and should collect long-term mortality data. Similarly, the FDA now routinely reviews longer-term data for PCDs for which market authorization is being sought when they are intended to treat patients with PAD, and the agency requests that trials capture information on adjunctive antithrombotic therapy and medications indicated for patients with atherosclerosis.

We are fortunate to live in an era when numerous beneficial treatment options are available for patients with PAD. These patients should receive the best available medical therapy and guidance to promote healthy lifestyles, including weight control, smoking cessation, and exercise. For patients requiring further treatment to relieve symptoms, we know that PCDs improve blood flow to the legs and are more likely than uncoated devices to avert the need for repeat procedures to reopen blocked blood vessels. The benefits and risks associated with available PAD

treatment options should be carefully considered and discussed with individual patients. The use of a PCD may be the best treatment for some patients, particularly those judged to be at particularly high risk for restenosis and repeat femoropopliteal interventions. Additional data are needed to further refine optimal treatment strategies for patients on the basis of their risk profile for restenosis, incorporating patientspecific factors (e.g., presence of diabetes, endothelial dysfunction, increased platelet activity, or systemic inflammation) and lesionspecific factors (e.g., small-diameter vessels, long lesions, high plaque burden, or reduced distal

The FDA will continue to work with investigators, medical professional societies, and the device industry to facilitate data development and to communicate with the public as new information becomes available.

Disclosure forms provided by the authors are available at NEJM.org.

From the Center for Devices and Radiological Health, Food and Drug Administration, Silver Spring, MD.

This article was published on January 9, 2021, at NEJM.org.

- 1. Katsanos K, Spiliopoulos S, Kitrou P, Krokidis M, Karnabatidis D. Risk of death following application of paclitaxel-coated balloons and stents in the femoropopliteal artery of the leg: a systematic review and meta-analysis of randomized controlled trials. J Am Heart Assoc 2018;7(24):e011245.
- 2. Rocha-Singh KJ, Duval S, Jaff MR, et al. Mortality and paclitaxel-coated devices: an individual patient data meta-analysis. Circulation 2020;141:1859-69.
- 3. Food and Drug Administration. August 7, 2019 update: treatment of peripheral arterial disease with paclitaxel-coated balloons and paclitaxel-eluting stents potentially associated with increased mortality (https://www.fda.gov/medical-devices/letters-health-care-providers/august-7-2019-update
- -treatment-peripheral-arterial-disease -paclitaxel-coated-balloons-and-paclitaxel).
- **4.** Nordanstig J, James S, Andersson M, et al. Mortality with paclitaxel-coated devices in peripheral artery disease. N Engl J Med 2020;383:2538-46.
- 5. Secemsky EA, Kundi H, Weinberg I, et al. Association of survival with femoropopliteal artery revascularization with drug-coated devices. JAMA Cardiol 2019;4:332-40

DOI: 10.1056/NEJMp2031360
Copyright © 2021 Massachusetts Medical Society.

Doctor as Street-Level Bureaucrat

Elvin H. Geng, M.D., M.P.H.

ne slow afternoon in urgent care, the triage nurse came and found me in the doctors room to tell me a patient had arrived. He handed me a vitals sheet, wrote the patient s initials on the white board with pneumonia as the working diagnosis, and then described the situation. The nurse wore an expression of dispassionate exasperation that I have seen only on experienced clinicians. With a subtle eye roll, he asked, Do you know this patient?

She s been here a bunch of times. She s also mad as hell.

I didn t know her, and as the nurse talked, I formed a differential in my head. The patient had been living with HIV for a decade and she d had a CD4 count of about 200 cells per cubic millimeter 6 months ago and was not consistently on treatment (so opportunistic infections were possibilities). Two weeks earlier, she d been admitted with a diagnosis of bacterial pneumonia and dis-

charged after treatment (could it be recrudescence, or was the initial diagnosis incomplete?). She was not taking pneumocystis prophylaxis (so nosocomial or opportunistic infection?).

Her case was coming into focus: AIDS-range immunosuppression, not on antiretroviral treatment, unresolved pneumonia. I was already mentally making my case for admission. When the nurse got to the physical exam, however, the vitals were reassur-



ing: The heart rate is 80, BP is 120/80, the respiratory rate is 20, her temp is 98.0, she's satting 100%. With my enthusiasm for admission now in question, I went to see the patient.

I hadn't asked what she was mad about, but I was interested to see. She was sitting in the chair in the exam room, knotted up, squirming and restless picture of agitation. Before I could introduce myself, she cursed that no one was helping her. I tried my usual lines I m sorry things have been frustrating. and I m here to help. and We can figure this out together. as I tried to elicit some history of her respiratory symptoms. She flatly refused to answer, instead insisting that I call her case worker about housing. After a few more attempts to assess the pneumo-

patients stay on waiting lists for years. Urgent care was not the place to address housing.

nia, I grew a little impatient. Housing problems, though im-

portant, are generally intractable

But I had no other patients waiting, so I said I d check to see if a social worker was available, suspecting that most likely none would be. In the hall, the triage nurse, who d heard the yelling, asked, Everything OK in there? I forced a grin as I passed. Having worked in a safety-net hospital for most of my life, I take some pride in getting into difficult situations, solving the problem, and coming out unscathed, but I was having some doubts. As expected, no social workers were available.

I returned to the room, hoping my attempt would create enough goodwill to permit discussion of the pneumonia. But the patient resumed her vociferous demands that I call her case worker. Wow, I thought, I m really not getting anywhere this time. I plotted a second exit. But first I thought I would make one additional gesture I picked up the phone and dialed the number she wanted me to call. To my surprise, a woman answered.

Yes, are you the doctor? she said. So glad you called. I asked Ms. X to have a doctor call.

I was intrigued overstretched community organizations rarely answer phones immediately. The case worker explained that the patient had been living in a shelter and had waited for years on a list for housing, but the list was slated to be closed, with the remaining clients unable to be placed. The case worker had been calling the clinic but hadn t gotten through. The patient had been despondent and agitated since hearing about the list. A doctor's note of medical necessity might bump her up before the list closed for good.

Given the strong association between stable housing and viral suppression,¹ I said I was happy to write a note. I drafted it on the computer in the exam room, sent it to the case worker, and handed the patient a hard copy. The letter calmed the patient considerably. She moved to the exam table, and we had a conversation. She answered my questions about her pneumonia, and I was satisfied that it was resolving.

In 1960, political scientist Michael Lipsky coined the term street-level bureaucrats to describe people on the front lines of governmental services and systems police, teachers, social workers, and others who exercise a tremendous amount of discretion in their decisions, including biases, whether implicit or explicit. A police officer who pulls you over for rolling through a stop sign can issue you a verbal warning or a substantial fine. A teacher can punish misbehaving students or give them some latitude. Although not usually con-

DOCTOR AS STREET-LEVEL BUREAUCRAT

ceptualized in this way, doctors are, now more than ever, streetlevel bureaucrats. When a patient is 15 minutes late for an appointment, we decide whether to squeeze them in or reschedule. We can empathize with a patient over a long wait or admonish them for being testy. Surgeons can refuse cases when the patient has used illicit drugs that might increase the risk posed by a procedure, even if that procedure could be lifesaving. These decisions have particularly significant effects on people whose circumstances render them most those who have no vulnerable housing, have mental health diagnoses, are targets of structural racism, or have chronically poor access to care.

Often in making these decisions, when we're faced with a choice between defending the system and advocating for the patient, we instinctively choose the former. We are not supposed to deal with housing in urgent care, and diagnosing and managing acute medical problems would be impossible if we did so routinely. But there is no rule saying that on a day when no other patients are waiting we can t address housing issues in urgent care, just as we would if we saw the same in primary care a day or two later. In a system in which the greatest challenges are often not clinical interventions but fragmentation, access, and quality of care, doctors are uniquely able to

bend the rules to make things work for our patients.

As the encounter came to an end, we talked a bit. She explained how distressing it was to be homeless, especially as a transgender woman who faced harassment in the shelter system; she told me about the discrimination and vulnerability she felt and about her longing for a home. Is housing a doctor's problem? Perhaps not. But if the consequences of poor housing are no different from those of nonadherence or the wrong antiretroviral regimen, we can't afford to ignore it even if we can t single-handedly rem-

After the patient left, I wondered whether I had really helped her to get housed, and whether housing would improve her clinical condition. What other issues in her life mental illness, substance abuse, discrimination would continue to affect her even if housing were found? I don't know, and I never saw her again.

Nevertheless, the encounter left me with a feeling that I don t always have at the end of a day of urgent care. I had given someone the help they wanted. I had been able to do so because I was a doctor, but the help I gave had nothing to do with being a doctor. It had to do with being human.

We have come to see health care as a system, in which we ve found ways to standardize and simplify, to create productive routines. Quality-improvement skills are now taught in medical school. Yet despite our efforts, much of the system is still broken. Information systems are still not well linked. The price of insurance can be exorbitant. Unnecessary clinical documentation for billing saps our morale. Referrals are a labyrinth. Differential and discriminatory access that further disadvantages the poor, African Americans, and other minorities are unjust. Why assiduously defend the system if it has betrayed us and our patients? Though doctors may not be able to immediately fix the system, we may sometimes find ourselves uniquely positioned to resist its failings

and to thereby help both ourselves and our patients. Such resistance may offer some, if incomplete, redemption for the ways in which our systems have fallen short of our ideals.

Identifying details have been changed to protect the patient s privacy.

Disclosure forms provided by the author are available at NEJM.org.

From the Division of Infectious Diseases, Department of Medicine, and the Center for Dissemination and Implementation, Institute for Public Health, Washington University, St. Louis.

This article was published on January 9, 2021, at NEJM.org.

1. Clemenzi-Allen A, Geng E, Christopoulos K, et al. Degree of housing instability shows independent dose-response with virologic suppression rates among people living with human immunodeficiency virus. Open Forum Infect Dis 2018;5(3):ofy035.

DOI: 10.1056/NEJMp2019939
Copyright © 2021 Massachusetts Medical Society.