

Beyond a Purple Journal: Improving Hospital-Based Addiction Care

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Rosa* was one of my first patients as an intern rotating at the county hospital. Her marriage had disintegrated years earlier. To cope with depression, she hid a daily ritual of orange juice and vodka from her children. She worked as a cashier, until nausea and fatigue overwhelmed her.

The first time I met her she sat on the gurney: petite, tanned, and pregnant. Then I saw her yellow eyes and revised: temporal wasting, jaundiced, and swollen with ascites. Rosa didn't know that alcohol could cause liver disease. Without insurance or access to primary care, her untreated alcohol use disorder (AUD) and depression had snowballed for years.

Midway through my intern year, I'd taken care of many people with AUD. However, I'd barely learned anything about it as a medical student, though we'd spent weeks studying esoteric diseases, that now—9 years after medical school—I still have not encountered.

Among the 28.3 million individuals in the United States with AUD, only 1% receive medication treatment.¹ In the United States, unhealthy alcohol use accounts for more than 95,000 deaths each year.² This number likely under-captures alcohol-related mortality and is higher now given recent reports of increasing alcohol-related deaths and prevalence of unhealthy alcohol use, especially among women, younger age groups, and marginalized populations.³⁻⁵

Rosa had alcohol-related hepatitis, which can cause severe inflammation and liver failure and quickly lead to death. As her liver failure progressed, I asked the gastroenterologists, "What other treatments can we offer? Is she a liver transplant candidate?" "Nothing" and "No" they answered.

Later, I emailed the hepatologist and transplant surgeon begging them to reevaluate her transplantation candidacy, but they told me there was no exception to the institution's 6-month sobriety rule.

Maintaining a 6-month sobriety period is not an evidence-based criterion for transplantation. However, 50% of transplant centers do not perform transplantation prior to 6 months of alcohol abstinence for alcohol-related hepatitis due to concern for return to drinking after transplant.⁶ This practice may promote bias in patient selection for transplantation. A recent study found that individuals with alcohol-related liver disease transplanted before 6 months of abstinence had similar rates

of survival and return to drinking compared to those who abstained from alcohol for 6 months and participated in AUD treatment before transplantation.⁷

There are other liver transplant practices that result in inequities for individuals with substance use disorders (SUD). Some liver transplant centers consider being on a medication for opioid use disorder a contraindication for transplantation—even if the individual is in recovery and abstaining from substances.⁸ Others mandate that individuals with alcohol-related liver disease attend Alcoholics Anonymous (AA) meetings prior to transplant. While mutual help groups, including AA, may benefit some individuals, different approaches work for different people.⁹ Other psychosocial interventions (eg, cognitive-behavioral therapy, contingency management, and residential treatment) and medications also help individuals reduce or stop drinking. Some meet their goals without any treatment. Addiction care works best when it respects autonomy and meets individuals where they are by allowing them to decide among options.

While organ allocations are a crystalized example of inequities in addiction care, they are also ethically complex. Many individuals—with and without SUD—die on waiting lists and must meet stringent transplantation criteria. However, we can at least remove the unnecessary biases that compound inequities in care people with SUD already face.

As Rosa's liver succumbed, her kidneys failed too, and she required dialysis. She sensed what was coming. "I want everything...for now. I need to take care of my children." I, too, wanted Rosa to live and see her youngest start kindergarten.

A few days before her discharge, I walked to the pharmacy and bought a purple journal. In a rare moment, I found Rosa alone in her room, without her ex-husband, sister, and mother, who rarely left her bedside. Together, we called AA and explored whether she could start participating in phone meetings from the hospital. I explained that one way to document a commitment to sobriety, as the transplant center's rules dictated, was to attend and document AA meetings in this notebook. "In 5 months, you will be a liver transplant candidate," I remember saying, wishing it to fruition.

I became Rosa's primary care physician and saw her in clinic. Over the next few weeks, her skin took on an ashen tone. Sleep escaped her and her thoughts and speech blurred. Her walk slowed and she needed a wheelchair. The quiet fierceness that had defined her dissipated as encephalopathy took over. But until our last visit, she brought her purple journal, tracking the AA meetings she'd attended. Dialysis became intolerable, but not before Rosa made care arrangements for her girls. When that happened, she stopped dialysis and went to Mexico, where she died in her sleep after saying good-bye to her father.

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Earlier access to healthcare and effective depression and AUD treatment could have saved Rosa's life. While it was too late for her, as hospitalists we care for many others with substance-related complications and may miss opportunities to discuss and offer evidence-based addiction treatment. For example, we initiate the most up-to-date management for a patient's gastrointestinal bleed but may leave the alcohol discussion for someone else. It is similar for other SUD: we treat cellulitis, epidural abscesses, bacteremia, chronic obstructive pulmonary disease, heart failure exacerbations, and other complications of SUD without addressing the root cause of the hospitalization—other than to prescribe abstinence from substance use or, at our worst, scold individuals for continuing to use.

But what can we offer? Most healthcare professionals still do not receive addiction education during training. Without tools, we enact temporizing measures, until patients return to the hospital or die.

In addition to increasing alcohol-related morbidity, there have also been increases in drug-related overdoses, fueled by COVID-19, synthetic opioids like fentanyl, and stimulants.¹⁰ In the 12-month period ending April 2021, more than 100,000 individuals died of drug-related overdoses, the highest number of deaths ever recorded in a year.¹¹ Despite this, most healthcare systems remain unequipped to provide addiction services during hospitalization due to inadequate training, stigma, and lack of systems-based care.

Hospitalists and healthcare systems cannot be bystanders amid our worsening addiction crisis. We must empower clinicians with addiction education and ensure health systems offer evidence-based SUD services.

Educational efforts can close the knowledge gaps for both medical students and hospitalists. Medical schools should include foundational curricular content in screening, assessing, diagnosing, and treating SUD in alignment with standards set by the Liaison Committee on Medical Education, which accredits US medical schools. Residency programs can offer educational conferences, case-based discussions, and addiction medicine rotations. Hospitalists can participate in educational didactics and review evidence-based addiction guidelines.^{12,13} While the focus here is on hospitalists, clinicians across practice settings and specialties will encounter patients with SUD, and all need to be well-versed in the diagnosis and treatment of addiction given the all-hands-on deck approach necessary amidst our worsening addiction crisis.

With one in nine hospitalizations involving individuals with SUD, and this number quickly rising, and with an annual cost to US hospitals of \$13.2 billion, healthcare system leaders must invest in addiction care.^{14,15} Hospital-based addiction services could pay for themselves and save healthcare systems money while improving the patient and clinician experience.¹⁶

One way to implement hospital-based addiction care is through an addiction consult team (ACT).¹⁷ While ACT compositions vary, most are interprofessional, offer evidence-based addiction treatment, and connect patients to community care.¹⁸ Our hospital's ACT has nurses, patient navigators, and physicians who assess, diagnose, and treat SUD, and arrange

follow-up addiction care.¹⁹ In addition to caring for individual patients, our ACT has led systems change. For example, we created order sets to guide clinicians, added medications to our hospital formulary to ensure access to evidence-based addiction treatment, and partnered with community stakeholders to streamline care transitions and access to psychosocial and medication treatment. Our team also worked with hospital leadership, nursing, and a syringe service program to integrate hospital harm reduction education and supply provision. Finally, we are building capacity among staff, trainees, and clinicians through education and systems changes.

In hospitals without an ACT, leadership can finance SUD champions and integrate them into policy-level decision-making to implement best practices in addiction care and lead hospital-wide educational efforts. This will transform hospital culture and improve care as all clinicians develop essential addiction skills.

Addiction champions and ACTs could also advocate for equitable practices for patients with SUD to reduce the stigma that both prevents patients from seeking care and results in self-discharges.²⁰ For example, with interprofessional support, we revised our in-hospital substance use policy. It previously entailed hospital security responding to substance use concerns, which unintentionally harmed patients and perpetuated stigma. Our revised policy ensures we offer medications for cravings and withdrawal, adequate pain management, and other services that address patients' reasons for in-hospital substance use.

With the increasing prevalence of SUD among hospitalized patients, escalating substance-related deaths, rising healthcare costs, and the impact of addiction on health and well-being, addiction care, including ACTs and champions, must be adequately funded. However, sustainable financing remains a challenge.¹⁸

Caring for Rosa and others with SUD sparked my desire to learn about addiction, obtain addiction medicine board certification as a practicing hospitalist, and create an ACT that offers evidence-based addiction treatment. While much remains to be done, by collaborating with addiction champions and engaging hospital leadership, we have transformed our hospital's approach to substance use care.

With the knowledge and resources I now have as an addiction medicine physician, I reimagine the possibilities for patients like Rosa.

Rosa died when living was possible.

**Name has been changed for patient privacy.*

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