on their personal journeys and highlight particular contributions they could make to an institution or profession that can't be captured by traditional metrics. Third, committees could stress character assessment, reflecting

An audio interview with Valerie Montgomery Rice is available at NEJM.org

on applicants' life histories and resilience and the challenges they've

faced, and incorporate metrics such as "adversity scores," which are often especially relevant to students from economically challenged backgrounds that have required early-life sacrifices and work experiences.

Universities, think tanks, and academic societies will undoubtedly weigh in on other new applicant-review processes, which might ultimately be evaluated in legal cases. The profile created using comprehensive review, in concert with assessment of academic prowess, could help predict students' likelihood of success in the face of challenging social and clinical circumstances and illuminate traits such as grit, perseverance, and drive - critical attributes for practicing in an increasingly complex environment.

Finally, medical schools could increase their capacity, creating more opportunities for all potential students.

Physicians take an oath to "do no harm." The cessation of prevailing admissions policies may further harm members of society who have long experienced injustices. We remain firm in our conviction that diversity, especially diversity of thought and culture, is invaluable. Over several decades, the environments in which we learn and practice medicine and conduct research have gradually become more equitable, and medicine has improved as both a profession and a practice. We must not allow a return to the dark era of medicine, when the profession did well for some patients and little for others. As leaders in medicine, we are bound by the ethical principles of beneficence, nonmaleficence, and justice. Accordingly, although we will comply with the Court's decision, we remain committed to the laudable and cardinal goal of achieving a diverse student body and workforce. Medical education must be steadfast and relentless in this pursuit, which will render medicine more just, fair, and equitable. Our patients — all our patients — deserve no less.

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- 1. McKinsey and Company. Diversity wins: how inclusion matters. May 19, 2020 (https://www.mckinsey.com/featured -insights/diversity-and-inclusion/diversity -wins-how-inclusion-matters).
- 2. Xierali IM, Nivet MA. The racial and ethnic composition and distribution of primary care physicians. J Health Care Poor Underserved 2018;29:556-70.
- 3. Alsan M, Garrick O, Graziani GC. Does diversity matter for health? Experimental evidence from Oakland. National Bureau of Economic Research, August 2019 (https://www.nber.org/papers/w24787).
- **4.** Shahriar AA, Puram VV, Miller JM, et al. Socioeconomic diversity of the matriculating US medical student body by race, ethnicity, and sex, 2017-2019. JAMA Netw Open 2022;5(3):e222621.
- 5. University of California. Research and analyses on the impact of Proposition 209 in California (https://www.ucop.edu/academic-affairs/prop-209/index.html).

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Outbreaks in U.S. Migrant Detention Centers — A Vaccine-Preventable Cause of Health Inequity

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R ates of vaccine-preventable infectious diseases are high among detained migrants in the United States.¹⁻³ In 2022, U.S. Immigration and Customs Enforcement (ICE) detained more than 300,000 migrants, housing them in detention centers whose envi-

ronmental conditions — including crowding, poor ventilation, and lack of sanitation — increase the risk of infectious-disease transmission and outbreaks. Moreover, detained migrants often have poor access to health care, including vaccination.²⁻⁴ Amid pressure

on ICE in the initial months of the Covid-19 pandemic, the agency started publicly reporting Covid-19 case numbers and deaths. Early in the pandemic, the incidence of Covid-19 was 13 times as high in the detained migrant population as in the general U.S. population,¹ which put ICE under significant scrutiny from members of Congress, the courts, and human rights organizations.⁵

Moving forward, we propose that the U.S. government consider requiring systematic and complete data collection and public reporting for all vaccine-preventable infectious diseases in U.S. migrant detention centers, tied to greater oversight, monitoring, and enforcement of surveillance practices. The data generated by means of comprehensive surveillance could support disease-specific vaccination policies and other efforts that would improve the health of members of this vulnerable population, with additional benefits for the broader U.S. population.

Even before the Covid-19 pandemic, there were well-documented infectious-disease outbreaks in ICE detention centers.^{2,3} We previously documented intense transmission of influenza, varicella, and mumps in 17 centers over approximately 3 years, including year-round (rather than only seasonal) influenza transmission and sustained varicella and mumps outbreaks, which are generally uncommon in the United States outside congregate settings.2 We hypothesized that conditions of confinement and the frequent transfer of migrants among detention centers probably create a complex transmission network leading to a high risk of infectious diseases throughout most ICE detention centers.2 Despite frequent outbreaks, however, such facilities aren't required to publicly report data on most vaccine-preventable infectious diseases, which limits the ability to use such data to guide policy.

In early 2020, ICE began publicly reporting Covid-19 case num-

bers by facility. Though the agency's reporting has been criticized for data-quality problems and has often been incomplete, which makes longitudinal analysis difficult, the reported data highlighted that SARS-CoV-2 transmission was occurring at rates far exceeding those in the general population.^{1,5} Public reporting of Covid-19 testing, cases, and deaths permitted a national assessment of the burden of Covid-19 in the detained migrant population and led to calls for new infection-control policies, routine testing programs, and other public health responses, some of which have been required by judicial mandate. Questions about the adequacy of ICE's response, however, have resulted in court cases and other efforts seeking the release of detainees for public health purposes, given that risk has remained high.5

As the United States transitions away from public health emergency status for Covid-19, a question remains: What will prevention of infectious-disease outbreaks in the detained migrant population look like in the future? We believe the government should mandate systematic and complete data collection and public reporting for all cases of vaccine-preventable infectious diseases in this population - expanding beyond the current practice of reporting data on only Covid-19 cases. This requirement would be a first step toward implementing better infection-control policies, vaccination guidance, and public health responses in detention centers.

Systematically collected and reported data on cases of vaccinepreventable infectious diseases are necessary for outbreaks in these settings to be identified and addressed. To start, robust surveillance programs are needed for case detection. Case detection could be passive so long as access to health care is adequate, but active surveillance efforts might also be required, especially in the context of a possible outbreak. Formal guidance on routine testing practices, outbreak surveillance, and reporting are needed, especially to ensure consistent practices in privately contracted facilities, where substandard health and safety conditions have been documented. This guidance could come from the Centers for Disease Control and Prevention (CDC) or an independent body of experts with support from the federal government. Ideally, reporting would continue to identify cases of infectious diseases in migrants who have been released from detention but might have been exposed while in custody.

Systematic and complete public reporting of outbreak data would also help better characterize the nature of transmission of infectious diseases throughout ICE facilities. The frequent transfer of detained migrants means that cases from the same outbreak may be diagnosed at various detention centers and form a complex transmission network. Lack of systematic data collection and reporting among all ICE detention centers may therefore preclude early detection of outbreaks. If information about outbreaks were reported over time, these events could spur urgent remediation at a facility or systemwide. Ensuring that vaccination and infection-control practices are in keeping with public health standards would support care for populations at high risk for complications of infection.

Sharing data on infectious dis-

eases in ICE facilities would have wider public health benefits, since infections often spill over into the local community and lead to further transmission in the general public. Conversely, outbreaks in the community can seed outbreaks within ICE detention centers. Data on cases of vaccine-preventable infectious diseases among staff should also be reported, including for subcontracted employees who are often omitted from these data. The same arguments would apply to refugees and asylum seekers, including children, who are detained at for-profit and nonprofit facilities under the auspices of the Office of Refugee Resettlement.

A mechanism for enforcing requirements for data collection and public reporting for all vaccinepreventable infectious diseases would be necessary to support meaningful change. Specifically, public release of facility-level data on adherence to surveillance practices would be needed, including information on measures ICE has taken to remediate deficiencies in reporting at various sites. When facilities aren't in compliance with requirements, the agency would need to apply sanctions, with an option for contract termination, to ensure accountability.

Public reporting of data on outbreaks in detained migrant populations might support vaccination policies and other mitigation efforts. In many circumstances, detained adult migrants aren't offered immunizations such as influenza vaccines, despite having a high risk of vaccine-preventable infectious diseases while in custody. When vaccines are offered, migrants are often given limited information to help them make decisions about vaccination, coun-

seling or consent forms may not be in their primary language, and opportunities to discuss options with a trusted clinician may not be available. Systematic reporting of vaccine-preventable infectious diseases in this population could support policies requiring facilities to offer vaccines on the basis of measured risk of a particular disease and to take steps to prevent secondary infections (e.g., by expanding testing and upgrading ventilation). Vaccination policies would need to be informed by both the government and professional societies. In all scenarios, additional resources will be needed to support equal access to vaccines for all populations and access to health care more broadly.

A viable mandate for public reporting of vaccine-preventable infectious diseases in the detained migrant population would hinge on several ethical considerations. First, data collection — which would require medical evaluation and testing - must occur with the consent of each person and as part of a patient-centered encounter to minimize the risk of coercion. Second, data on infectious diseases should be deidentified and aggregated before public release, to protect patient confidentiality. If data cannot be sufficiently deidentified, data-use agreements with ethical oversight may be required, in some cases, to perform additional analyses to guide policy and outbreak responses. ICE's current Web-based weekly reporting of Covid-19 cases on a public dashboard is a model that could be extended to other infectious diseases. Third, all detained migrants should have access to robust and comprehensive health care, including being offered appropriate vaccination,4

and data on access to vaccines and vaccination uptake could be included on a public dashboard.

The high rate of vaccine-preventable infectious diseases among detained migrants in the United States was demonstrated before and during the Covid-19 pandemic. We believe mandating systematic infectious-disease surveillance and public reporting of cases of vaccine-preventable infectious diseases in detained migrants would be a first step toward improving the health of members of this vulnerable population, people who work at detention centers, and surrounding communities.

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- 1. Erfani P, Uppal N, Lee CH, Mishori R, Peeler KR. COVID-19 testing and cases in immigration detention centers, April-August 2020. JAMA 2021;325:182-4.
- 2. Lo NC, Nyathi S, Chapman LAC, et al. Influenza, varicella, and mumps outbreaks in US migrant detention centers. JAMA 2021;325:180-2.
- 3. Venkat H, Briggs G, Brady S, et al. Measles outbreak at a privately operated detention facility: Arizona, 2016. Clin Infect Dis 2019:68:2018-25.
- **4.** Foppiano Palacios C, Openshaw JJ, Travassos MA. Influenza in U.S. detention centers the desperate need for immunization. N Engl J Med 2020;382:789-91.
- 5. Lopez WD, Kline N, LeBrón AMW, et al. Preventing the spread of COVID-19 in immigration detention centers requires the release of detainees. Am J Public Health 2021; 111:110-5.

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