A Clearer View:
Humboldt Steps Out of the Fog of Medical Variation

California HealthCare Foundation

Lessons from the Field

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Pulling Back the Curtain

The drive north from San Francisco takes six hours; on a propeller plane, you can fly up in about an hour. Peer out the window on the descent for landing and you'll see the turquoise-green water of the sandy Eel River twisting its way to the ocean at Humboldt's edge. It meanders through high hills covered with second and third growth forests: only a few last virgin redwood groves remain.

Humboldt County is beautiful, rural, and remote — so isolated that residents sometimes joke they live "behind the redwood curtain."

Humboldt's three largest towns come into view, one after the other — first Fortuna, solidly working class; Eureka, the relatively cosmopolitan county seat; and Arcata, home of Humboldt State University. Each has its own small hospital. The population is widely scattered: of the 135,000 people who make Humboldt their home, fewer than half reside in the three main towns.

Sparse it is, but Humboldt has never lived life in miniature. The county is perhaps most famous for the "timber wars" of the 1990s, when loggers trying to protect their jobs squared off against environmentalists trying to protect ancient trees. One writer described Humboldt in those years as "a region riven by anger, economic dysfunction, and growing despair."

Yet through the efforts of several local leaders, community groups were formed to bridge cultural gaps and find common ground; a peace between the two camps, if sometimes uneasy, persists today.

Now, it's health care's turn.

A Leader in Innovation

Rates for elective surgery vary dramatically from doctor to doctor, from hospital to hospital, from region to region. That fact is not new.

What is unusual, perhaps unprecedented, is how one community in Northern California reacted to news that local elective surgery rates were shockingly high, in some cases more than double the statewide average.

Who would have thought that cold, foggy, sparsely populated Humboldt could emerge as a leader in health care innovation?

Rather than shrug off the statistics and carry on with business as usual, physicians and patients in rural Humboldt County came together to study

the numbers and discuss what, if anything, should be done about them.

The meetings were by turns angry, alarmist, contentious, thoughtful, reasoned, and cooperative. In the end, recommendations were made to improve communications between doctor and patient, and between physician and physician. Doctors and hospital executives agreed to at least consider them.

Far more remarkable than the outcome, though, is that the process occurred at all.

In 2011, the California HealthCare Foundation commissioned and published *All Over the Map: Elective Procedure Rates in California Vary Widely.* To accompany it, an interactive online map of California was posted, color-coded in shades ranging from palest yellow to darkest red. For two of the 13 procedures studied — elective coronary artery bypass graft (CABG), and carotid endarterectomy — the map displayed a distinctive dark red blotch in a far northwestern section of the state: Humboldt County.

On four other elective procedures — gall bladder removals, hysterectomies, knee replacements, and bariatric surgeries for the obese — Humboldt communities also rated far higher than average.

There may or may not be good reasons for those rates. But either way, community leaders were troubled.

"I've lived here for 50 years, my kids live here, they're raising their kids here and I'm concerned about the well- being of my children and grandchildren. If we have issues behind the rates, we have to look at them as a community," says Dennis Mullins, a labor market economist active with the Labor Market Information Division.

It also concerned him professionally: "When statistics like this come out it says something about the county. For creative people, business people who want to come here, this says it's not a healthy place. I don't think that's true. But you look at the data, you can't deny it's alarming."

People in Humboldt were also sensitized by a scandal over higher-than-usual surgical rates revealed a decade ago in nearby Redding, in Shasta County. Two doctors at a hospital then owned by Tenet Healthcare — since sold and renamed Shasta Regional Medical Center — were accused of performing hundreds of unnecessary angioplasty and heart bypass operations, even on patients with no heart disease. The FBI investigated and raided the hospital. While no criminal charges were ever filed, the doctors and the hospital between them paid hundreds of millions of dollars in civil settlements.

Humboldt's doctors have never been accused of anything remotely similar, and the numbers in Baker's report weren't anywhere near to that level of concern. Yet the Redding scandal hung in the air.

> *"People tend to look at these kinds of data and say, oh boy, the health care system is complicated, the insurance providers are complicated, the malpractice laws are complicated. So they throw up their hands and walk back away from it. This community's reaction is not something I normally see."*
>
> — LAURENCE BAKER, STANFORD UNIVERSITY HEALTH CARE ECONOMIST AND LEAD RESEARCHER

Crafting a Plan

Humboldt's Surgical Rate Project got its start in a taxicab stuck in a traffic jam on the way to Dulles International Airport outside of Washington, D.C. in 2012.

Martin Love and Betsy Stapleton had just left a health care conference, heading back to Humboldt. In the back of the cab, they discussed how to address the Baker report, which had just been released.

> *"If nobody is asking questions, maybe we end up with results that aren't quite right."*
>
> — LAURENCE BAKER

Love's knees were wedged up against the seat-back. He's tall and thin, with a close-cropped white beard, thin strawberry hair on top, and glasses. Stapleton sports a healthy mane of brown hair with just a touch of gray. They are longtime veterans of Humboldt's health care community, Love the CEO of a physician's group called the Humboldt Del Norte IPA, Stapleton a former nurse practitioner who serves as a volunteer advisor on the project.

In 2003, along with a Eureka physician named Alan Glaseroff, now at Stanford Hospital in Silicon Valley, they had begun a series of "Community Care Improvement" projects involving health practitioners and non-medical community members, almost all housed at the IPA. They'd overseen about two dozen of them, so had plenty of experience organizing such efforts.

Love and Stapleton came up with what they called The Surgical Rate Project: create three committees; one for community members, one for specialist physicians, and one for primary care practitioners. The plan was to bring in Baker to discuss his rate report, then invite clinical experts from outside the area to discuss the findings with each committee. The end goal was to produce recommendations to address the high rates, and hold a final meeting to reach consensus. Also brought in was Connie Stewart, who runs the California Center for Rural Policy, to help engage the non-medical community.

Of Humboldt's 240 practicing physicians and surgeons, about 65 chose to participate. Bruce Kessler, a Eureka internist, hoped more would participate, but notes that "Most physicians don't like to be under the microscope."

The meeting between Baker and the physicians was, as Love puts it, "rowdy." The focus was not on addressing high rates; all the energy was aimed at challenging the numbers themselves.

"A number of people stood up, said this is wrong, totally wrong," Love says.

"Baker," Love says, "was charming. He interacted, but he didn't back down one bit. He answered every reasonable question."

Baker himself says, "I don't think it was overly hostile."

The physicians questioned the data, some aggressively with a broad brush, some calmly and in sophisticated detail. The adjustments Baker used in his study to account for factors like sex, race, age, income, population size, insurance status, and hospitalization rates, when appropriate, drew the most criticism. Some physicians insisted Humboldt is different from other places in ways that make surgical rates high. Statistical adjustments are intended to enable apples-to-apples comparisons across the state.

Baker says he's okay with skeptics. In academia, "The conclusions you draw are regularly challenged. That's a

healthy process. If nobody is asking questions maybe we end up with results that aren't quite right."

He went through samples sizes, statistical significance, confidence intervals, and anything else he was challenged on.

"The group there was reasonably sophisticated. They were asking a lot of the right questions. There was opportunity for us to get on the same page where we could understand each other."

— LAURENCE BAKER

Several hospital executives also attended, from Mad River Community Hospital in Arcata, and St. Joseph Health System, with a hospital each in Eureka and Fortuna. The hospital business leaders listened attentively and didn't have much to say.

The Community Responds

The community group had a smoother experience. Of course, no one felt his job performance was under critical review. Its nine members included a congressman's district representative, a school district business manager, a union leader, and a general partner in an accounting firm.

The community group and the doctor groups were intentionally kept separate until the final meeting, Stapleton says. "The medical folks needed 'safety' to explore their issues, while knowing they would ultimately have to respond to the wider community. Community members needed to develop a secure information base and explore their understanding before they'd feel confident as equal partners in the conversation."

With the Redding scandal fresh in mind, several community members thought identifying "bad actors" among the surgeons might solve the problem. The data don't identify specific doctors or patients, Love told them, adding, "This is a quality improvement project, not a physician discipline project." The goal was to address the high surgery rates, not to conduct professional autopsies.

Love also cautioned the committee that there is "no right rate" for elective surgery. Baker's report used the California average for comparison purposes — the farther a region varied from the average, the more the rates there deserved a hard look. But average rates aren't necessarily the right rates. Humboldt's hysterectomy rates are higher than the California average, but lower than the national average. Said one doctor: "Maybe there aren't enough hysterectomies being done in California, I don't know."

"This is a quality improvement project, not a physician discipline project."

— MARTIN LOVE

The community group instead focused strongly on patient preferences in elective surgery, in the context of what's known as "shared decisionmaking." The idea: helping a patient choose among options in elective procedures, and truly leaving the final choice up to them, is essential to a healthy doctor-patient relationship. Plentiful research shows shared decisionmaking leads to less reliance on expensive, invasive surgical procedures and better outcomes in general. While that phrase can come off as perfunctory and bureaucratic, shared decisionmaking is intended to connote true dialogue.

Many conditions have only one treatment, and the patient decides either to get it or not. Shared

decisionmaking applies mainly to elective treatment. Some people think of elective surgery as unnecessary or even frivolous, like a cosmetic facelift. Another fairly new term, "preference-sensitive" treatment, applies when several options are available.

> *"I always thought I had engaged my patients in shared decisionmaking, but perhaps what I was doing more often was giving them my opinion."*
>
> — BRUCE KESSLER, MD, EUREKA INTERNIST

A non-cancerous enlarged prostate serves as a clear example. The painful condition can be treated with medication, with what's called watchful waiting, or with surgery to remove the prostate. Dr. Jack Wennberg, the founding editor of The Dartmouth Atlas of Health Care, which examines the patterns of medical resource intensity and use in the US, says surgery may deal most effectively with the pain, at the cost of incontinence or loss of sexual function.

"It's a matter of choice between sex and feeling better about urination," he says. "It's hard to say a decision like that should be up to the doctor."

Hysterectomy is another example. Fibroids on the uterus sometimes cause bleeding. Hysterectomy, the removal of the uterus, is an option, but precludes future childbirth. Often the condition can be treated with birth control pills.

"But guess what?" says Kim Ervin, a Eureka gynecologist and project participant. "Insurance doesn't cover that stuff." (The Affordable Care Act will require birth control pill coverage beginning in 2014.) The pills, Ervin says, cost $75.00 a month, and some women who want no more children would rather get the surgery than face the monthly bill. "Really, these are valid things," she says.

Of course physicians often can guide a patient's preference to square with their own, especially in a culture where patients feel cowed by a doctor's authority and presumed expertise. As recently as 2010, a Gallup poll found that 70% of Americans so respect their physicians that they never get a second opinion or do additional research on their options.

The community group approached their task with gusto. In all, 13 meetings were held between June and February 2012.

Second Opinions

Concurrent to the community group meetings, the clinical experts were meeting with the doctor groups. Finding those experts was difficult and some had to be imported from the Bay Area. Doctors who possessed both clinical expertise and a facility with statistics, along with an ability to communicate well amid contention, were harder to find than Love and Stapleton imagined. And there was some reluctance to get involved at all. One specialist told Stapleton bluntly that he did not want to risk his referral relationship with Humboldt doctors and so declined to participate.

> *"You start thinking maybe this is the way it's supposed to be, and over time you begin to diverge from the norm."*
>
> — CHRISTOPHER CODY, EUREKA PEDIATRICIAN
> IPA BOARD PRESIDENT

A crucial insight did emerge from those meetings: the communication between primary care doctors and the specialists could be improved. Some primary care doctors, when they referred patients to a surgeon or other specialist, said they thought they were seeking second opinions. Some of the specialists said they often took a referral from primary care as a recommendation for surgery.

"I was surprised to hear the surgeons say that when we primary care physicians refer someone for evaluation of abdominal pain they felt pressure to recommend a gall bladder operation," says Kessler.

Primary care doctors took some of the responsibility. "We may be biased toward the surgery without knowing it," says Kessler. Such misunderstandings "have been pointed out over the years," says Baker. The problem may have become worse, several participants said, with changes in health care that lead primary care doctors to spend less time in the hospital, and electronic health records where often nuance in communication is lost.

Local culture can also act as a strong force behind surgical rates, as noted in Dr. Atul Gawande's widely-cited 2009 New Yorker story, "The Cost Conundrum." Gawande detailed wildly different treatment rates in two nearby counties in Texas and the variation in local culture of medicine underpinning of each. Cody wonders if a similar phenomenon might be at play in Humboldt.

"If I see doctors referring to somebody for this procedure and I'm not doing it, and patients ask me why I'm not, the snowball can start rolling, you start thinking maybe this is the way it's supposed to be, and over time, without being in touch with others, you begin to diverge from the norm."

Doctor income also came up, and the discussions were frank.

"I spend a lot of time with my patients going over alternatives, and I don't get paid for that," says gynecologist Ervin. "The sad truth is that the system here and all over the country rewards me for doing hysterectomies." The solution, she says: "Stop rewarding procedures."

Despite years of talk about reforming income incentives in health care, 89% of payments still reward volume of services, according to a recent survey of commercial insurance payments by the group Catalyst for Payment Reform. Only 11% are "value based," meaning quality, waste, and avoidance of unnecessary procedures are taken into account.

The shrinking real-dollar reimbursement rates from Medicare and Medicaid were also cited as influential factors, even by surgeons like Luther Cobb, who say they avoid surgery when other options are available.

> *"When I got out of college you could buy a house for doing 50 cholecystectomies. Now to buy a house in Palo Alto, you've got to do 1,800, and here (in Humboldt) about 800."*
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> — LUTHER COBB, SURGEON

The Way Forward

All parties came together for the final meeting on a drizzly night, February 27, 2013, at a small Eureka conference center near the marina.

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>
> — LAURENCE BAKER

The meeting was cordial.

The community group made its recommendations:

- Preference-based procedures should be "based on the patient's informed preference, in consultation with the clinician."
- Shared decisionmaking "is best used in the primary care setting prior to referral to a specialist. Infrastructure will need to be developed to support integrating this process into primary care settings. Education will be necessary to integrate shared decisionmaking into the culture of community health care."
- On referrals, "a clear process and nomenclature distinguishing the intent of the referral be adopted across primary care physicians and specialists. The patient should be fully informed as to the intent of the referral."
- "A community consensus (should) be developed about proper steps for evaluation and treatment… based on the most up-to-date treatment protocols available and that there be a process where they are kept current and providers be prompted to use them."
- On Baker's data: "We believe the report is an accurate reflection of services being delivered and we encourage the medical community to embrace the data. We recommend that there be on-going monitoring of the data, initially by procedure, with a progression to the reporting of each individual surgeon's rates."
- On the non-medical community's role in health care: "It would be very difficult for any one provider or hospital to take a community-wide view. We therefore believe that this is the legitimate and necessary role of the community…there should be a place for community members to provide input and guidance in the on-going efforts that result from this project."

> *"If better patient engagement comes out of this, it will probably push their system in a better place. And if it turns out rates stay the same, as long as we're sure patients are engaged, maybe that's okay."*
>
> — LAURENCE BAKER

The meeting ended with everyone invited to attach little round green stickers to a giant piece of paper next to their favored recommendations. Most popular: implementing shared decisionmaking; clarifying the intent of referrals; and continuing discussions among doctors and with the community about other issues. Least popular: using a

community-group format to develop medical standards for evaluation and treatment. The doctors (and two hospital executives) seemed amenable, but how they apply the recommendations or anything else that came up in the project is yet to be determined.

The community has “no command and control levers, just nudges and moral persuasion,” says Stapleton.

Baker, though, is impressed. “The challenges the health care system faces, of which Humboldt is a microcosm, demand long term efforts. They didn’t stop with a bunch of questions; they looked at what would make the system better. That’s the unique part of it.

Author

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About the Foundation

The California HealthCare Foundation works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit us online at www.chcf.org.