Conserving Supply of Personal Protective Equipment—A Call for Ideas
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The editors of JAMA recognize the challenges, concerns, and frustration about the shortage of personal protective equipment (PPE) that is affecting the care of patients and safety of health care workers in the US and around the world. We seek creative immediate solutions for how to maximize the use of PPE, to conserve the supply of PPE, and to identify new sources of PPE. We are interested in suggestions, recommendations, and potential actions from individuals who have relevant experience, especially from physicians, other health care professionals, and administrators in hospitals and other clinical settings. JAMA is inviting immediate suggestions, which can be added as online comments to this article.

Note: The online version displays comments from the initial publication. It is now closed to new comments and suggestions.

Sourcing Personal Protective Equipment During the COVID-19 Pandemic
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As the coronavirus disease 2019 (COVID-19) pandemic accelerates, global health care systems have become overwhelmed with potentially infectious patients seeking testing and care. Preventing spread of infection to and from health care workers (HCWs) and patients relies on effective use of personal protective equipment (PPE)—gloves, face masks, air-purifying respirators, goggles, face shields, respirators, and gowns. A critical shortage of all of these is projected to develop or has already developed in areas of high demand. PPE, formerly ubiquitous and disposable in the hospital environment, is now a scarce and precious commodity in many locations when it is needed most to care for highly infectious patients. An increase in PPE supply in response to this new demand will require a large increase in PPE manufacturing, a process that will take time many health care systems do not have, given the rapid increase in ill COVID-19 patients.

In its current guidance to optimize use of face masks during the pandemic, the Centers for Disease Control and Prevention (CDC) identifies 3 levels of operational status: conventional, contingency, and crisis.1 During normal times, face masks are used in conventional ways to protect HCWs from splashes and sprays. When health care systems become stressed and enter the contingency mode, CDC recommends conserving resources by selectively canceling nonemergency procedures, deferring nonurgent outpatient encounters that might require face masks, removing face masks from public areas, and using face masks for extended periods if feasible.

When health systems enter crisis mode, the CDC recommends cancellation of all elective and nonurgent procedures and outpatient appointments for which face masks are typically used, use of face masks beyond the manufacturer-designated shelf life during patient care activities, limited reuse, and prioritization of use for activities or procedures in which splashes, sprays, or aerosolization are likely. When face masks are altogether unavailable, the CDC recommends use of face shields without masks, taking clinicians at high risk for COVID-19 complications out of clinical service, staffing services with convalescent HCWs presumably immune to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), and use of homemade masks, perhaps from bandanas or scarves if necessary.

Many communities in the US and globally are rapidly entering crisis mode. Popular news outlets report unconventional solutions for PPE at local hospitals, such as plastic garbage bags for gowns and plastic water bottle cutouts for eye protection.2 Plans for resupply through the repurposing of industrial capacity and other means are welcome but seem unlikely to solve the