 8:30 | D | Res X | 8:40 |
| 8:40 | E | Res Y | 8:50 |
| 8:50 | F | Res Z | 9:00 |
| 9:10 | Hold | Res X - Virtual Urgent seen directly w/attending | |
| Time | Patient (F2f) | Resident (x,y,z) | Available to chief F2f |
| 9:00 | G | Res Y | 9:30 |
| 9:15 | H | Res Z | 9:50 |
| 9:30 | I | Res X | 10:10 |
| 10:00 | J | Res Y | 10:30 |
| 10:15 | K | Res Z | 10:50 |
| 10:30 | Hold | Res X - Access F2f | 11:10 |
| 11:50 | Hold | Res Y - Virtual Urgent seen directly w/attending | |

Table 1. Flow Diagram integration of 15 care appointments optimizing face-to-face (F2F) and virtual care appointments (shaded gray in table) with four reserved for urgent virtual appointments (hold). Time: Patient appointment start time; Patient Slots A-K are scheduled appointments; Hold are reserved for urgent visits. Residents (Res): 3 resident physicians available for patient care. F2F is essential care visit., Time Attending Enters: When the attending physician begins care of patient.

past and current medical and social history, medicine reconciliation, allergies and preliminary physical examination). The patient/caregiver is then put in the virtual waiting room (hold status). The attending will mark themselves in available status vs. busy on their skype. The resident connects to the attending and discusses the case. The resident then connects with the attending back to the patient (virtual waiting room), where the care visit is completed. The attending marks themselves as busy. The attending then disconnects from the care visit and marks their status as available. The process is repeated. An after-visit summary is generated with instructions for care and follow-up, which includes contact information for the nurse care line should further information be needed.

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