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Workflow Solutions for Primary Care Clinic Recovery During the COVID-19 Pandemic: A Primer

Ann M. Nguyen, PhD, MPH; Attila J. Hertelendy, PhD; Melinda Ashton, MD; Frederick M. Burkle Jr, MD, PhD(Hon), MPH, DTM, FAAP, FACEP

The COVID-19 pandemic has changed routine function of primary care clinics across the United States. In April 2020, ambulatory care visits dropped by 60%¹ due to clinics reducing hours, shifting to telehealth, or closing their offices altogether to ensure the safety of patients and staff.^{2,3} This has also led to tremendous financial strain on primary care clinics.^{2,4} There has since been a gradual rebound of in-person visits,¹ though the trajectory of the pandemic is uncertain.

As clinics begin to reopen, it has been increasingly apparent that the standard workflow of a primary care clinic does not readily adapt to social distancing strategies. On June 8, 2020, the US Centers for Medicare & Medicaid Services (CMS) released recommendations for reopening facilities to provide non-emergent, non-COVID-19 care.⁵ Krist et al⁶ also put forth a list of actions for redesigning primary care in the midst of the pandemic, calling out the urgent need for “a strategy to resume ‘normal’ in-person care.” While both present reasonable platforms to work from, there still are no operational-level guidelines specifically for primary care clinics to deliver safe care and recover from the pandemic.

Guidelines are essential in helping primary care clinics reopen and address growing delays in routine care.⁷⁻⁹ A May 2020 survey reported that 66% of

primary care providers expect to be overwhelmed by avoided and diverted health care needs.⁴ A high proportion of patients delaying care are the elderly, who have higher rates of chronic care conditions.¹⁰ Some of that care has effectively moved to telehealth (phone, video, e-visits), with telehealth use quadrupling from April 2019 to April 2020.¹¹ The CMS has also supported telehealth expansion through emergency policy changes, including increased telehealth reimbursements and the lifting of geographic restrictions. These policy changes are slated to become permanent.¹²

Despite the growing role of telehealth, not all care translates to telehealth, nor is it equally accessible to all socioeconomic groups.¹³ There is thus a need for primary care clinics to reopen to provide essential, in-person visits or identify better ways to deliver care digitally. In this article, we outline workflow solutions that may serve as a primer for optimizing primary care during the COVID-19 pandemic. We draw upon strategies from Hawaii Pacific Health, a health system trialing new workflows, and our observed experiences in public health, emergency, and disaster management.

Hawaii Pacific Health

Hawaii Pacific Health is the largest, private health care organization in Hawaii anchored by 4 hospitals and more than 70 ambulatory care settings, including primary care. As social distancing and safety precautions persist, Hawaii Pacific Health implemented a 4-stage approach for reopening ambulatory clinics with innovative workflow solutions, increasing in-person visit capacity with each stage. To progress, clinics must meet strict safety evaluations called “MUST-PASS Indicators” based on the number of new COVID-19 cases, supply of personal protective equipment (PPE), and supply of local testing. More detail is given in the Supplemental Digital Content (available at <http://links.lww.com/JPHMP/A728>). The system has seen high utilization of telehealth—with more than 13 000 video visits between May 1 and June 6—and is concurrently expanding telehealth offerings.

Author Affiliations: Department of Population Health, School of Medicine, NYU Langone Health, New York, New York (Dr Nguyen); Department of Information Systems and Business Analytics, College of Business, Florida International University, Miami, Florida (Dr Hertelendy); Hawaii Pacific Health, Honolulu, Hawaii (Dr Ashton); and Harvard Humanitarian Initiative, T. H. Chan School of Public Health, Harvard University, Boston, Massachusetts (Dr Burkle).

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Drs Nguyen and Hertelendy contributed equally to this work.

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Correspondence: Ann M. Nguyen, PhD, MPH, Department of Department of Population Health, School of Medicine, NYU Langone Health, 180 Madison Ave, 2nd Floor, New York, NY (nguyea16@nyu.edu).

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Primary Care Workflow Solutions

We describe workflow solutions that aim to offer patients as exceptional of an in-person experience as possible during this pandemic and, in line with CMS recommendations,⁵ prioritizes telehealth where appropriate. The workflow is summarized in the Figure and follows Porter’s¹⁴ Value Chain Framework, which posits that the patient experience gains value from service delivery (preservice, point-of-service, after-service) and clinic support activities (organizational culture, structure, resources). Not all solutions will be applicable or feasible for all settings but aim to serve as a primer.

Preservice solutions

Risk should be mitigated for staff and patients before they arrive at the clinic. Telephone nurse triage has been shown to be essential to managing a pandemic,¹⁵ and a triage protocol should be implemented starting with the patient’s first call. If the nurse determines that care can be delivered digitally, offer telehealth. If an in-person visit is required, the verbal triage encounter should evaluate the patient for COVID-19 symptoms, and this assessment should be repeated during appointment reminders and when the patient arrives. Nurses should also check for other care gaps. For example, if laboratory work is required or missing, order the laboratory work 7 to 10 days in advance of the visit. Many local laboratories have slowed response times and capacity or have focused on COVID-19 testing, so check with local laboratories for the best times for chronic care patients to visit and

any directives to separate chronic care patients from those seeking COVID-19 testing.

When scheduling appointments, stagger them so that patients do not overlap. Schedule telehealth visits in-between office visits to allow for wider gaps between in-person visits. Also consider which examination rooms will be used and allot adequate time for rooms and equipment to be cleaned. Offer early-morning appointment slots to high-risk patients when it may be easier for them to travel with less exposure. Intake forms should be completed online or over the phone. Patients should be advised to wear masks to their appointments and that companions are not permitted unless essential for the patient’s physical or emotional well-being and care.

Point-of-service solutions

Walk-in appointments should be discouraged or stopped altogether. Inform patients arriving for their scheduled appointments to expect the office door to be intentionally locked. A trained staff member wearing PPE can meet the patient at the curbside or in the car to conduct a COVID-19 screening (eg, temperature and symptoms check). If the patient passes the check, the clinic may choose to conduct the visit outside, in which providers can use a portal electronic device to pull up the patient’s electronic health record. If the clinic chooses to bring the patient into the office, the staff member can walk the patient to the examination room. No patients should be placed in the waiting room, but if that is not possible, waiting areas should allow for 6-ft distancing. Minimize the duration of face-to face encounters. If possible, employ a scribe,

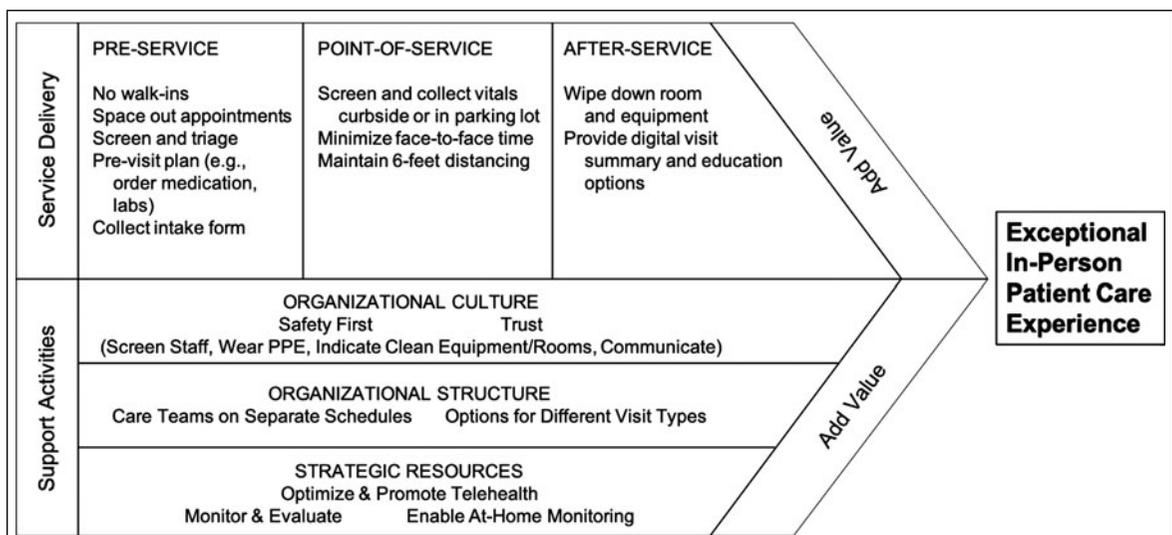


FIGURE Primary Care Workflow Solutions for Reopening During the COVID-19 Pandemic
Abbreviation: PPE, personal protective equipment.

to allow the provider to spend more time interacting with the patient. Tasks that can be off-loaded to telehealth are encouraged, such as discussion of laboratory and radiology results.

After-service solutions

Following every patient visit, the equipment and examination room should be sanitized. Assign a staff member or cleaning contractor to be accountable for this task. Use visual indicators on the examination room door to confirm the room has been cleaned. Offer an electronic visit summary including education and follow-up options in a timely format, and teach patients how to use the patient portal (if available) to send questions.

Solutions for support activities

To streamline service delivery, the clinic should consider its organizational culture, structure, and strategic resources. The clinic owner/leadership should ensure the “safety first” mentality is understood by all staff members. Screen providers and staff every day for COVID-19 symptoms. Provide them with sufficient PPE—the CMS recommends staff wear surgical face masks at all times in the facility and an N95 respirator if they are working with suspected or confirmed COVID-19 patients.⁵ Instructions on when and how PPE is to be used should be part of operating standards.¹⁶ Trust must also be established between the clinic and patients so that patients feel comfortable returning to the office. Send messages (eg, newsletters) or make calls to inform patients about the clinic’s safety precautions.

Structurally, care teams should work separate schedules, so if there is an infection, potential spread may be contained. Offer patients visit options that minimize risk, such as dedicated appointment slots for high-risk populations and telehealth. Telehealth is envisioned to become a permanent fixture in the future model of care, and clinics should consider providing telehealth support to patients.

Allocate resources to align with the “safety first” mission, and keep a record of the PPE supply. Coordination and communication about telehealth should remain a key strategy. Systematically survey patients and staff to track changes in their satisfaction, and share results during team huddles. Involve staff in updating the workflow in response to survey data and regulations. Consider which staff can work from home and which have changed roles. For example, the front desk staff may no longer need to check-in patients, but they can absorb new functions such as managing the new appointment system and providing technical assistance on telehealth. Finally, provide

patients with equipment for at-home monitoring or connect them to resources that offer affordable options.

Conclusion

Like everything else that is transforming during COVID-19, this workflow needs to be put into effect expeditiously before primary care clinics become the focus of the next surge. It should also be continuously assessed and adapted to current conditions and the clinic’s setting and resources. While telehealth is not the focus of this article, we would be remiss to not recognize its lasting role. As is being done at Hawaii Pacific Health, clinic owners/leadership should consider ways to expand and integrate telehealth into routine care, complementing in-person visits. The pandemic has transformed the practice of medicine, giving us opportunities to “reset” the way we deliver care.¹⁷ We urge primary care clinics to continue innovating workflow solutions, particularly for telehealth, to not only prevent future outbreaks but also improve standards of care.

As of this writing, the number of COVID-19 cases continues to grow. Because primary care clinics will have a close pulse on the situation in the community, it is pertinent that they have direct communications with local and state decision makers to keep abreast of evolving conditions. To date, guidelines from various government levels do not spell out granular-level detail for primary care clinics. This article aims to serve as a primer for workflow solutions for primary care clinic recovery that we hope can lend to definitive policy changes in the near future.

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