

Clinicians' Perspectives on Providing Emergency-Only Hemodialysis to Undocumented Immigrants

A Qualitative Study

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Background: In the United States, nearly half of undocumented immigrants with end-stage kidney disease receive hemodialysis only when they are evaluated in an emergency department and are found to have life-threatening renal failure ("emergency-only hemodialysis" [EOHD]). These patients experience psychosocial distress and much higher mortality than patients receiving regularly scheduled hemodialysis, but little is known about how providing EOHD affects the clinicians involved.

Objective: To understand clinicians' experiences providing EOHD.

Design: Qualitative study using semistructured interviews.

Setting: A safety-net hospital in Denver, Colorado, and a safety-net system in Houston, Texas.

Participants: Fifty interdisciplinary clinicians experienced in providing EOHD.

Measurements: Interviews were analyzed using thematic analysis. Outcomes included themes and subthemes.

Results: Four themes and 13 subthemes (in parentheses) were identified: 1) drivers of professional burnout (emotional exhaustion from witnessing needless suffering and high mortality, jeopardizing patient trust, detaching from patients, perceived lack of

control over EOHD criteria, and physical exhaustion from overextending to bridge care), 2) moral distress from propagating injustice (altered care based on nonmedical factors, focus on volume at the expense of quality, and need to game the system), 3) confusing and perverse financial incentives (wasting resources, confusing financial incentives, and concerns about sustainability), and 4) inspiration toward advocacy (deriving inspiration from patients and strengthened altruism).

Limitation: Whether the findings apply to other settings is unknown, and social desirability response bias might have reduced reporting of negative perceptions and experiences.

Conclusion: Clinicians in safety-net settings who provide EOHD to undocumented patients describe experiencing moral distress and being driven toward professional burnout. The burden of EOHD on clinicians should inform discussions of systemic approaches to support provision of adequate care based on medical need.

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An estimated 6500 undocumented immigrants in the United States have end-stage kidney disease (ESKD), and access to hemodialysis services for these patients is often restricted (1-3). Undocumented immigrants do not qualify for traditional Medicaid benefits and are excluded from both the 1972 Medicare dialysis entitlement program and the provisions of the Patient Protection and Affordable Care Act (4-6). Although coverage for their hemodialysis can be obtained via the Emergency Medical Treatment and Active Labor Act, which provides for coverage of medical services to undocumented immigrants using federal "emergency" Medicaid funds, this program provides coverage only when "such care and services . . . are necessary for the treatment of an emergency medical condition" (2, 7). To finance standard hemodialysis for undocumented patients with ESKD, some states have amended their emergency Medicaid programs (3, 4). In Arizona, for example, the administrative code states that "emergency services include outpatient hemodialysis" (8). In states without such amendments, payment from the emergency Medicaid program may be an incentive to provide hemodialysis to undocumented patients with ESKD only when they are critically ill, a situation termed "emergency-only hemodialysis" (EOHD).

To receive EOHD, a patient must first be evaluated in an emergency department (ED) and meet criteria for an emergent, life-threatening illness (such as high potassium level, electrocardiogram abnormalities, volume overload, or uremic symptoms) (4). There are no national guidelines addressing EOHD, so protocols vary throughout the country (9). For example, at Denver Health in Denver, Colorado, undocumented patients with ESKD receive permanent hemodialysis access (for example, arteriovenous fistula or graft) and, on average, 65 such patients present to the ED weekly and are admitted as inpatients for 2 consecutive hemodialysis sessions (4). In contrast, at Harris Health in Houston, Texas, patients initiate hemodialysis with a tunneled catheter, and roughly 100 receive single dialysis sessions, usually on a biweekly basis (4). Regardless of the protocol, EOHD is a radical departure from the usual standards of care for patients with ESKD. Compared with standard hemodialysis, EOHD is associated with a 14-fold higher mortality rate and is more costly due to

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frequent ED visits, inpatient hospital stays, and blood transfusions (2, 4, 10–12). Patients receiving EOHD describe a physical and emotional toll from weekly symptom accumulation (which is necessary to trigger an ED visit) and the frequency of experiencing imminent death (10).

Little is known, however, about how EOHD affects the clinicians providing care. Clinicians at safety-net centers, which provide “a significant level of health care and other health-related services to patients with no insurance or with Medicaid,” often face issues with limited resources and high patient volume, but these issues might be magnified or altered for clinicians providing EOHD (13–16). This study describes the experiences and perspectives of interdisciplinary clinicians providing direct care for undocumented patients who rely on EOHD.

METHODS

Study Design

We conducted semistructured interviews and used the Consolidated Criteria for Reporting Qualitative Health Research to report this study (17). The multi-institutional review boards of the University of Colorado Denver and the Baylor College of Medicine approved this study.

Participants and Setting

Interdisciplinary clinicians with at least 1 year of direct care of undocumented immigrants relying on EOHD were eligible. Participants were recruited via e-mail and flyers from 2 institutions providing a high volume of EOHD: Denver Health, a safety-net hospital in Denver, Colorado, and Harris Health, a safety-net system in Houston, Texas. The recruitment flyer and e-mail stated that the study would assess clinicians' perspectives on providing care for undocumented immigrants receiving EOHD. We used purposive sampling to include a range of demographic characteristics and professions (nephrology, internal medicine, emergency medicine, palliative care, nursing, and allied health). All participants provided written informed consent.

Data Collection

Three of the authors (S.R., N.H., and R.R.) conducted one-to-one in-person interviews with each participant from September 2016 to May 2017. The interview guide (Appendix Table, available at Annals.org) was based on a literature review of EOHD studies, and all participant comments were in the context of conversations about EOHD for undocumented immigrants with ESKD (2, 10, 18–22). Interviews were audio-recorded, transcribed, and analyzed, and additional interviews were conducted until thematic saturation was achieved (23).

Data Analysis

Interviews were analyzed between October 2016 and August 2017. Transcripts were imported into ATLAS.ti, version 8.0.27.0 (Scientific Software Development), for analysis using thematic analysis and principles of grounded theory (24, 25). Two of the authors

Table 1. Participant Characteristics

Characteristic	Participants (n = 50)
Mean age (SD), y	53.1 (10)
Female, n (%)	31 (62)
Race/ethnicity, n (%)	
Hispanic	11 (22)
African American	5 (10)
Asian	8 (16)
Non-Hispanic white	26 (52)
Mean time spent providing direct care (SD), y	8.7 (7.9)
Hospital, n (%)	
Denver Health	25 (50)
Harris Health	25 (50)
Discipline, n (%)	
Nephrology	
Physician	7 (14)
Nurse	8 (16)
Internal medicine	
Physician	10 (20)
Nurse	4 (8)
Physician assistant	1 (2)
Certified nurse assistant	1 (2)
Emergency medicine	
Physician	9 (18)
Nurse	3 (6)
Physician assistant	2 (4)
Certified nurse assistant	1 (2)
Palliative care	
Physician	1 (2)
Nurse	1 (2)
Other	
Dietitian	1 (2)
Clinical social worker	1 (2)

(S.R. and L.C.) read transcripts, inductively identified and coded concepts, grouped similar concepts into initial themes and subthemes, identified links among themes, and reached consensus on themes with 2 other authors (A.T. and R.H.) who also read transcripts. Except where noted, themes and subthemes represent views expressed by all or nearly all participants. To ensure rigor and credibility, preliminary findings were sent to participants, and their feedback was integrated into the final analysis (for example, by adding new concepts to descriptions of themes raised by participants) (26). Investigator triangulation and member checking helped to ensure that the themes reflected the full range and depth of the data (27).

Role of the Funding Source

The study was made possible by the Harold Amos Medical Faculty Development Program and a grant from the Doris Duke Charitable Foundation. Neither funding source had a role in the design, conduct, or reporting of the study.

RESULTS

The 50 participants included physicians ($n = 27$), nurses ($n = 16$), and allied health professionals ($n = 7$) (Table 1). The mean age was 53 years (SD, 10), and 31 (62%) were female. The mean number of years of clinical experience with EOHD was 8.7 (SD, 7.9). The mean interview duration was 30 minutes.

We identified 4 high-level themes: drivers of professional burnout, moral distress from propagating injustice, confusing and perverse financial incentives, and inspiration toward advocacy. These themes and the subthemes are described in the following sections, and illustrative quotations to support each subtheme are provided in Table 2.

Drivers of Professional Burnout

Participants felt emotionally and physically exhausted by daily organizational and system-level barriers to providing care. They reported witnessing unnecessary suffering, worrying about betraying patients' trust, and wrestling with becoming detached.

Emotional Exhaustion From Witnessing Needless Suffering and High Mortality

Participants felt anguish about patients, knowing that they were experiencing avoidable nausea, pruritus, edema, and shortness of breath at home until they met criteria for EOHD, and sometimes misjudging and waiting too long. A nephrology nurse commented, "I pray every morning before coming here that nothing bad will happen to my undocumented kidney failure patients." Participants were especially worried about patients' recurrent risk for imminent death and recounted many examples of patients requiring cardiopulmonary resuscitation (CPR). If a patient did not return for expected care, participants became anxious about whether the patient had died. They reported that patients felt better after hemodialysis, but the cycle then repeated itself.

Jeopardizing Patient Trust

Participants often felt forced to deny EOHD even for visibly ill patients, especially when hemodialysis chairs were not available. They believed that such denials gave the impression that they were uncaring and diminished their ability to establish trust, which they found demoralizing. An internal medicine physician stated, "There isn't a lot of trust between patients and providers because we're put in this situation where we can't provide what we want to in the way that we want." The term "compassionate hemodialysis" has sometimes been used to describe EOHD, but some clinicians believed that the term is misleading because patients must become critically ill every week to receive hemodialysis. For example, a nephrology physician reported, "Emergency hemodialysis makes us feel very inhumane and I don't like to call it 'compassionate hemodialysis.' We're torturing them."

Detaching From Patients

Participants felt guilty when denying patients hemodialysis and reported numbing themselves against feeling too much empathy for EOHD patients because they felt powerless to change the situation. They reported seeing a similar pattern in colleagues and worried about trainees becoming inured to avoidable human suffering. An internal medicine physician said that "turning patients away from hemodialysis is a huge as-

pect of physician burnout. Residents have to emotionally disassociate from their patients, and that's the opposite of what we're trying to teach."

Perceived Lack of Control Over EOHD Criteria

Participants found the criteria used to determine whether patients are eligible for EOHD to be vague and inconsistent, particularly noting that when the hemodialysis center was full, eligibility thresholds became more restrictive. Participants also said the criteria could vary across disciplines (for example, ED vs. nephrology), often without a clear rationale. An internal medicine physician assistant commented, "It's frustrating—criteria are based on potassium and uremia, but some patients get turned away even if they have a high urea." The seeming caprice of these variable interpretations sometimes caused open conflict between clinicians. For example, ED physicians were sometimes frustrated when nephrologists questioned their decisions about who met criteria for EOHD. Nurses felt unable to answer patients who asked why they were being denied EOHD when they had received it for the same criteria in the past.

Physical Exhaustion From Overextending to Bridge Care

Participants reported frequently working longer hours in an effort to make up for the unfairness they perceived their EOHD patients faced. A nephrology physician stated, "I will stay late if that means that I can get someone dialyzed. It's very emotionally draining." In addition, because EOHD patients often face challenges in accessing needed care beyond hemodialysis, participants often felt they should compensate for the inadequacies of EOHD by seeking other ways to demonstrate caring (for example, keeping patients admitted for nonemergency conditions, contacting philanthropic organizations to cover costs of medical equipment, and helping patients complete immigration paperwork).

Moral Distress From Propagating Injustice

As employees of safety-net systems, participants uniformly believed that making care decisions based on nonmedical factors, such as social status, was unethical. As a result, they felt justified in bending the rules to provide EOHD; however, gaming the system made them worry about their personal integrity. Clinicians also reported that the care for these patients was often rushed and focused only on the frequent life-and-death EOHD decisions, neglecting other important medical issues.

Altered Care Based on Nonmedical Factors

Participants were frustrated by EOHD because it reflects an overtly different and inferior standard of medical care based on nonmedical criteria. They also worried that EOHD policies normalized and could even generate disrespect for and unequal treatment of other disadvantaged groups. An emergency medicine physician believed that "if that's how we treat some patients,

Table 2. Themes, Subthemes, and Illustrative Quotations

Illustrative Quotations, by Themes and Subthemes	Participant
Drivers of professional burnout	
Emotional exhaustion from witnessing needless suffering and high mortality	
"The challenge for many health care providers is to witness a fair amount of suffering. It invites a feeling of helplessness."	Participant 30 (palliative care physician)
"People become hyperkalemic and can die in 2 seconds. They go into an arrhythmia. It just seems like we are playing Russian roulette to some extent with people's lives."	Participant 32 (internal medicine physician)
"You see patients that are awake and alert and talking, and then they come in a week later and they are basically in cardiac arrest and they die. That has been a really tough thing to experience. People that you know by name."	Participant 24 (emergency medicine physician)
Jeopardizing patient trust	
"Undocumented ESKD patients feel as if they really don't have good access [to care] and for a team to come in and begin talking. [Undocumented patients with ESKD] may have a low level of trust around what our motivation might be. Are we trying to limit costs versus have a discussion around what is best for them?"	Participant 30 (palliative care physician)
"To be honest with you, I feel like the patient is like, 'Okay, they're not on my side. They're making me leave.'"	Participant 31 (internal medicine physician)
"We do not do compassionate hemodialysis; I think that's unfair. We do emergent hemodialysis in an effort to ration our resources to those who need it the most, which reflects local and national attitudes and policies."	Participant 50 (emergency medicine physician)
Detaching from patients	
"There are times I feel like I have to go take a shower after I finish talking to them because I feel really stinky for having to tell them what I just had to tell them. They're crying, or their family is crying."	Participant 86 (social worker)
"It's often easy to think of these patients only as numbers: potassium, oxygen, and bicarb. Of course, they're actually people and they were living somewhere before they came to this city and they had a life before they needed emergent dialysis."	Participant 69 (emergency medicine physician)
Perceived lack of control over EOHD criteria	
"Nephrology will argue with you about whether or not they think somebody meets criteria. It would be a very interesting experiment to have the nephrologists down here making those calls, basically playing God."	Participant 91 (emergency medicine physician)
"The guidelines don't apply to them because the guidelines are meant for patients who receive 3-times-a-week dialysis. These folks don't have guidelines because nobody is able to set a standard for these patients."	Participant 76 (nephrology physician)
"Why did you pick that person over another to receive hemodialysis? I am not in the clinician's head. Who picks who to go to dialysis, but in my opinion I think it is inconsistent and I think it is a control mechanism."	Participant 21 (internal medicine nurse)
Physical exhaustion from overextending to bridge care	
"We try to take as many patients every day as we can and sometimes we even do 4 shifts just to accommodate them."	Participant 62 (nephrology nurse)
"Sometimes the medications aren't enough because they can't keep them down, so it's a matter of just being there for them; get them comfortable, sit with them in a chair, and hold their hand."	Participant 8 (internal medicine nurse)
Moral distress from propagating injustice	
Altered care based on nonmedical factors	
"It's kind of ridiculous that this group of patients have to go through a system that we know doesn't provide good care because of immigration paperwork."	Participant 15 (internal medicine physician)
"To be honest, it's sad but if these were documented patients and you were a facility that had this dual process where one population was getting amazing care and the other was not, there'd be huge problems."	Participant 50 (emergency medicine physician)
"It's kind of like they're treated like dogs in a lot of ways. It's really very heartbreaking."	Participant 91 (emergency medicine physician)
Focus on volume at the expense of quality	
"The number of undocumented ESKD admissions and discharges per day are really high and so you don't have time to really think about things beyond the emergent need for dialysis, but when they get sick, they really get sick and you're just totally overwhelmed."	Participant 35 (internal medicine physician)
"We have an overwhelming number of [undocumented EOHD patients with ESKD], and what we do is we do the best that we can."	Participant 58 (nephrology nurse)
"Some days, hospital medicine physicians might see 20 patients on the service. That's busy. Regardless of what patients you're seeing, if you're seeing 20 patients in a day, there's the challenge of, 'Did I look at everything? Did I miss something? Did I do everything I needed to?'"	Participant 18 (internal medicine physician)
"These patients are a lab or vital sign number, and there is no rhyme or reason as to why they get emergency hemodialysis or why they don't. They're just being plugged in and plugged out without regards to what they really need."	Participant 21 (internal medicine nurse)
Need to game the system	
"Those are hard decisions that they have to make. 'Do I go downstairs to the cafeteria and be noncompliant by eating high-potassium food so I can get hemodialysis?' It just seems like they are requiring people to make really hard decisions that can be life-threatening."	Participant 32 (internal medicine physician)

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Table 2—Continued

Illustrative Quotations, by Themes and Subthemes	Participant
"I try and 'sell it,' even when the potassium is a little borderline. 'Oh, it looks like they have a little bit of pulmonary edema,' even though they are not requiring oxygen and they are not short of breath."	Participant 10 (emergency medicine physician)
Confusing and perverse financial incentives	
Wasting resources	
"It has an extra layer of frustration for me because I know we work in a resource-limited setting and the fact that we're forced into using a lot of those resources for something that is avoidable."	Participant 38 (emergency medicine physician)
"I just hate saying, 'Well, you need to go to the ED and then you're going to sit and wait for however busy it is in the emergency department,' but it's like our emergency department costs are one of the biggest costs in health care and this is something that we could fix, but we don't."	Participant 40 (palliative care nurse)
Confusing financial incentives	
"So, you are asking to keep a patient sicker so you can make more money. I am sorry, that is not why I became a physician."	Participant 36 (emergency medicine physician)
"I'm split because you can't function without money . . . there has to be a way to serve the greater good."	Participant 21 (internal medicine nurse)
"It feels a little bit like we're part of a system that's manipulating that process to provide an avenue for their care and an avenue that will be reimbursed. We're just a stop in the process to facilitate payment in a lot of ways."	Participant 10 (emergency medicine physician)
"Emergency-only hemodialysis is a great way to go for a nonprofit institution that needs the money to take care of things that perhaps they wouldn't be able to otherwise."	Participant 12 (nephrology physician)
Concerns about sustainability	
"You can only transfer patients if they're stable, but then there's a person with a high potassium that is super short of breath, and we just have to transfer them. We just don't have the capacity."	Participant 85 (emergency medicine physician)
"They might be here 16 hours and there may not be any spots for dialysis, so they get transferred to a hospital where they can get dialysis, but then they have no way back home."	Participant 56 (emergency medicine nurse)
"The specific barriers are the volume, and that volume is based on what the state of Texas is closing their eyes to, which is, it costs more. Unfortunately, some politicians only look at things in the short term and then want to kick the can down the road."	Participant 86 (social worker)
Inspiration toward advocacy	
Deriving inspiration from patients	
"They're just so grateful to get dialysis . . . you can walk around the unit and they will come and say, 'Hi' . . . so even though they have to go through this, which I feel is difficult, I mean they are so appreciative and it just, it makes you want to continue doing what you do."	Participant 77 (nephrology physician)
"It's something that makes you step back and say, 'Gosh, what if I had to live that life . . . and only felt good half the time that I was home because of my chronic illness.' It's really amazing that they can do that and keep a positive attitude."	Participant 18 (internal medicine physician)
"They have kind of rekindled my love for taking care of people because they are so sweet and so kind and so thankful and so nice."	Participant 8 (internal medicine nurse)
Strengthened altruism	
"Having seen how sick they have gotten and how much they are contributing to society . . . these are people that are holding jobs . . . they contribute to our society. So, I absolutely think that they deserve the standard of care that we would provide to anyone else."	Participant 24 (emergency medicine physician)
"I think that we're an integral part in helping the patient because they don't have anybody else that will help them and they find security when they see us."	Participant 62 (nephrology nurse)
"I really wish that legislators would just come and see. I don't think that they understand how tragic it is. I don't think that they understand how easy it would be to fix."	Participant 43 (internal medicine physician)

ED = emergency department; EOHD = emergency-only hemodialysis; ESKD = end-stage kidney disease.

that's a strong message about how we see patients . . . some are worthy and some are not."

Focus on Volume at the Expense of Quality

Participants reported having an "overwhelming number" of EOHD patients and feeling pressured to process them quickly, including by ignoring important non-EOHD-related laboratory or symptom abnormalities. An internal medicine certified nurse assistant com-

mented, "There are people who get neglected because they're here every week. Some say, 'They're hemodialysis patients, they'll be fine,' but they should be cared for the same way as you care for any of your other patients."

Need to Game the System

Participants reported gaming of the system among both patients and professionals. They described desperate patients who deliberately elevated their labora-

tory values by consuming high-potassium foods because dangerous values are typically given higher priority for EOHD. An emergency medicine physician stated, "Some of them game the system. I'd be doing the same damn thing if I had to come in and act like I was more short of breath or eat a couple of bananas to make my potassium go up." Participants were especially conflicted about having to resort to strategies to increase their patients' likelihood of receiving EOHD, such as exaggerating symptoms and laboratory values. For example, an internal medicine physician said, "We were told to put all hyperkalemia as emergent or severe even if it was 5.0 mEq/L, which I typically wouldn't call emergent hyperkalemia. Are we being honest in how we're reporting things?"

Confusing and Perverse Financial Incentives

Participants saw EOHD as an inefficient and unsustainable use of hospital and system resources, though some also believed that it reflects a rational, albeit unethical, response to perverse underlying incentives.

Wasting Resources

Participants reported frustration at the repeated unnecessary use of resources in the ED to screen patients for critical illness (for example, blood tests, electrocardiography, and chest radiography) and recognized that EOHD is more costly to provide than standard hemodialysis. They also reported spillover costs of EOHD for the hospital's other patients. An emergency medicine physician commented, "We give them emergent care, which costs so much more than if we just hook them up into regular hemodialysis, in which case their quality of life would be better, our cost would be lower, and they wouldn't be clogging up the ED and our hemodialysis chairs."

Confusing Financial Incentives

Many participants were uncertain about financial policies around EOHD and whether health systems made or lost money when providing it. An internal medicine physician said, "There is a revenue stream from those patients. Is it technically enough to cover their costs? That analysis is complex and I hear varying things. I don't know what's true." Some felt disillusioned because they perceived that EOHD was lucrative for the hospital despite being bad for patients, and others rationalized the system by noting that revenue from EOHD could be used to support other services.

Concerns About Sustainability

Participants believed that the system supporting EOHD would eventually collapse due to ineffective use of resources, unclear payment structure, and medico-legal risk. Participants recalled multiple examples of transferring critically ill patients to distant hospitals because no local hemodialysis chairs were available. An emergency medicine physician reported, "We had 2 young patients come in back-to-back, both of them just about ready to code because they were so short of

breath. They [nephrology] said, 'We don't have hemodialysis overnight, you have to transfer them.' Transferring these patients is terrible."

Inspiration Toward Advocacy

Despite the challenges described, participants felt inspired by their EOHD patients, which strengthened their sense of professional altruism and responsibility and also motivated them to advocate for better care.

Deriving Inspiration From Patients

Participants were inspired by their patients' resilience, kindness, and gratitude. They described patients surviving longer than expected and continuing to work manual labor jobs despite their diminished health. An internal medicine physician stated that "they are like warriors . . . but they don't have an option." Some were surprised by patients' expressing appreciation despite the avoidable suffering they experienced.

Strengthened Altruism

Participants reported that caring for EOHD patients presented opportunities for acting on their best instincts and motivated them to advocacy. An emergency medicine physician said, "I would like to see them be treated similarly to any patient needing hemodialysis. It would be a really strong message to staff about what we stand for . . . do the right thing . . . If we lose a lot of money because we're providing more compassionate care, the city and our partners will not let us go under."

DISCUSSION

Emergency-only hemodialysis is known to be harmful to patients and more expensive than regularly scheduled hemodialysis, but little is known about its effects on the clinicians providing it (4, 12). In this qualitative study, we found that clinicians providing EOHD for undocumented immigrants in safety-net hospitals experienced several key drivers of professional burnout as well as moral distress related to feeling forced to provide substandard care. They also were frustrated by a perverse payment model and inappropriate use of resources associated with providing EOHD. Yet, they felt a strong sense of admiration for their EOHD patients, which motivated them to advocate on their behalf.

Several of our findings are of particular interest, given this cohort of clinicians working in high-volume safety-net centers. First, despite their considerable experience, clinicians in our study were frustrated by the vagaries of determining whether patients met criteria for EOHD. As a result, they often felt compelled to game the system to benefit their patients but then found themselves questioning their own integrity. This reflects a complex policy issue. To receive federal emergency Medicaid payment for EOHD, clinicians must document that the patient is critically ill and requires EOHD. The criteria to receive EOHD vary among sites and are not always explicit, but they typically include both objective findings, such as laboratory val-

ues, and more subjective symptoms related to volume overload (for example, dyspnea) and uremia (for example, nausea and vomiting) (4, 9). Clinicians described how they would sometimes exaggerate their undocumented patients' subjective symptoms or use lower laboratory cutoffs to justify EOHD, rather than turning them away when they did not yet meet criteria only to see them return the following day. Even more worrisome is that they reported that patients sometimes risked death by consuming foods high in potassium to raise their levels above the threshold, and many reported needing to perform CPR on patients who had miscalculated or waited too long between ED visits. Unfortunately, although gaming the system is a well-described strategy for addressing coverage limits, it has several disadvantages, including questionable legality and possible loss of public trust in the integrity of the profession, along with the self-doubt our participants described (28).

Second, our study confirms others that have found that clinicians providing care for patients with complex needs in safety-net settings face high rates of professional burnout (13-15) and that insufficient resources for patient care is a primary source of stress (15). The clinicians in our study provided additional detailed and nuanced descriptions of how repeatedly witnessing avoidable human suffering leads to depersonalization and other factors that contribute to burnout. They also vividly described a related phenomenon, which we labeled "moral distress," caused by being required to provide substandard care with immediately recognizable negative effects on individual patients. Moral distress is traditionally defined as knowing the morally right thing to do but being unwilling or unable to do it because of external constraints. In the nursing literature, where it was first described, the term was applied to the experience of nurses who were ordered to carry out actions they perceived as unethical (29). The American Nurses Association Code of Ethics notes that moral distress "threatens the core values and moral integrity" of nurses (30). More recently, moral distress has been described in other settings, including among physicians, and it has been associated with loss of empathy, job dissatisfaction, increased turnover, and worse patient outcomes (31, 32). The clinicians in our study described the provision of EOHD in terms that suggested it caused substantial moral distress. The decision to provide EOHD (rather than standard hemodialysis) for undocumented patients is made at the policy level rather than the individual-physician level, and hemodialysis cannot be provided by a single clinician in any event—it requires a team and institutional support. As a result, these clinicians felt that they were helpless to change the situation and were forced to continue providing what they recognized as substandard care. Although extraordinary in its severity, this circumstance reflects a common set of ethical issues in which "decisions about resource allocation challenge the physician's primary role as patient advocate" (33). Many of the opinions in the American Medical Association Code

of Medical Ethics address moral distress, emphasizing the need to alleviate it at a systemic level (34).

Third, our study highlights the unintended consequences and ethical dilemmas health care policy can generate. Clinicians providing EOHD regularly struggled to reconcile ethical principles of justice, beneficence, veracity, and respect for autonomy in a policy environment they believed supported none of these values. They reported being required to care for undocumented immigrants with ESKD by using a different and inferior set of standards. They also described regularly witnessing their patients struggle with debilitating symptom accumulation, knowing these symptoms could be avoided with standard hemodialysis.

Finally, recognition of their patients' vulnerability and their own inability to change the situation alone led these clinicians to consider potential advocacy approaches for addressing the needs of undocumented patients with ESKD. The codes of ethics of the American Medical Association (35) and the American Nurses Association (30) emphasize beneficence and justice by guiding physicians to "support access to medical care for all people" and nurses to practice with "compassion and respect for the inherent dignity, worth, and unique attributes of every person." The American Medical Association code (principle III) also calls on physicians to "respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient." As frontline providers of care, clinicians have a unique lens and a credible voice that can help shape policy on issues related to insurance coverage (36). For example, in Houston, clinicians and legislators established the Riverside Clinic, a county-funded clinic to provide standard hemodialysis to the majority of Houston's undocumented patients with ESKD (12, 18).

Our study generated diverse and in-depth insights because interviews were conducted until data saturation, and our findings were confirmed via member checking and investigator triangulation. However, there are limitations. Clinicians were recruited from 2 academic safety-net centers, and the transferability of findings to other centers is uncertain. Some themes may not have been captured because EOHD protocols vary throughout the country; there may be additional or different challenges faced by clinicians where policies are more or less restrictive. In addition, social desirability bias may have caused some participants to censor negative views or attitudes about caring for undocumented immigrants requiring EOHD. We also studied clinicians only; future studies may assess the perspectives of legislators, as well as the perspectives of patients' family members and other caregivers and the burden of EOHD on them.

In summary, a diverse group of experienced clinicians in safety-net settings reported experiencing several important drivers of professional burnout from providing EOHD to undocumented patients and moral distress from feeling compelled to perpetrate injustice and provide inferior care due to a nonmedical factor (immigration status). These clinicians also admired

EOHD patients and were driven toward advocacy for them because of the patients' humanity and vulnerability and because the clinicians recognized their own inability to address this policy problem alone. The burden on clinicians of providing EOHD should inform policy discussions and systemic approaches to support provision of an adequate standard of care to all patients with ESKD.

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Appendix Table. Interview Guide

In what capacity have you provided care for the emergency-only hemodialysis community?

Tell me about your experience providing care for the emergency-only hemodialysis patients.

What observations have you made about this model of care?

Are there any challenges (or barriers) that you see using the emergency-only hemodialysis model of care?

Have you seen any examples of how this model of care impacts the hospital system?

Give me an example of how this model of care impacted a patient you cared for.

In what way might things have been different had the patient received routine (thrice-weekly) hemodialysis?

Give me an example of how this model of care has impacted you.
