it is appropriate to charge a fee, just as logging companies pay "stumpage" fees and oil companies pay royalties. (A perfect fee would be calibrated to the extent of antibiotic resistance caused by each use; a practical fee, which is what we propose, would be based on the volume of antibiotics used.)

A user fee would have four important advantages over a ban. First, it would be relatively easy to administer, since it could be imposed at the manufacturing or importing stage.

Second, a user fee would deter low-value uses of antibiotics. Farms with good substitutes for antibiotics — for example, vaccinations or improved animal-management practices — would be discouraged from using antibiotics by higher prices, whereas farms with a high incidence of infections would probably continue to use antibiotics. The idea is to allow the farmer or veterinarian to decide whether the antibiotic confers enough benefits to make it worth the higher price, rather than relying on the intrusive, indiscriminate hand of government.

Third, user fees would generate revenues that could help to pay for rewards to companies that successfully develop new antibiotics,[5] or to subsidize antibiotic-research investments, or to support antimicrobial stewardship and education programs. In effect, a user fee could help to restock and maintain the antibiotic cupboard, which is looking increasingly bare.

The benefits to human health would be substantial. By reducing the volume of antibiotics, a user fee would mitigate the pressure of selection and diminish the prevalence of resistant pathogens. In addition, it could support the introduction of new drugs. According to our calculations above, a 1% reduction in the usefulness of existing antibiotics could impose costs of $600 billion to $3 trillion in lost human health. It is vital to protect this essential resource.

A user-fee policy would similarly help agricultural production. Farms, no less than hospitals, suffer because of antibiotic resistance. Individual farms would benefit from a reduction in use of antibiotics by other farms and from the introduction of new drugs able to treat resistant infections.

The fourth key benefit of the user-fee approach, as compared with a ban, is international replicability. Resistant bacteria do not respect national borders. Although the United States would benefit from imposing user fees on its own, an even better approach would be an international treaty to recognize the fragility of our common antibiotic resources and to impose user fees to be collected by national governments. A treaty would level the playing field for agricultural producers while mitigating the disastrous overuse of antibiotics. Such a treaty would also have a chance of attaining international compliance, since governments would be motivated to collect the revenues. By contrast, a ban, which disadvantages local producers while providing no revenues to government, would be much less attractive to enforce.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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DOI: 10.1056/NEJMp1311479
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Elder Self-Neglect — How Can a Physician Help?

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Mr. L. is a 96-year-old widower with critical aortic stenosis and mild cognitive impairment who had become increasingly short of breath and exhausted over the course of several weeks and needed 3 hours to get dressed on the day of admission. A concerned neighbor brought him to the hospital. He is not a candidate for aortic-valve replacement owing to poor functional status and coexisting conditions, and after several days of gentle diuresis, he can barely walk across

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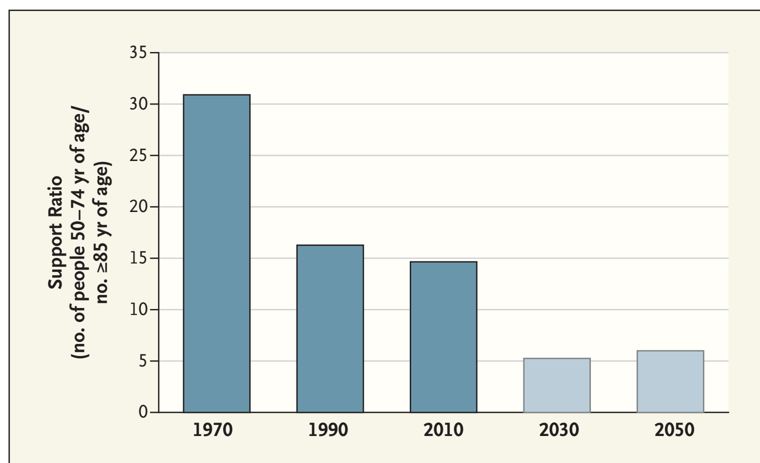

Oldest-Old Support Ratio.

The bars indicate the ratios of the number of persons 50 to 74 years of age to the number 85 years of age or older. Data are from Robine et al.[2] and the U.S. Census Bureau.

the room. At the request of the primary care physician, Mr. L.'s son flies in for a family meeting to discuss discharge options. Mr. L. has always insisted on living alone in his apartment.

Asked what is most important to him, Mr. L. declares, "I want to leave my apartment feet first. I'm going home." His son, who visits once a month, is very concerned about his father's ability to care for himself. He notes that his father's house is cluttered and contains piles of rotting food and even rat feces. Though Mr. L. admits that he has fallen several times and worries about breaking a hip, he insists, "I can take care of myself. I've been doing it my whole life." He rejects the idea of "strangers" coming into his house.

The primary care physician is unsure how to proceed but wants to respect Mr. L.'s choices if he's mentally competent and they're informed choices. But the physician worries that Mr. L. is in serious danger at home and feels obligated to prevent harm. How can the physician respond to these countervailing professional imperatives?

Clinicians often expend considerable effort caring for elders who do not attend to their own needs or well-being. Clinicians can only watch as their careful plans fall through. Home care teams cannot help if they are not allowed in the house. Reimbursement for physician house calls is low. Geriatric care managers, though extremely helpful, bill privately on a fee-for-service basis, not through Medicare or Medicaid, so they are rarely available to the very poor. Clinicians are legally required to report patients to adult protective services, but they can be more helpful if they also have the knowledge and skills to aid their patients directly. (Moreover, unlike child protective services, adult protective services agencies have little enforcement power and cannot enter patients' homes uninvited.)

We propose four practical approaches to the clinical care of self-neglecting patients. First, clinicians can avoid setting too high a threshold for safety. Second, physicians can try to persuade patients to accept interventions that further their goal of remaining in their homes. Third, physicians can most effectively help patients meet their goal of aging in place by going into their home. Finally, clinicians can work with patients and their caregivers to develop plans for worst-case scenarios.

As many as 1 in 10 older adults neglect themselves, and rates are higher among black Americans and the poor.[1] This rate will probably increase as the population ages, because American families have become smaller and more geographically dispersed. In the United States, persons 50 to 74 years of age provide the majority of informal caregiving to persons 85 years of age or older, and the ratio between the two groups is decreasing (see graph).[2] Elder self-neglect has serious consequences, including increased rates of hospitalization, nursing home placement, and death.[3-5]

Although cognitive impairment is common among self-neglecting elders, many such people do not have moderate or severe dementia and so are not considered legally incompetent to make health care decisions. A geropsychologist or geropsychiatrist can help in evaluating legal competency. When a court rules a patient incompetent, the clinical decision is easier, since we do not allow patients who clearly cannot make informed decisions for themselves to make dangerous or highly risky choices. But self-neglecting patients with cognitive impairment or mild dementia fall into a gray zone. These patients, like Mr. L., challenge clinicians because they have some capacity to

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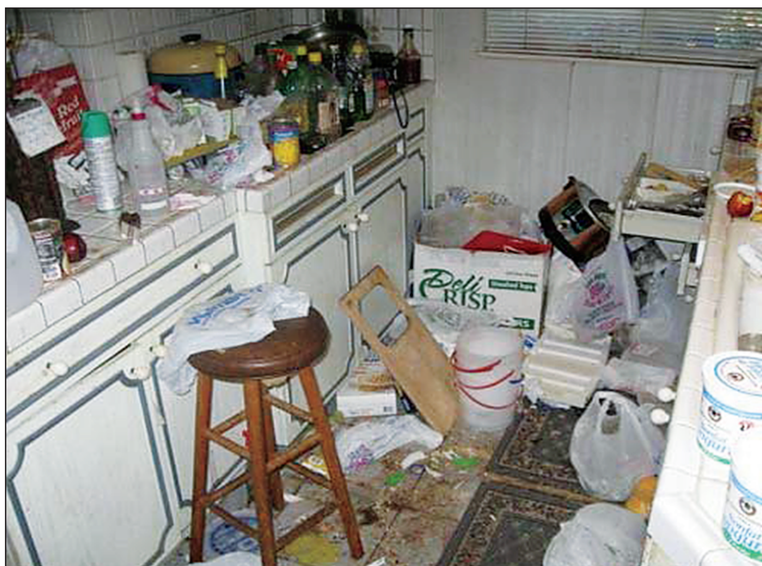

Unsanitary Conditions in an Older Adult's Kitchen.

San Diego County Sheriff's Department.

make decisions but cannot adequately care for themselves. Clinicians feel stuck between competing ethical concerns — respecting their patient's preferences and protecting the patient from harm.

In the United States, we place tremendous value on people's right to make medical and social choices that jeopardize their safety. Overriding a competent patient's informed choices "for his own good" violates a patient's dignity and autonomy. It is unfair — and raises concerns about ageism — to substantially raise the safety threshold solely on the basis of age. Moreover, safety is not the paramount goal for many elderly people and should not be seen as the sole criterion for decisions about their future. Clinicians might be guided instead by the principles of harm reduction, a concept that aims for incremental gains toward improved health and well-being. For example, Mr. L.'s apartment does not need to be entirely clear of clutter. Rather, father and son might together create pathways through the piles between the most important areas of the home. Danger to third parties must be considered, however, and if neighbors are at risk from the fire hazard or rodents, then clinicians must notify the fire department or public health authorities.

Clinicians can use persuasion in their conversations with self-neglecting patients to help them meet shared goals — in this case, remaining safely at home. By demonstrating a sincere understanding of Mr. L.'s goals, and becoming aligned with them, the physician can build trust. The physician can say, "I agree that it's really important to keep you in your home. I also understand that you don't like being in the hospital. Let's talk about what we can do so you can get home." By clearly understanding Mr. L.'s reluctance to accept outside help, the physician can side with the patient in favor of remaining at home rather than accepting institutionalization. The physician might ask, "Can you tell me what concerns you have about letting someone come into your home to help you?" and "Is there anything that would make someone coming into your home acceptable to you?"

A home visit by the physician may effectively address the patient's reluctance to allow strangers into the home. At a home visit, the doctor may be able to leverage his relationship with Mr. L. to introduce him to members of a home care team. Because of Medicare penalties for readmissions, it would be prudent for health care organizations to provide incentives to physicians to make home visits in such cases. The physician might also be able to persuade Mr. L. to allow neighbors or perhaps volunteers from a charity organization to provide needed assistance at home. Adjustments can be made. For instance, if Mr. L. does not want Meals On Wheels delivery people to enter his home, perhaps they could leave the food outside. Maybe Mr. L.'s son could put a garbage can with scented liners next to the microwave oven, and a neighbor could be enlisted to help empty the trash weekly.

A final key aspect of the care of neglected elders is creating plans for worst-case scenarios. The physician might say to Mr. L., "I want to help you prepare in case things don't go as well as we hope. What if you fell, broke your hip, and needed 24-hour care? How would you want your care to proceed?" Such advance care planning is a natural next step after the immediate care plan has been put in place. If Mr. L.'s goal is to remain at home for the rest of his life, even as his

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condition declines and despite the risk of serious harms such as hip fracture, hospice may be an appropriate intervention that aligns with his goal.

Although there is no single answer that applies to all self-neglecting older adults, these approaches may help physicians find the combination of creativity and pragmatism that lies at the heart of good geriatric care.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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DOI: 10.1056/NEJMp1310684
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