

# Questionable Admissions

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“I’ve been coughing real bad, Doc,” the man told me. He couldn’t seem to stop. His green sputum was tinged with blood. His lungs crackled. Although his fever had briefly abated, he still shivered beneath his rough hospital blanket.

Despite his illness, he looked relieved. Violent snow squalls erased the view of the city from the emergency department (ED) window. His blanket was pulled up to his armpits, exposing his feet at the end of his stretcher. The beginning of frostbite on his thick soles attested to the fact that this was his first time indoors in days. I did not need to be a senior resident to know he had pneumonia.

“Am I gonna get a bed upstairs?” he asked.

That was less clear.

Bed shortages were a constant at the large public hospital where I worked. At no time was that so obvious as in December. Over the course of the month, the internal medicine wards would fill with patients. Then the ED would fill with admitted patients who might spend days waiting for a bed upstairs.

“Put me in a cupboard,” a patient in the ED begged one night. “Let me lie in the hallway.”

But I couldn’t: the hallways upstairs were lined with beds, all of them already full.

My attendings were sent daily updates on the number of patients they had admitted and admonished to aim for fewer. They, in turn, admonished residents to discharge quickly and, whenever possible, prevent admissions in the first place.

One evening during my internship, an attending insisted that I discharge a woman. After a long stay, she had been scheduled to go home the next morning. My attending pointed out that her medical condition had resolved. “If she can go home tomorrow, she can go home tonight,” he said.

When I tactlessly relayed that conclusion to her, she burst into tears. She wasn’t ready, she said. Nobody would be home for her that night. I felt unsettled, but I couldn’t argue about her clinical stability.

Pressure came from all sides. Years later, when I was an attending myself, a nurse approached a resident and me as we prepared a discharge summary.

“You’re a good team,” she said.

“Thank you,” I said, feeling pleased. “We try to take care of our patients.”

“No,” she clarified. “I mean you get patients out.”

We were part of a broader movement. Between 1980 and 2006, the average length of stay for U.S. patients admitted with heart failure was cut nearly in half, from 10.1 days to 5.1 days. During the same period, average stays for women admitted for childbirth dropped from 3.8 days to 2.1 days. Cataract surgery once required an average stay of 3.6 days. Thanks largely to technological advances, it is now an outpatient procedure.<sup>1</sup>

The tools that reduced hospital stays were not just technological but cognitive as well. In 1954, the psychologist Paul Meehl published a book arguing that mathematical prediction tools could outperform physicians’ clinical

judgments. Perhaps anticipating modern machine-learning techniques, he argued that decision tools could incorporate properly coded clinical judgments and largely eliminate biasing factors such as emotion and fatigue. His work influenced the young Daniel Kahneman, who developed an early decision tool to predict the success of Israeli army officers.<sup>2</sup>

Meehl’s work has been strikingly influential in medicine. Over the past several decades, numerous scoring systems have been developed to predict prognosis and reduce admissions. Seeing my patient with pneumonia, I almost instinctively checked for signs of sepsis using the then-current systemic inflammatory response syndrome (SIRS) criteria, looking for a fever, tachycardia, tachypnea, or an elevated peripheral white-cell count. I calculated the CURB-65 score, which assigns a point apiece for confusion, an elevated blood urea nitrogen level, tachypnea, and age greater than 65 years. Two points on the CURB-65 score would predict a risk of death within 30 days high enough to buy my patient admission into the hospital and out of the cold.<sup>3</sup> But he had one point at most, indicating a risk of death low enough for him to be safely treated as an outpatient. Beyond the score, he didn’t seem to need anything the hospital alone could provide. He didn’t need oxygen. He might need antibiotics, but he could clearly take them orally: he had devoured the sandwich I had found for him in the ED fridge.

I finished writing my note and went back to see him. He was sleeping beneath his thin blanket.

The wind whistled outside, its sound muffled by the window. I hovered by the heavy sliding door of his room for a moment, watching his chest rise and fall. The noise of the ED seemed to fade as I listened to the cadence of his breathing and the punctuation of his coughs. Despite what the algorithm told me to do, something kept me from letting him go.

I returned to the office where residents worked on their consults and entered orders for his admission. Other residents surrounded me, writing notes on their own patients. I said nothing to them. I didn't call my attending. When morning came, he would assert his control. But the night belonged to the residents. I went to see other patients and thought about what I would say.

I struggle sometimes with the seemingly inescapable logic of Meehl's conclusions. Decision rules do not get tired or hungry during late nights on call. They are not swayed by emotional connections with patients.

But they are not free from bias. The philosopher Ian Hacking suggests that though scientific and mathematical conclusions are not subjective, their development invariably reflects societal choices about what really matters.<sup>4</sup>

A 1995 article describes what had once been provided in hospital to mothers after delivery: "teaching and support on breastfeeding, infant care, women's health needs, and family planning, and . . . maternal and family psychosocial assessment."<sup>5</sup> Length of stay did not drop just because deliveries are safer. It

dropped because of a changing conception of what a hospital and its staff must provide. Clinical scores like the CURB-65 and modern machine-learning algorithms are objective in that their



application in similar cases will usually lead to the same conclusion. But they are designed around an unwritten bias: that the role of the hospital is nothing more than that of preventing narrowly defined medical outcomes.

Kahneman's decision rule for Israeli army officers met with mixed success. The score itself was only moderately effective, and the officers rebelled against the mechanical application of a scoring system. So he compromised by requesting that they first apply the scoring system, then close their eyes and rank recruits from one to five. To his surprise, the application of intuition after applying the rule was even more effective at predicting success than either method alone.<sup>5</sup> It is impossible to imagine modern medicine without decision-support tools. But perhaps part of the process of becoming a clinician lies in learning to see beyond the rules when the situation requires it.

Morning came to the ED. Overnight, the city had been entombed in snow. My attending arrived, his cheeks red from the cold. They lightened as we walked through the ED reviewing the patients admitted overnight. Finally, the two of us hovered outside my patient's room, standing at opposite ends of the sliding door that led in. I was tired and leaned heavily on the door for support as I presented his case. As I spoke, my attending's eyebrows arched slightly and his lips pursed, although his jaw didn't tense. He seemed puzzled more than anything. I finished.

"Why did you admit him?" he finally asked.

In my exhaustion, the excuses I'd prepared left my mind, and I blurted out the truth.

"Because he was sick and he had nowhere else to go."

Disclosure forms provided by the author are available at [nejm.org](http://nejm.org).

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