CORRESPONDENCE

COVID-19 NOTES

To rapidly communicate short reports of innovative responses to Covid-19 around the world, along with a range of current thinking on policy and strategy relevant to the pandemic, the Journal *has initiated the Covid-19 Notes series.*

Contact Tracing for Native Americans in Rural Arizona

Our critical access hospital in rural eastern Arizona provides health care and public health services for a community of approximately 18,000 Native Americans. Ours was one of the last areas in the state to see Covid-19, and we therefore had time to prepare our public health response. After watching Covid-19 push the capacities of larger, better-equipped hospital systems, we knew that a surge of cases could easily overwhelm our small facility. Helicopter transport to a tertiary care center takes hours, and such facilities could quickly reach capacity from local admissions alone. We developed an aggressive, integrated early-response plan that relied heavily on contact tracing to limit the spread of Covid-19.

Crowded home environments are a part of life in our community. It's not uncommon for eight or more people to live in a two-bedroom house, so self-isolation is nearly impossible. Several families in our community set up camping tents in their yards to quarantine infected household members, but the sharing of bathrooms and eating utensils contributed to secondary household attack rates above 80%. Nearly every household here includes a grandparent, and many include a great-grandparent. It's rare to encounter a patient with Covid-19 who doesn't live with at least one high-risk person.

Identifying high-risk patients who would benefit from early intervention became our top priority. Our tracing team went from asking, "Where have you been?" to asking, "Who are your grandparents?" We perform rapid testing of newly identified contacts, and a team of clinicians visits people who have tested positive as often as every day. Public health nurses call high-risk people who have been exposed to Covid-19 but tested negative to verify that they are remaining asymptomatic throughout the incubation period.

This type of intensive outreach effort is important for two reasons. First, several people in our community have had cases of "happy hypoxemia," with little awareness that they had a serious respiratory disease. Waiting for patients to seek care only when symptoms become intolerable reduces the utility of most interventions. By detecting hypoxemia sooner, we can start patients on oxygen and, in some cases, keep them at home.

The second reason has been the unexpected utility of frequent follow-up visits made by our team members that make them more available to the community. Many patients with the "happiest" hypoxemia — those with minimal or no dyspnea — are young, relatively healthy people who might not otherwise present for medical care at all. We try to evaluate everyone in the household when we are visiting elders, and we frequently discover people with oxygen saturations of 80% or lower who did not know they were infected. Only by being in the field are we able to identify such patients early, initiate supportive care, and perhaps save a few lives.

More than 1600 cases of Covid-19 have been diagnosed on the reservation served by our hospital, with only one of these patients being intubated in our emergency department. Of some 400 patients who needed hospitalization, nearly half have been transported to facilities that provide higher-level care. Our community's case fatality rate so far is 1.1%, less than half the rate reported for the rest of Arizona.

Running this kind of operation is difficult. It is staff-intensive and requires clinicians to spend long days in the hot sun. But we believe that our process has yielded positive outcomes.

Any success is due in large part to strong partnerships with tribal leaders who have acted decisively to curb the spread of infection, sup-

porting social-distancing measures despite obvious challenges. In addition, our hospital and clinicians have built a level of trust with the community that we do not take for granted. Recent data suggest we have successfully flattened the curve in our community, but our situation remains precarious, given rising case counts statewide.

Covid-19 is a novel disease in need of novel approaches. But our experience has shown that there is no substitute for providing services according to the most basic principles of medicine and public health. In our current health care system, knocking on doors and talking to patients may be the most novel approach of all.

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