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MEASURING UP

Data, rankings can lead to improved care for patients

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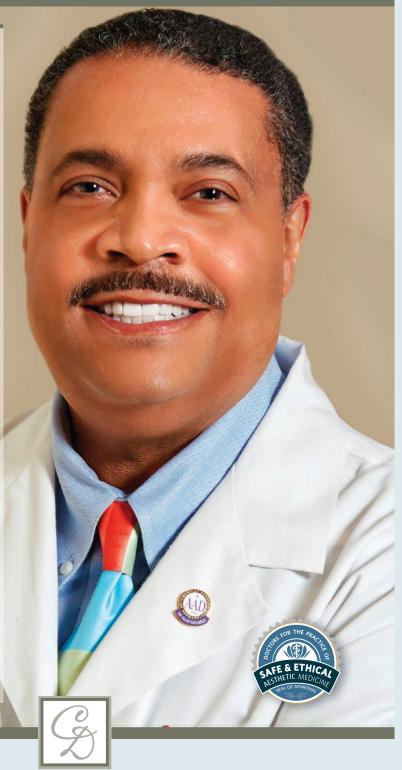
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A FACE OF A MINNESOTA DERMATOLOGIST

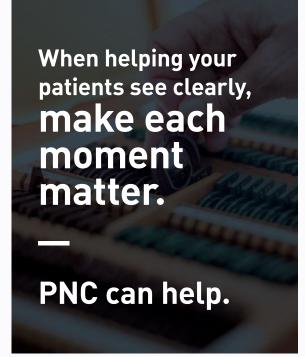
Recognized by physicians and nurses as one of the area's leading dermatologists, Charles E. Crutchfield III MD has received a significant list of honors including the Karis Humanitarian Award from the Mayo Clinic, 100 Most Influential Health Care Leaders in the State of Minnesota (Minnesota Medicine), and the First a Physician Award from the Minnesota Medical Association, for positively impacting both organized medicine and improving the lives of people in our community. He has a private practice in Eagan and is the team dermatologist for the Minnesota Twins, Wild, Vikings and Timberwolves. Dr. Crutchfield is a physician, teacher, author, inventor, entrepreneur, and philanthropist. He has several medical patents, has written a children's book on sun protection, and writes a weekly newspaper health column. Dr. Crutchfield regularly gives back to the Twin Cities community including sponsoring academic scholarships, camps for children, sponsoring programs for children with dyslexia, mentoring underrepresented students from the University of Minnesota, and establishing a Dermatology lectureship at the University of Minnesota in the names of his parents, Drs. Charles and Susan, both pioneering graduates of the U of M Medical School, class of 1963. As a professor, he teaches students at both Carleton College and the University of Minnesota Medical School. He lives in Mendota Heights with his wife Laurie, three beautiful children and two hairless cats.



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Rather than viewing quality domains or individual measures independently, we need to see that they work in concert to contribute to a complete picture of quality for each patient.

Mind the gap: where quality measures fall down

hysicians today are navigating a complex health care environment where our practices are being scrutinized by competing interests.

As one colleague described it to me, "I can't win; if I give antibiotics to the patient [with a viral illness] to improve satisfaction scores, I'm also dinged for poor antibiotic stewardship."

This is a familiar story to clinicians, especially those within large health care organizations, where often we feel like providing the best care is not only difficult, but inevitably prone to criticism. This hopelessness is a primary contributor to burnout, succinctly highlighted in the movie Office Space (1999), where the protagonist describes his reaction to draconian administrative oversight: "My only real motivation is not to be hassled."

How can we provide quality care in a practice environment where we are doomed to failure, knowing that quality is being further entwined with reimbursement as medicine shifts towards value-based care?

Health care quality has been defined by the Institute of Medicine as "the degree to which healthcare services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." This definition has been reiterated by the World Health Organization, the National Committee for Quality Assurance, and by the Agency for Healthcare Research and Quality, at times with somewhat different verbiage.

These same organizations likewise agree on the domains in which quality must be pursued: safety, effectiveness, efficiency, equity, patient-centeredness and timeliness. Four of these six parallel the four basic principles of medical ethics—the exceptions being efficiency (benefit relative to cost) and timeliness.

The domains can be at odds with each other. Explaining why overprescribing increases the patient's and the population's risk of harm can help satisfaction, but comes at the expense of efficiency, since educating each patient increases time and reduces patient volumes. The same is true when a patient needs a medication, but timeliness is sacrificed to the gods of insurance prior authorization, an administrative barrier completely outside of our control.

Rather than viewing quality domains or individual measures independently, we need to see that they work in concert to contribute to a complete picture of quality for each patient in each instance of care. If we view these quality domains as a map of individual islands in an ocean, the interactions of these domains sink in the water between them. We must close these gaps and envision quality as a dynamic continent in which various countries are competing for resources, with the most influential aspects of our work occurring at the shifting international borders.

Imagine evaluating diabetes care by glycosylated hemoglobin (HbA1c) alone, instead of by several quality domains in parallel, where a poor HbA1c may be related to patient not starting it immediately (patientcentered), despite the most effective treatment (insulin) being prescribed at the right time. In diabetes management, we must consider the balance of safety, effectiveness, efficiency and equity, as impacted by patient preference, insurance coverage and the high cost of insulin to patients.

We must advocate within our institutions, our specialties and our regulatory frameworks for a balance of measures in the context of whole-person care, as opposed to an independent evaluation of quality in each domain. Only when the sum of these domains is viewed as greater than any of its parts will physicians be able to comfortably practice medicine as partners in—rather than hostages to—quality measurement. MM

Zeke J. McKinney, MD, MHI, MPH, is the chief medical editor of Minnesota Medicine.





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It's the most demanding time of the year

BY SUZY FRISCH

There will be surgeries and appointments and patients for seeing and treating ... until the ball drops on New Year's Eve.

s the year comes to a close, most people are slowing down, taking time to celebrate the holidays with their friends, family and co-workers, but many physicians and other health care providers are getting busier and busier as patients try to fit in elective procedures before their deductibles reset on January 1. Many physicians expect and plan for the year-end surge, knowing that it's not the time to take vacation or expect many breaks during the workday.

Besides the fulfilled-deductible elective procedures, there are other reasons for late in the year volume: college students come home for winter break, eager to fix that bum knee, while snowbirds strive to fit in medical care before they head south for the winter. And then there are the first cases of people falling and hurting themselves on ice and snow.

"It's the perfect storm in the fourth quarter," says Edward Craig, MD, MPH, orthopedic shoulder surgeon and CEO of Tria Orthopaedic Center. "There is the seasonality of it, and then ambulatory centers nationally are trying to move patients from hospital surgical procedures to ambulatory and outpatient. This is coalescing to stress all four of our freestanding surgery centers."

Finding a way to fit in all of the desired elective procedures keeps Tria staff on their toes through the fall until the last days of the year. To handle the crush, surgeons and their teams start procedures early in the morning and into the

evening. Many physicians also come in on Saturdays to tackle about 30 extra cases. Procedures are varied, from elective hand surgery to total joint replacements.

Tria staff huddle after the holidays to talk about what worked and what didn't, considering what to adjust for next year's peak season. True planning starts in August to line up resources to meet the fourth-quarter demand, says Mary Haugen, RN, MA, director of ambulatory surgery center/orthopedic urgent care operations and nursing practice at Tria.

To help employees through the rush—and often the stress—Tria holds potlucks, offers hand and chair massages and puts up inspirational quotes. "We do work on resiliency ... so that our teams can function well throughout the day," Haugen adds.

Delaying care

The Hennepin Healthcare mammography team sees a big influx of patients wanting screenings in October in honor of breast cancer awareness month, closely followed by an extremely busy November and December. That's when women come in

droves to have suspicious lumps looked at or have other issues treated at the Comprehensive Cancer Center, says Leah Hahn, radiologic technologist and mammography supervisor.

Fearing the worst, many had put off diagnostic images or biopsies. Some just couldn't find the time or help with commitments like children or ill parents. Those who already hit their yearly deductibles—and are on the hook for none or just some of the cost—are trying to take advantage of their remaining insurance benefits.

Staff, including surgical oncologists Richard Zera, MD, and Ryan Deisler, MD, accommodate patients by packing their schedules and often coming in on their days off, Hahn says. "They are incredibly caring, and they understand that patients need to get this fixed now because it's their life, so they go the extra mile," she adds. "The downside is that it pushes their already full schedule behind."

Adding to the craziness, more of the women who have biopsies at that time of year are diagnosed with breast cancer, perhaps because of the delay. In a typical month, the team diagnoses cancer in 20 percent to 40 percent of patients. That rate jumped to 62 percent last December, and that's not unusual, Hahn says. "Patients have symptoms, but they wait until the end of the year," she adds. "It's scary for them to think they might have cancer."

The year-end rush is going strong at Allina Health, too, where surgeons see a 10 percent jump in procedures. Elective surgery is the main draw, including hernias, orthopedic issues and urological concerns, says Bill Evans, vice president of surgical services and orthopedics. That 10 percent gets difficult to fit in when its hospitals already are operating close to 90 percent capacity, he notes.

To meet demand, Abbott Northwestern Hospital in Minneapolis schedules patients for surgeries between 5 and 7pm during the week, as well as on weekends, says Eric Johnson, MD, a general surgeon who specializes in esophagus and stomach

"

It's always a struggle. It seems so arbitrary. Why are insurance renewal dates on January 1 when it could be based on enrollment dates or birth dates? It's a construct of insurance companies, and it's holding us hostage to this system."

- ERIC JOHNSON, MD ABBOTT NORTHWESTERN HOSPITAL, MINNEAPOLIS

conditions. Some physicians' groups, like those in anesthesia, don't allow vacations in December; the bulk of doctors also take on additional shifts and work overtime. too.

"It's always a struggle," says Johnson, west regional director of surgery for Allina. But he isn't as frustrated about the extra workload as he is the system that creates this rush end-of-year rush. "It seems so arbitrary. Why are insurance renewal dates on January 1 when it could be based on enrollment dates or birth dates? It's a construct of insurance companies, and it's holding us hostage to this system."

Bracing for it—or not

Many physicians are used to the fact that their year-end will be busy and so they brace for it. It often means longer hours, working through lunch and juggling schedules, says Phil Keith, MD, a dermatologist with Dermatology Consultants. Caseloads start ramping up in October; by November and December it's full throttle.

Once patients hit their deductibles, they start calling to have have a baseline skin cancer screening exam, or to have acne, warts, cysts, lipomas and skin tags treated. Others need a skin check before they leave Minnesota for the winter. With a 19-physician practice, Dermatology Consultants schedulers find ways to fit patients in, despite the mad rush in November and December.

"You don't want patients to wait for a month when they need to be seen in less than two weeks," Keith says. "So, we create more appointment times for them."

Mentally, the staff knows that it's going to be busy in the short-term, so they are primed to go above and beyond for patients. "I expect to be busy and take it one day at a time," Keith says. "It can be slower at other points in the year, so we try to embrace the busy season."

Other providers are seeing a shift. For M Health Fairview, the busy season has started to slow because fewer patients are hitting their high deductibles at all. What has been called "deductible release day" used to come around March, then May—and now not at all with the bulk of patients, says Krista Skorupa, MD, a family physician and vice president of medical practice for primary care.

"We have seen a change in the past several years," Skorupa says. "This was very commonplace where we would all do many physicals to prepare people for an elective surgical procedure at the end of the year."

Although more out-of-pocket costs and higher deductibles over the past several years have had an impact, Skorupa says, the fourth quarter continues to have the highest patient volume—which then drops off in January, when deductibles reset.

Unless M Health Fairview is the canary in the coal mine, or until insurance companies shift policy renewal dates away from a uniform January 1, the end of year rush seems here to stay. MM

Suzy Frisch is a Twin Cities freelance writer

Improving health for people with serious mental illness

BY MICHAEL TRANGLE, MD; JERRY STORCK, PHD; PAUL GOERING, MD; KAREN D. LLOYD, PHD, LP; MARCY OTYPKA, RN; AND WILLIAM BURLESON

In 2009, Minnesota 10x10 got underway with the ambitious goal of reducing the median years of life lost for people with serious mental illnesses (SMI) by 10 years within 10 years.

A number of activities were undertaken focused on educating, engaging and activating populations, groups and agencies.

Now, nearly 10 years later, we are pausing to review the data, look for early results and reflect on what we are learning.

According to numerous studies, people with SMI are at greater risk of premature death than the general population. This is largely due to complications from untreated, preventable chronic illnesses such as obesity, diabetes, hypertension and cardiovascular disease, which are aggravated by limited health choices associated with poverty, including poor nutrition, lack of exercise and smoking. Obesity and sedentary behavior are major risk factors for cardiovascular disease, diabetes and reduced life expectancy. Over half of adults with self-reported diagnosis of schizophrenia, bipolar disorder or depression are obese, while fewer than 20 percent of people with schizophrenia engage in regular moderate exercise, and people with schizophrenia consume fewer fruits and vegetables and



more calories and saturated fats than the general population.

Minnesota responds

Following the 2006, 2007 and 2009 publication by the Substance Abuse and Mental Health Services Administration of reports highlighting the early mortality of people with SMI, a group of Minnesota psychiatric leaders felt a strong need to see if this applied to their patients. They created a broad-based public/private workgroup that includes representatives from:

- Allina Health
- HealthPartners Medical Group
- Medica
- Mental Health Minnesota
- The Minnesota Department of Health
- The Minnesota Department of Human
- The University of Minnesota

 The earlier methodology was replicated for Minnesota. The data showed the me-

dian of years of life lost in Minnesota was 24 and the primary causes of death and the number of years lost were:

- Heart diseases (27 years of life lost)
- Unintentional injury (18)
- COPD (15)
- Cancer (15)

Based upon the Substance Abuse and Mental Health Services Administration recommendations and the Minnesota data, the workgroup created a best-practice bundle of modifiable risk factors. These risk factors were posted on the Minnesota Department of Human Services (DHS) website and then worked on by a host of advocacy groups, community mental health centers, multispecialty groups, specialty providers/ societies, health plans, residential treatment centers, group homes and patients/families. The factors included:

- Annual physical with primary care
- BMI <30
- No tobacco use

- No high-risk drinking/drug use
- BP≤140/90
- LDL≤129
- If does not have diabetes, fasting blood sugar (FBS) ≤125
- If has diabetes, HGB A1C <8.
- (These numbers have been updated as the evidence and guidelines changed over time. The initial unhealthy numbers were LDL>100; BP \geq 131/81; FBS \geq 126; Hgb A1C ≥ 8.)

Based on this information, in 2010, the workgroup set a goal of reducing the median years of life lost by 10 years within 10 years by engaging patients so these risk factors return to healthy zones.

Activities

Minnesota 10x10's primary strategy consisted of educating, engaging and activating populations/groups/agencies including: consumers/families, providers (mental health and primary care), advocates, community mental health centers (and their leaders), case managers, Assertive Community Treatment (ACT) teams, health plans, Minnesota Department of Health/DHS, outpatient mental health professions, hospitals with psychiatric units and the media.

Generally, each group/entity/agency was encouraged to voluntarily work on this issue and reach out through multiple channels to engage patients/families and other stakeholders/professions in their domains. The only mandated actions involved Assertive Community Treatment (ACT) teams who participated in two separate year-long collaboratives and were required to submit resulting data to DHS' Mental Health Information Systems.

Other activities included:

- Health plans used newsletters and telephonic care managers to engage patients and families, and used claims data to measure compliance with recommended primary care physicians visits (and lab draws).
- Minnesota NAMI used web communication and embedding in classes.
- The Mental Health Association of Minnesota encouraged individuals via their

- website, consumer advocates, conferences and Steps to Wellness handouts.
- Andrew's Residence, a large group home, ran a nutrition program and exercise program and tracked Minnesota 10x10 measures.
- Clinical "pearls"—summaries of the problem with recommended actionswere distributed to primary care physicians at HealthPartners (with a list of their patients with SMI).
- Minnesota Psychiatric Society promoted the initiative on websites and at conferences.
- Psychiatric units in hospitals embedded the Minnesota 10x10 approach into a best practice white paper on transitions; this approach was integrated into the work of a one-year collaborative designed to reduce re-admissions.
- Minnesota 10x10 was embedded in routine discharge bundles. This meant measuring and reporting on the bestpractice bundle of modifiable risk factors at discharge.
- Minnesota participated in a Tobacco Policy Academy sponsored by SMHSA to address the issue of the high percentage of adults with SMI who smoke or use tobacco. This led to work with the American Lung Association and the Minnesota Department of Health to focus attention and customize smoking prevention work and materials for adults with SMI.
- A number of the health care delivery systems developed tools and processes to monitor provider performance as a quality improvement measure.

Results

An early and important success is that HealthPartners Medical Group (HPMG) embedded Minnesota 10x10 in routine discharge bundles with promising results. The optimal bundle was:

- Annual exam by PCP
- BMI < 30
- No tobacco use
- BP <130/80
- LDL <100
- Fasting blood sugar <125 or
- Hg A1C <8

• No high-risk drinking/drug use The percentage of people with SMI achieving the optimal bundle went from 5.7 percent to 15.2 percent in June 2015.

However, HPMG's efforts have not been widely duplicated in other clinical systems.

A new look at the data

While it is too soon to measure the work of 10x10, the new data does reinforce the urgency of the problem and offers us some new directions.

A fresh analysis of the data for 2008-2012, when compared to 2003-2007, found that the median age of death for people with serious mental illness and over 18 enrolled in Minnesota Health Care Programs showed no change.

- 2008–2012 median age of death for people with SMI: 58 years old.
- Years of life lost, people with SMI compared to people without SMI: 25 years.

For both sampling periods, patients with bipolar affective disorders die the youngest (30 median years of life lost) with schizoaffective disorders being intermediate (24 median years of life lost) and schizophrenia having the least years of life lost (17 years). Generally, causes of death parallel that of the general population; however, people with SMI are succumbing sooner. Suicide and accidental deaths were higher, especially for those with bipolar disorder.

The top six causes of death for people with SMI were:

- Heart disease
- Cancer
- Unintentional injury
- COPD
- Suicide
- Diabetes

The 2008-2012 data also looked at results by specific diagnosis. The most frequent causes of death for people with bipolar affective disorders were consistent and continue to be unintentional injuries, tobacco usage, substance use disorders and possibly obesity. People with schizophrenia not only die later than those with bipolar disorders, their deaths are more related to typical chronic diseases that lead to the death of non-SMI population (although 15 years earlier) including cardiovascular

GOODPRACTICE IDEAS THAT WORK

disease, cancer and COPD. People with schizoaffective disorders had causes more consistent with schizophrenia. These findings suggest that different tactics and interventions are required for different conditions and their health impact.

Conclusion

Given the data and our experience implementing the program:

- While we made less progress than we hoped, these condition-specific findings may lead to more targeted (and hopefully successful) interventions.
- One startling finding from the Minnesota 10x10 collaborative was how frequently readmissions were for medical reasons, and how inpatient psychiatric units need to take responsibility for treating routine medical problems and more reliably communicating and handing off issues to primary care.
- Our initial intent was to reduce median age of death for the SMI population by 10 years within 10 years (10x10). We were confident in the strategies to effect mortality health measures, but were certainly naïve about the potential rate of change with such short timelines.
- We assumed incorrectly that we could treat those with serious mental illnesses as one homogeneous group and then focus on stratifying causes of heart disease, accidents, injuries, etc. and utilizing interventions for each of them based upon evidence and literature. In reality, people

who have bipolar affective disorder are dying considerably younger and the leading cause of death is unintentional injuries. This suggests that interventions may need to focus on preventing or nipping manic episodes—including impulsivity and substance abuse comorbidities—in the bud, while we focus on preventing and ameliorating chronic medical diseases for those with schizophrenia.

- Two additional opportunities were identified, the first being to build on the promising work with ACT teams as well as the large multispecialty groups.
- The development of Behavioral Health Homes and Certified Behavioral Health Clinics in the past few years offers the potential to improve outcomes, but there are only a few of these integrated care delivery systems available in Minnesota.
- We naively anticipated that the MDs (primary care physicians, psychiatrist, ACT teams) would routinely commit to measuring and reporting the bundle data (similar to the Diamond/Minnesota Community Measurement). This was not the reality.
- We hoped that between Substance Abuse and Mental Health Services Administration, National Quality Forum and the Centers for Medicare and Medicaid Services there would be a standard unifying national quality bundle in this area, but the reality is that this will not happen in the foreseeable future.

It is up to us in Minnesota to engage our community to intensify our actions and pursue funding and support to get the bundle measurement outcomes broadly and publicly displayed in Minnesota via Minnesota Community Measurement.

Countless articles end with the concept, "further research is needed." However, it is now well established that the population with SMI is dying early. We need urgency in building on these early efforts— during our data collection period, 2,326 Minnesotan's died prematurely. Delays in developing successful tactic have palpable implications. MM

Michael Trangle, MD, is a senior fellow, Health Partners Institute for Research & Education, HealthPartners Medical Group. Jerry Storck, PhD, is former supervisor of Mental Health Research and Evaluation, Minnesota Department of Human Services. Paul Goering, MD, is vice president, Mental Health and Addiction, Allina Health. Karen D. Lloyd, PhD, LP, is senior director, Behavioral Health and Resilience, HealthPartners health plan, Health Partners Medical Group. Marcy Otypka, RN, is senior quality consultant, HealthPartners health plan, HealthPartners Medical Group. William Burleson is communications manager, Community Supports Administration, Minnesota Department of Human Services.

To see the full report, visit the Minnesota 10x10 web page at https://mn.gov/dhs/ partners-and-providers/policies-procedures/ adult-mental-health/minnesota-10x10/

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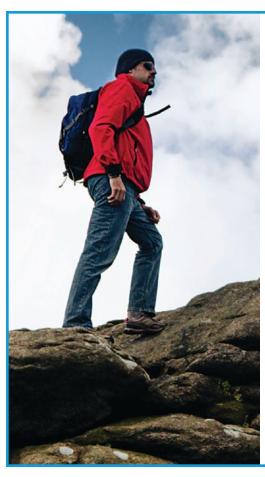
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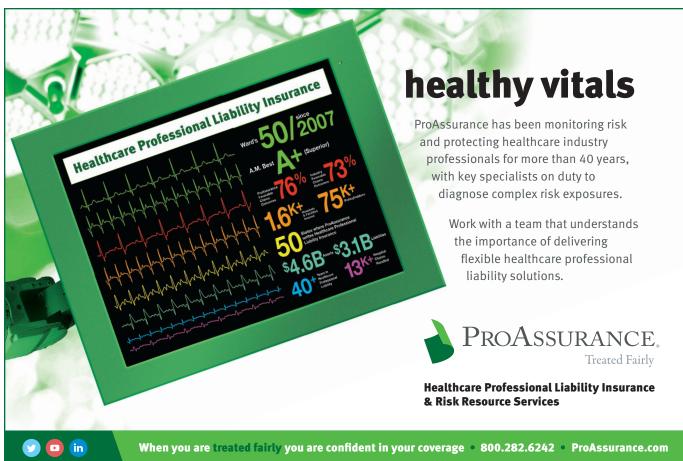
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QUANTIFYING

Does what's measured improve care? BY ANDREW TELLIJOHN

hen Mayo Clinic learned that its baseline surgical site infection rates related to gynecologic cancer surgeries were in the bottom 10 percent of the country between 2010 and 2012, the organization implemented a bundle of interventions aimed at improving those results.

Changes included requiring staff glove changes for fascia and skin closure, dressing removal at one to two days following the procedure and a follow-up nursing phone call after discharge.

Within a year, Mayo had gone from the bottom 10 percent in national rankings

to the top 20 percent. At 18 months, it reached the top 10 percent in the country.

"This is a good example of how following outcomes can identify areas for improvement," says Sean Dowdy, MD, division chair of Gynecologic Oncology at Mayo Clinic. "These outcomes can improve if you have the will, the resources and surgeons who are willing to face up to their shortcomings and change old habits."

More recently, Mayo Clinic was facing challenges with higher-than-average infection rates related to clostridium difficile and surgical site infections after colorectal surgery. After quality measurement readings in 2018, Mayo performed a root

cause analysis to determine why the rates were high, then put in motion a series of interventions aimed at reducing those incidents.

"Both interventions have been successful and our rates are now at or below average nationally," says Dowdy, who also is the Midwest vice-chair of Quality and Affordability.

NOT ALWAYS THE RIGHT **MEASUREMENTS**

When the health care system became more intentional and organized in measuring quality over quantity more than a decade ago, many stakeholders celebrated the

WHY **MEASURE OUALITY?**

To improve patients' lives

When Alyssa Palmer took on the quality measurement job at Southside Community Health Services in Minneapolis two years ago, she asked her new colleagues what they expected.

"I learned that no one really knew what the previous quality people did," she says. "At Southside, it was always behind the scenes."

Which doesn't mean that performance on quality measures wasn't being logged and reported—as a Federally Qualified Health Center, Southside is required to report quality measures each year to the Health Resources Services Administration and to MN Community Measurement. It was just that people within the health care organization didn't necessarily know how Southside was doing.

"As I was learning, it was natural for me to go, 'Gosh, I need to see where we're at," says Palmer. "We don't know what we don't know, if we're not looking at these numbers."

She started with screening for colorectal cancer. Southside reported that 47 percent of its patients were being screened. "I think a lot of people look at quality metrics and think of them as something we have to do, and they look at 47 percent and it's a little bit of a beat down, we're not doing



QUALITY

move as a way of making sure they were providing high-quality care—while also lamenting that there were too many organizations asking for too much data on too many points of emphasis.

Steven Bergeson, MD, medical director for care improvement at Allina Health, says different organizations have different measures for the same thing. The Center for Medicare and Medicaid Services (CMS) on the federal side and the Minnesota Hospital Association both measure for readmissions, for example, but use different time periods and measures (all readmissions vs. potentially preventable readmissions).

Among the less useful metrics, Dowdy says, are measuring "discharge to home" and treatment of sepsis. With sepsis, many interventions are tracked to determine whether the patient received appropriate care, but multiple studies have shown that such measures do not necessarily correlate with better outcomes. "We are, nevertheless, evaluated on whether or not we perform them. In some instances, performing all the required interventions would not be in the patient's best interest."

Measurement organizations, Dowdy says, also often inappropriately penalize care providers for discharging patients to somewhere besides their homes.

"The discharge to home metric assumes that if a person is admitted to the hospital from home, but is discharged to a skilled nursing facility, that some lapse in care occurred during the hospitalization," he says. "In fact, discharge to a skilled nursing facility in the vast majority of instances is a marker for high-quality and safe care to assure optimal functional recovery."

Dowdy says in many cases elderly patients are living alone inappropriately. Once the patient is admitted to the hospital, their family, together with caregivers, may jointly decide the patient is not safe at home and would benefit from supervi
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well," she says. "Whereas I look at it and go, 'Gosh, 47 percent, that means half of our patients are missing this opportunity to be screened. What can we do to make it better?"

Palmer shared the numbers with staff. They discovered that it wasn't a matter of clinicians not ordering colorectal cancer screens, but of patients not returning their kits. With a few relatively small changes to the system, Southside increased colorectal screening to 61 percent of its patients by the end of the year.

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sion. "That change was in the patient's best interest and was not a result of poor care," Dowdy says.

INEFFICIENCIES

Measuring quality, Dowdy says, is often inefficient. There are differences between federal and state organizations that collect measures and in those collected by payers, as well.

And measurement is expensive, to the tune of \$15 billion annually at Mayo, Dowdy says. The organization has more than 200 full-time-equivalent employees working in quality, much of which is focused on data abstraction, analysis, creation of reports for external rankings and, most important, quality improvement.

But quality measurement processes are improving. Dowdy says organizations are doing a better job of adjusting for patient factors beyond the physician's control as well as adjusting for variation in severity, for example, between the situation of a gynecologist who focuses on doing complex,

five- or six-hour procedures versus one doing routine 30-minute services.

"Those outcomes are going to be very different," he says. "You have to make some adjustments for the procedures and patient comorbidities. There is more of an understanding of that than there has been in the past."

Despite the challenges, Dowdy says today's data collection better serves patient care. "It's been an evolution," he says. "I think we're at a very early phase when it comes to evaluating quality."

COSTLY, BUT EFFECTIVE

St. Luke's Health Care System, headquartered in Duluth, includes two hospitals and more than 40 primary and specialty care clinics across northern Minnesota, Wisconsin and Michigan.

Pam Helgeson-Britton, director of quality management, and Gary Peterson, MD, vice president and chief medical officer, both say the expense and breadth of data sought by multiple organizations is challenging, but ultimately useful for improving care.

For most of the last several years, for example, the pressure ulcer rate throughout St. Luke's Health Care System was at or below the benchmark the organization uses to monitor the quality of its care.

Then, in 2018, incidents increased significantly.

The organization used quality processes and outcome measurements to identify this as an area of emphasis, created a plan for reversing the incidents and, this year, has once again brought its pressure ulcer rate in line with state and national averages.

"Creating measures that help us see both how the care process works and what provides patients with the best health outcomes is key to creating the best possible health care and supporting our community to live healthy lives," says Helgeson-

Collecting the data and keeping up with changes is expensive and time consuming. "A lot of these measures keep changing

WHY MEASURE QUALITY? (continued from previous page)

"That was the perfect door to being able to show our staff and our clinicians that this is what we can do, this is why we get those numbers," Palmer says. She shares quality measurements with staff every month, "but I tell them that these numbers are for me to worry about, as the quality director. You guys just need to worry about taking care of patients. If I notice a trend in the wrong direction, then I'm going to come to you guys and we look at the system and where we need to tweak."

Palmer understands why the idea of measurement can feel like a burden to clinicians, but she's very nearly a cheerleader for it. "From a clinician's viewpoint, they really just want to take care of their patients, and then all of a sudden, there are all of these checkboxes being thrown at them," she says. "When we feel like we're being told what to do with every single patient, we replace intent with fear, we worry about payment, we worry about those measures not being where they need to be. We get so caught up in the idea that we have to do this, or that someone else is telling us we have to do this, that we forget our own stories about why we're doing it."

In 2018, Southside needed to improve by at least 5 percent on three specific quality measures—depression screening, controlled hypertension and uncontrolled diabetes (where a lower score is desired) as part of the Federally Qualified Health Network in the metro area. Palmer put together three focus groups that included representative staff from physicians to front desk staff. "It was my way of being able to share with people who were not historically familiar with quality measures-some of them didn't even know what we were measuring—and for them to get involved and engaged."

The focus groups looked at the numbers, and then brainstormed ways to improve not only the way they did things but, most important, patients' health.

The result: Southside met or exceeded the 5 percent improvement goal on all three measures—and attained an HRSA gold-level Health Center Quality Leader status for its clinical quality improvement in 2018. That means that of roughly 1,400 community health centers in the nation, Southside is in the top 10 percent. - LINDA PICONE



on us on a quarterly, semi-annual or annual basis and we have to try to keep up," Peterson says. "We've got systems in place to deal with those changes, but this quality reporting does cost a lot of money and none of it is reimbursed."

St. Luke's has had to add staff in its quality and patient safety, patient experience and information technology areas and also spent significantly on more sophisticated IT systems, Helgeson-Britton

The investments have resulted in the ability to get consistent measurements on how the group's performance lies in comparison with other health care organizations. And St. Luke's values the purpose of the measurement. "We believe in the need for transparency for how we perform for our patients," Helgeson-Britton says.

The low volume of patients and small staff at Cook County North Shore Hospital and Care Center in Grand Marais, presents unique challenges for quality measures.

Kimber Wraalstad, CEO and administrator, says the organization has about 150 employees. Four of them handle collecting and submitting data, although none of them do it full-time. In fact, the department manager who is predominantly responsible for data might spend only about one-eighth of her time on it.

"Could it be more? Yes," Wraalstad says. "I think she sometimes feels overwhelmed, particularly when somebody says 'here's another piece of data to gather."

The organization, which acts as hospital, nursing home, home care agency and ambulance service for Cook County, struggles at times to interpret what data is being sought and the degree to which a small number of misses can affect its own scores. She cited flu shots as an example of a measure where goals are high, but numbers skew quickly when just a few patients don't get the treatment.

"As a small rural organization, we sometimes don't have the volume with which to look at some of the measures," she says.

But, she says, the organization is committed to using data to better itself. "That's how you learn. We all want to get better. We all want to do it because we care about the people we are taking care of."

MN COMMUNITY MEASUREMENT

Julie Sonier, president of MN Community Measurement (MNCM), says there are outlets of communication in place that health care providers can use if they want to add, alter or change a measure. Doing so requires input from multiple perspectives, including providers, health plans, employers and consumers.

MNCM is an independent nonprofit that collects and publishers measures of health care quality and cost, focused primarily on clinic and medical group performance.

"Much of the feedback that we receive about measurement from health care providers is more general, rather than being about specific measures, and it is about the overall burden of measurement and the need for greater alignment of measures being collected by different entities," she says. "We've been working hard on these pain points."

She acknowledges that measures change over time, both as clinical evidence changes and in response to feedback from users. Depression measures, for example, have changed to allow for a longer window of measuring whether follow-up care is being provided. Feedback from providers also helped identify problems with a national measure for colorectal screening.

"MNCM was able to successfully advocate with the national measure steward for changes that address this problem," Sonier

In the last two years, MNCM has launched an effort to make data on quality timelier and more actionable while reducing the collection burden. Work also is underway on an effort involving health plans and providers that will standardize and streamline data flows "in ways that will make data less fragmented and more actionable, and set Minnesota up for success in value-based care."

Still, Sonier cites statistics in several key areas as proof that measuring quality is working. In 2004, for example, only 12

percent of diabetic patients in Minnesota were receiving optimal care, compared with 45 percent now. The percentage of adolescents who receive mental health screenings at well-check visits have increased from 40 percent to 86 percent since MNCM introduced its measure in 2015. Follow-up assessments at 12 months with patients who have depression have increased from 17 percent to 30 percent.

"We know that measuring and reporting on health care quality makes a difference," she says. "Health care providers tell us they use our data extensively to understand how they compare to others and where they have the biggest opportunities for improvement. And we know that data drives change."

CONSULTANTS OFFER OBSERVATIONS

Daniel K. Zismer, PhD, professor emeritus at the University of Minnesota's School of Public Health and current co-chair and CEO of Associated Eye Care Partners, says those who establish quality measurements could take years and years attempting to find consensus on where to start in order to satisfy every stakeholder, or they could pick some, start measuring and adjust as feedback arrives.

"You have to start somewhere," he says. "There have been decades worth of argument on what is quality. And that argument really doesn't get anybody anywhere."

He hears frequently about small organizations struggling to keep up in a market becoming increasingly dominated by well-capitalized, large health care organizations. Those larger organizations spend the money to make sure their systems communicate, which he says means better care for patients.

"The care for individuals is becoming less fragmented over time, which really has had an extraordinary effect on quality," Zismer says. "If you want to swim upstream against that, you have the perfect right to do so, but if you are going to remain relevant and included in certain markets you've got to be prepared to play at a very high level or take the consequences."



At this point, says Arnold Milstein, MD, MPH, a professor of medicine at Stanford University and director of its Clinical Excellence Research Center, the quality movement is making progress. "Though the direction is positive," he says, "its yield could be higher if performance measures better addressed the main reason people subject their checkbooks and bodies to health care—whether they function better physically, mentally or emotionally after treatment."

Health care providers themselves, if they strongly disagree with the currently established data sets, could take matters into their own hands by collecting before, during and after treatment surveys from patients on the improvement—or lack of improvement—in their ability to function. The data could be collected in person or via smart phone. But so far, Milstein says, it's been hard to make "patient-reported outcome measurement" routine in the United States, despite early success in some Scandinavian countries.

WHAT'S GOOD, WHAT'S NEXT?

Organizations are asked to collect and collect and collect some more. Then what? "We have more data than we know what to do with," Bergeson says. "There's tons of data on individual clinicians and hospitals and different groups. The question is how do we use it in meaningful ways? There is still the need to make data actually meaningful rather than just data, something that can actually be used to improve things."

He agrees that collecting data for measuring quality has been a good first step, and says the next step is to engage and work collaboratively with clinicians to decide on the initiatives to improve care. If it is diabetes, then clinicians will be needed to develop new standards for diabetes care. Eventually, algorithms will be created for best practices for advancing medications and standards for staff to order necessary labs according to a protocol. With these algorithms, improvement becomes hardwired; it's easy to do the right thing.

Bergeson says he's eager to see how quality measurement evolves and he hopes it starts moving away from collecting

hundreds of data points and more toward interventions when necessary.

For instance, patients with diabetes need to have access to the right food. "If diet is part of getting diabetes under control and you don't know if they have trouble getting enough food, then that's something you should know," he says.

What Bergeson would like to see is care providers finding ways to take existing data and then adding information about patients who face some kind of disadvantage due to their employment, family or other situations so their care can be improved. That, he says, would help take measuring quality to the next level.

"What we're all struggling with right now is how we get information into our systems that would show us our patients at highest risk," he says. "So, it's not just who are our patients that are in poor diabetic control, but who are our patients in poor diabetic control who don't have the resources or tools to help themselves."

MMA VISION COMING SOON

Doug Wood, MD, medical director for the Center for Innovation at Mayo Clinic, where he also is a consultant in cardiovascular diseases, is the immediate past president of the Minnesota Medical Association. During his tenure, the MMA's board convened a work group to look at where quality measurement might go next.

"When quality improvement methods began to be adopted in medicine, there was a good deal of emphasis on how we measure processes and outcomes," he says. "That was appropriate and important because it was necessary to get medicine to think about how it could more consistently perform, especially when we saw evidence that certain processes were not consistent and needed to be better."

In some situations, it has resulted in improvements. Measures, for example, have improved the treatment of hypertension and diabetes by making sure people are getting examined and taking medications.

That said, Wood adds, there's a need for change going forward. The Government Accountability Office in September issued a report indicating that the Centers for Medicare & Medicaid Services have not done a good job of tracking program funding or whether quality measures meet

Additionally, despite a focus on measurement, there has not been improvement in areas like life expectancy, obesity, disparities on several socioeconomic factors and the overall health of those in the United States, Wood says.

Wood says the MMA has closely examined a 2015 National Academy of Medicine report, "Vital Signs: Core Metrics for Health and Health Care Progress." The report challenged the effectiveness of current measurement efforts, noting that measurement "as a whole is limited by a lack of organizing focus, interrelationship and parsimony in the service of truly meaningful accountability and assessment for the health system." The report further recommends concentrating on 15 "core" measures that would focus on decreasing the burden of collecting metrics while improving outcomes.

"The thing we are missing is a way to look at health as an outcome and all the factors that are important to it," Wood says. "Medical practice affects only a portion of the outcome of health. To expect, then, that we should spend lot of time and money and effort measuring, especially, processes that might not produce results means it's time to think about a different way of examining how you achieve health and what measures you use."

That might include shifting the focus from processes to achieving outcomes. With diabetes, for example, the focus so far has been on diabetes care, ignoring proven methods for preventing diabetes in the first place. "They haven't really been used because payment has not been aimed at prevention," Wood says.

The working group will issue its recommendations to the board in November.

"What we're thinking about is how we advance the important task of measurement in a way that will help us make sure Minnesotans are among the healthiest people in the country," Wood says.

Andrew Tellijohn is a Twin Cities freelance writer and editor.



DATA-DRIVEN APPROACH AT RCHC PAYING DIVIDENDS NOW AND IN THE FUTURE

RC Hospital and Clinics (RCHC) has a partnership with PrimeWest Health, the Medicaid provider for Renville County as part of the Accountable Rural Community Health (ARCH) program that has helped improve care quality and reduce health care costs in rural Minnesota.

RCHC had screening measures to meet in five different areas: mammograms, A1C blood tests, human papillomavirus, asthma and a post-discharge medication reconciliation review.



"When we initially started the program, we were surprised our numbers were not where we want them to be," says Jennifer Kramer, RN, lead nursing care coordinator on the RCHC's Population Health Team.

By having care coordinators reaching out individually to Medicaid patients who weren't getting screened, RCHC was able to change some of its processes and get more of those who need screening to show up. "Last year we successfully met all those quality measures for them," Kramer says.

Although the initial efforts were focused on Medicaid patients, Kramer says that after studying the processes that worked and those that didn't, the organization was able to roll changes out to the entire organization.

More recently, says Carly Kubesh, RN, quality improvement specialist on the Population Health Team, the system implemented a change that has diabetic educators looking

at patients with A1C blood test results above an 8 and automatically referring them for a consultation.

The organization, Kramer says, likely would have made the changes eventually, but using the measures to do so allowed for a better approach.

RCHC has a number of quality-related projects taking place at any given time and, in a smaller organization, it can be tough having enough resources to spread across them all.

"We don't have a lot of staff, so a lot of us wear multiple hats," Kubesh says.

The organization also can be challenged by regular changes to Epic, the electronic medical record program it uses, or by having patients that go to other care facilities that are on different versions of that program or different programs altogether that don't communicate, says Michelle Erikson, Epic optimizer on the Population Health Team. She works with care providers to ensure that those records are entered the proper way to save time and add a layer of efficiency to the collection process.

The organization takes a "care team" approach, with a multidisciplinary group of people including doctors, clinic nurses, health coordinators, scheduling and hospice representatives and others as appropriate, meeting monthly with the Population Health Team to discuss data, approaches that are working or not working and how they can collaborate, Kramer says.

Rob Kemp, MD, family practice physician, says there is a "long game" at play with a lot of the data-driven changes at RCHC. Much of the approach is preventative care and preventative medicine that, for instance, will prevent diabetes patients from having strokes or experiencing kidney failure. Those results don't always show up right away.

"There's not always immediate gratification where we do this and we see a few days later that all of a sudden, things have improved dramatically," he says. "We're in this for the long haul." — ANDREW TELLIJOHN



EVERYONE'S A CRITIC

For some physicians, managing patient-satisfaction scores means striking a balance between popularity and practice

BY ANDY STEINER

patient searching for a physician whose goal is to make her patients happy, one who will prescribe antibiotics for the slightest sniffle or a pile of pain meds for an ingrown toenail, is not likely to land on Kim Fischer, MD.

An experienced, no-nonsense OB/GYN with a steady supply of dedicated patients who appreciate her honest approach to medicine, Fischer admits that her style doesn't make her popular with every person who walks through her clinic's door.

She's got the patient rating scores to prove it.

After every medical visit, Allina Health offers patients an opportunity to rate their experience, using the national CAHPS Clinician and Group survey measures (https://www.ahrq.gov/cahps/ surveys-guidance/cg/index.html). Not every patient fills out the survey, but many do. Allina policies make the reviews transparent; physicians can read reviews and see how they measure up to their colleagues—and to system-wide ratings goals.



On the survey, patients are asked to rate their experience on a scale of 0-3, with 3 being "excellent." Fischer, lead physician at East Metro Allina Women's Health, says the Allina expectation is that physicians hit the top score. "Anything under that is inadequate."

Fischer is the first to admit that there were times in the past when her patient approval ratings were less than stellar. "At my lowest," she reports, "I was at the 63rd percentile, which is much, much lower than expectations."

While she usually chalks up her less-than-stellar patient reviews to her no-nonsense style, Fischer admits that she wasn't happy with her results. Like most physicians, she's a competitive overachiever and even though she still had a busy practice with plenty of satisfied patients, she was frustrated with her underwhelming ratings.

"If a patient doesn't say you were 'excellent,' then your percentage goes downward," Fischer says. "It only takes one or two bad evals to take your score down significantly."

She wasn't sure how to best bring her satisfaction scores up to where she felt they should be. "Sometimes you feel like you can't win," she sighs. "You're doing the right thing, but it's not exactly what the patient wants. Sometimes a patient just isn't happy, no matter what you do. I know that as a doctor I'm not here to make everybody happy—I'm here to take good care of patients. That's the utmost goal, to do the right thing. But sometimes it still feels like a struggle."

ROOM FOR IMPROVEMENT

There was a time when Fischer tried to take a more cynical view of her patient review scores.

"I told myself it was all ridiculous," she recalls. "But the truth is, as a physician it is hard to take that kind of feedback. We are so used to learning medicine and then suddenly it feels like there is an expectation to learn how to make everybody love you all the time." And she also knew plenty of ethical physicians with strong patient reviews. Fischer asked herself what they did to achieve that balance.

When higher-ups suggested that she sign up for a class designed to teach physicians how to improve patient relationships led by Steve Bergeson, MD, Allina's medical director for Care Improvement, Fischer agreed to try it.

Bergeson, a family medicine physician with a calm, measured manner, has been part of a team working on Allina's care improvement efforts since 2006. He sympathizes with "amazing, committed" doctors like Fischer, who feel rankled by the outsized impact of negative patient reviews. But in an age when public criticism of physicians can pop up anywhere, not just on official clinic review portals but also on sites like Google, Yelp or Healthgrades, the issue is too important to ignore.

"Of course, there is the grief and reactions like, 'this is not accurate,' and "I hate this kind of survey' and 'This doesn't really mean anything," Bergeson says. But he knows plenty of physicians who've taken Allina's communication courses and come away with a new perspective. "We have a lot of people who were not doing as well as they wanted to and have substantially improved their reviews by doing some specific things that they've learned in these classes."

Bergeson says Allina's courses are dynamic and interactive, not stodgy PowerPoint presentations. Some experiential courses involve actors who role-play typical patient scenarios with physicians. Some videos for professionals star cast members from the Minneapolis improv group Brave New Workshop.

Humor goes a long way, Bergeson says. "We have done a fair amount of Brave New Workshop videos where we say, 'We'll show you a not-so-good approach and then we'll contrast that with an even better approach,' so that they can actually see it. And we've actually produced discussion guides where we say, 'Watch it to this point, stop the video, ask these questions, get some feedback, find out what was good about it and what could've been even better."

Fischer took two rounds of communication courses, and says the key advice that they provided helped her learn how to shift her style in important ways.

"Some of it just seems so basic," she says now, "but it is really important." The style shifts that made the biggest difference for her revolved around seemingly ordinary patient interactions.

Entering an exam room, for example: "I learned that you should knock twice on the door," she says. "Then you should wait two seconds before cracking open the door. Then you need to ask permission to enter. Not all physicians know to do that, and many patients really appreciate this step."

Taking a little time to interact personally was another: "I would introduce myself to the patient and that was it," she says. "I didn't want to waste everyone's time." The courses taught her that she needs to slow down and make connections with patients—and any friends or family members they've brought along. "I now make a point of introducing myself to everyone in the room," Fisher says. "I also learned that during an appointment, I should slow down and talk to the patient about something that's not medical, like complimenting their bag or their shoes."

When running late to appointments: she learned to pause and say to patients, "I'm sorry to have kept you waiting."

Taking these suggestions to heart helped Fischer bring her approval ratings up to the 93rd percentile. While she's happy with that improvement, she still feels like she has a way to go. "Allina wants us at the 95th percentile in patient satisfaction ratings," Fischer says. "There are a lot of physicians out there who are higher than me."

Charlene McEvoy, MD, a pulmonary specialist at HealthPartners, consistently gets high patient reviews. She's also been voted a top doctor in Minnesota Monthly and Mpls.St.Paul magazines.

McEvoy believes that her approach to medicine helps boost her patient ratings. "I enter every relationship with a patient as a sacred relationship," she explains. "When they are in the exam room, patients are super vulnerable. They are often telling me things that they won't tell anyone else. It is like a confessional. They trust that I have their best interests at heart. I take that seriously."



While she knows that practicing medicine isn't a popularity contest, McEvoy says she has a deeper reason for wanting to earn her patients' approval: "I care if patients like me because I want to be an effective doctor."

Christopher Warlick, MD, PhD, is a urologist and interim chair of the Department of Urology at the University of Minnesota Medical School. He's also a Top Doc with a pile of 5-star patient reviews, some of which he chalks up to commitment to careful, clear explanation of medical options and procedures.

"When I have a patient who says, 'That's the first time anyone has explained that to me,' or when they say, 'You've really explained that well," Warlick says, "that means I have achieved one of my goals with them, which is helping them to fully understand their situation."

Though he acknowledges the overall importance in reputation-building, Warlick admits that he generally makes a practice of not reading his patient reviews.

"I don't look at them, to be honest," he says. "That may not be very savvy on my part. We're in the age of social media and we need to be aware of those things. But I actually try not to review them on any regular basis. It's just too distracting"

That attitude may come from Warlick's upbringing. "My father was a professional football player for the Buffalo Bills," he says. "He used to say, 'You don't read your own press clippings. Let the critics do their job and you just focus on doing the best job you can do.' I try to make that my attitude as well."

WALK THE LINE

Some physicians admit that it can be hard to strike a balance between running an ethical practice and one that consistently wins high patient praise.

Renée Crichlow, MD, is director of advocacy and policy in the Department of Family Medicine and Community Health at the University of Minnesota. She also trains medical interns at North Memorial Health Hospital. She says that putting patient happiness above all else can actually be bad medicine.



I told myself it was all ridiculous. But the truth is, as a physician it is hard to take that kind of feedback. We are so used to learning medicine and then suddenly it feels like there is an expectation to learn how to make everybody love you all the time."

KIM FISCHER, MD

"It is not always in the patient's best interest for the doctor to do exactly what they are requesting," she says, pointing to The Cost of Satisfaction, a 2012 JAMA study that found that higher patient satisfaction scores were associated with increased mortality of patients. "I'd be curious how many lower ratings correlate with the patient not getting antibiotics because the doctor thought their illness was viral or a patient not getting a chest x-ray for a cough or an MRI for low back pain. The perverse incentive to make the patient feel like all of their requests can be fulfilled, that's just not good for patient care. It is not good for the patient."

Sometimes patient bias can figure into an unfavorable review. A white woman born in the United States, Fischer says that she's is concerned about the impact that negative patient ratings can have on the practices of younger physicians—especially those who are foreign-born physicians or physicians of color.

"Online reviews might have more of an impact on them because they are just coming in and they don't have an established practice like I do," Fischer says. "Most of my patients are coming to me through word-of-mouth from patients who like my style and like who I am. My concern is that a new doctor who's getting all different types of patients and not yet getting referrals might not have as strong of a reputation. One bad review could be a big problem for them."

A family physician, Crichlow says she believes that patient satisfaction is achieved through building a long term, trusting relationship with patients. "I want myself as a physician and the physicians that I train to be working for that patient in the room right there, not for their Google and Yelp reviews," Crichlow says. While patient feedback can be an essential way for doctors to learn how their practice can be improved, it's important to understand that patients won't always come away from medical appointments feeling happy.

"I'm not against getting feedback from patients or using patient satisfaction scores," Crichlow says, "but I think we still haven't figured out how to measure physician performance it in a way that really expresses factors like, 'Did you [the physician] work with the patient well? Did you feel heard?' Those kinds of questions are more important than questions like, 'How satisfied were you? Were you pleased?"

Because the practice of medicine is a richly nuanced skill, Crichlow believes that working well with patients, listening and providing appropriate comfort are the most important techniques she can practice and teach.

"If you give someone a cancer diagnosis, do you think they were pleased? How would they rate that experience?" she asks. "As physicians, we are with people in really hard times and really joyful times. We do obstetrics. We do hospital work. When you are with people in hard times, sometimes you have to tell them bad news, and you have to know how to do it right. But when you do it right it can make all of the difference." MM



CLEAN-UP CDEW

Patient reviews on online sites like Yelp, Google or Healthgrades are powerful. A disgruntled patient or a random person with an ax to grind can get online and do serious damage to the reputation of a physician, clinic or hospital, and often the targets of those reviews feel like there is little they can do to directly respond to complaints or remedy the situation.

A few years ago, communications staff at M Health Fairview decided to confront this issue head on.

"We have taken a more system-oriented approach to online reviews," says David Henke, M Health Fairview senior communications specialist. "In late 2016, early 2017, we ran a pilot project looking at the online reviews that a subset of physicians and clinics were receiving on popular review websites like Google, Healthgrades and Vitals."

The project soon grew into an effort to respond to all online reviews for M Health Fairview services. Communications staff implemented software that allows them to pull in reviews and react to them in real time. "Our team can see those activity points and we can respond to them by routing the concerns to someone in the most appropriate place," Henke explains. "If it is someone posting a review of one of our locations we will find out if there is something we can do for that particular individual. It may mean connecting with the clinic manager and making them aware of what is happening and finding a way to resolve that."

This approach is part of M Health Fairview's commitment to fine-tuning the "entire patient experience, not just the part of it when you're with your doctor," says Maria Lettman, senior communications manager. "When you think about how people experience medicine, it's a much larger experience than your time with the physician. It's how your schedule your appointment, how you interacted with the person at the

We want your feedback

front desk, how you paid your bill. We care about the entire patient experience."

When M Health Fairview responds quickly to complaints, reviewers are usually pleased, Lettman says.

"We see that people are surprised by how quickly we respond and how empathetically and helpfully we respond. "We can get someone who just starts by blowing off some steam and the fact that we are listening, that we don't get defensive and are there to help, people often go from angry to surprised to grateful for the help. We see people taking down their negative reviews."

Henke views taking time to maintain online relationships by responding to unsolicited reviews as part of maintaining M Health Fairview's reputation in the larger world.

"There's a pretty well-documented movement within health care that people are looking to a health system's social media channels, online websites or review portals to help them solve problems and answer questions," he says. "We recognize that as a system and wanted to ramp up our efforts to handle it. We wanted to create this concept of a digital front door. We want to be prepared to open that door when someone knocks."



Protecting a physician's

REPUTATION

Recognize, respond and react

BY DEAN MCCONNELL, JD

atient complaints often share one common denominator—a breakdown in the physician-patient relationship. In today's digital environment, where patients have the ability to voice their complaints openly, this can result in a negative online comment on websites like HealthGrades.com, RateMDs.com or Yelp. com, as well as on social media.

What should a doctor do in response? Ignoring a negative comment looks like you do not care or agree the comment is valid. Hiding or removing negative reviews may result in a re-post of the comment on multiple sites, pointing out your efforts to "hide the truth." Attacking the commenter is dangerous and often results in more malicious or derisive comments.

A better option is to focus on repairing and preserving relationships with your patients based on the following:

- Recognize that you have an unhappy
- Respond to the complaint in a positive manner.
- React based on a full and objective assessment of the situation.

RECOGNIZE

Recognizing that the patient is unhappy is difficult when you are feeling attacked. Negative comments invoke defensive reactions and fears that the physician's reputation and practice may be seriously harmed. Despite these normal reactions, the patient's concerns must be addressed in a professional and appropriate manner. Whether the patient's complaints are justified or not, the patient is unhappy enough to make his or her complaints known to the world at large. Remember that this is only one of many patients in the practice, most of whom are very happy. While action is often prudent, it needs to be measured and appropriate to the context.

RESPOND POSITIVELY

Acknowledge that the patient is not satisfied and that patient satisfaction is important, and ask to take the conversation offline to address the issue. The written response should be tailored to the specific complaint. If a patient is unhappy about waiting too long for an appointment, an appropriate response might be: "Thank you for taking the time to comment. While we try to respect each patient's time, sometimes the number of people who need our









help causes unexpected delays, especially when emergencies arise. If there is anything we can do, please give us a call at the office. Your satisfaction is important to us." If the patient does not call, contact him or her. People will often say things online that they would never say face-toface. A phone call provides a better chance of connecting with the patient and solving the problem.

Before responding with your own online comment, cool off. Let it sit overnight and ask a trusted colleague to review it before posting. Also, be careful about HIPAA. Do not include treatment or payment information or provide patient names or identifying information in your response.

REACT APPROPRIATELY

Sometimes patients are right. Maybe the physician was just having a bad day. An explanation and an apology is usually all that it takes to resolve this situation. Maybe the payment policy for "no shows" should not be absolute and can be waived for the mom who missed her appointment because she had to pick up her sick kid from school. Maybe the problem really is a rude front desk person and corrective action should be taken. Take this opportunity to evaluate the practice and improve

Sometimes patients are wrong. Nevertheless, they are still patients and may have had a bad day. In resolving these issues, communication with the patient is critical. Try to understand the situation from their perspective and consider whether there is some concession you can live with. Perhaps an explanation of how "no shows" affect the practice, a one-time waiver of the fee and a clear communication that future "no shows" will be charged. A good, long-term patient might be saved for the price of an office visit. Patients who have been heard will sometimes remove their own negative comment or, better yet, post a positive one extolling how the doctor cares about

patients and was willing to listen and address the problem.

In certain situations, the physician may also want to consider whether this patient is just not the right fit for their practice, then provide a referral to a colleague who might be a better fit.

For the most serious violations—and as the last resort—consult an attorney about bringing a defamation claim.

RALLY THE TROOPS

Build a following of good patients online. Post a short blog on a health topic of interest. Ask patients to post reviews. These activities build a positive presence online and a negative comment will look like an outlier, possibly provoking positive responses from your followers. MM

Dean McConnell, JD, is senior legal counsel, **COPIC Legal Department**





Verna Thornton, MD, an OB/GYN based in Cloquet, takes a photo with Gov. Tim Walz.

State physicians, physicians-in-training gather on the shores of Lake Superior

early 120 physicians and physicians-in-training gathered at the Duluth Entertainment Convention Center in September to discuss the state of health care access in Minnesota, inaugurate their new president and hear Gov. Tim Walz's assessment of the medical industry.

In his closing speech, Walz told attendees that he plans to "lean in" on the association's efforts to improve vaccination rates in Minnesota.

"The immunization issue—we have got to do better," Walz said. "I am going to ask and look for your help. I'm going to lean in a little bit more with the authority and things we have to make sure for all the right reasons, the science that makes things work, the herd immunity issue. I've got a 12-year-old in public school and I'm not going to tell you that there's not some self-interest in me. I don't want unvaccinated people putting him at risk at where he can be. Your voice speaks a lot louder than mine on these issues."

Walz covered several health-care issues in his 15-minute address, including the current work at the Capitol regarding emergency insulin supplies. He expressed his frustration with the pharmaceutical industry and said he hopes he can work with physicians to make the necessary changes to improve health care in Minnesota.

He also touched upon advance directives, the provider tax, a public option and health care as a "basic human right."

The conference also included the MMA annual awards, a medical student/resident/fellow poster symposium and hours of engaging discussions on a variety of timely topics.

New officers

Keith Stelter, MD, a family physician in Mankato, was inaugurated as the 153rd president of the MMA. Other MMA officers for 2019 include **Marilyn Peitso**, MD, a pediatrician in St. Cloud, as president-elect. **Doug Wood**, MD, a cardiologist in Rochester, assumed the role of immediate past president. **Edwin Bogonko**, MD, a hospitalist in Shakopee, continues as secretary/treasurer. **Randy Rice**, MD, a family physician in Moose Lake, continues as board chair.

Other elected officers:

- **Dionne Hart**, MD, a psychiatrist in Rochester, was re-elected as an MMA trustee.
- Abigail Ring, MD, a family physician in Detroit Lakes, was reelected as an MMA trustee..
- **Rebecca Thomas**, MD, MHS, an oncologist in Maple Grove, was newly elected as a trustee.
- Kimberly Tjaden, MD, MPH, a family physician in St. Cloud, was newly elected as a trustee.
- **David Estrin**, MD, a pediatrician in Plymouth, was re-elected as an AMA delegate.
- Former MMA president **David Thorson**, MD, a family physician in White Bear Lake and current AMA alternate delegate, was elected to serve as an AMA delegate.
- Ashok Patel, MD, a pulmonologist at Mayo Clinic, was newly elected to serve as an AMA alternate delegate.

All MMA terms begin immediately following the Annual Confernece; AMA delegation terms begin January 1, 2020.

MMA Awards

Five MMA members were honored with MMA Awards, which are given each year to those in medicine who go above and beyond.

Distinguished Service Award

Former MMA President **Donald Jacobs**, MD, received the MMA's highest honor, the Distinguished Service Award, for his years of service to the association and to medicine.

Now retired, Jacobs served as president in 2014. Before retiring, Jacobs was chief of clinical operations for Hennepin Healthcare System in Minneapolis. He was CEO and chair of Hennepin

Jon Hallberg, MD, leads another entertaining session of Hippocrates Cafe.



Annual Conference attendees were asked to come up with health care haikus.

gathered togethe

1 Mary Owen, MD, discusses Native Health. 2 Stephen Schondelmeyer, PharmD, PhD led a discussion on pharmaceutical costs.









3 Award winners: Donald Jacobs, MD (left); George Lohmer; John Goeppinger, MD; Kathryn Duevel, MD; Tom Schmidt and Jeffrey Schiff, MD, MBA. 4 Dozens of vendors displayed their products and services at the conference. 5 Medical students and residents met with attendees and discussed their research efforts

in service to fellow medical students, the profession of medicine and the broader com-

munity.

Schmidt is co-chair of the Medical Student Section (MSS) Executive Committee. He has also been active with Hands On Advocacy, a student-created, student-led experiential learning project started by students within the MMA-MSS that provides a structured opportunity for medical students to run an advocacy campaign on a public health topic.

James H. Sova Memorial Award for Advocacy

Jeffrey Schiff, MD, MBA, received the Sova award, given to the extraordinary health care champion who comes along every once and a while. Schiff is the former medical director for Minnesota Health Care Programs at the Minnesota De-

partment of Human Services. He served as medical director from 2006 until earlier this year.

Faculty Associates for 12 years before its integration with Hennepin County Medical Center in 2012.

He practiced general surgery in the Twin Cities for more than 30 years and served as surgery department chair and residency program director at Hennepin. From 2006 to 2010, he chaired Healthy Minnesota and served on the Minnesota Healthcare Access Commission and the Health Care Reform Review Council on behalf of the MMA.

President's Awards

Kathryn Duevel, MD, and George Lohmer received the MMA's President's Award, which recognizes those who have given much of his or her free time to help improve the association.

Duevel currently serves as medical director of quality and innovation at Carris Health in Willmar. She has been active in fighting opioid abuse in central Minnesota and she served on the first board of MNsure.

Lohmer, recently retired from the MMA, has been an advocate for Minnesota physicians for four decades. He is one of the longest serving staff members of the MMA, having served 43 years.

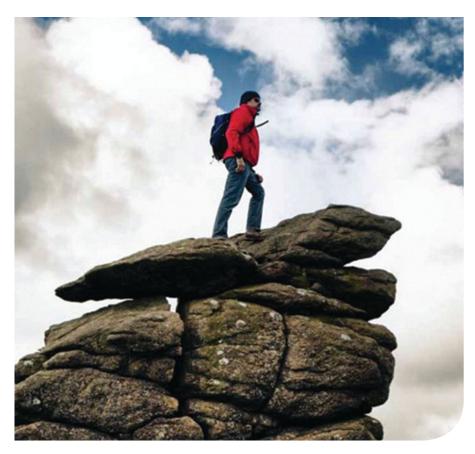
MMA Foundation's Physician Volunteerism Award

John Goeppinger, MD, a retired family physician in Red Wing, received the Physician Volunteerism Award. Created by the MMA Foundation in 2018, this award recognizes physicians who make extraordinary contributions as volunteers to serve people who have been left behind or who have few options for health care. He was nominated by two of the clinics where he is a regular and long-time volunteer. He also has volunteered extensively in Africa and the Middle East.

Poster Symposium Winner

University of Minnesota Medical student Walter (Nick) Jungbauer, Jr., (along with students on the PHHP POLST project) won the sixth annual MMA Poster Symposium for work on "Administration and Utilization of POLST Among Long-Term Care Facilities in Minnesota."

Next year's Annual Conference is scheduled for September 25–26, 2020, in St. Louis Park.



MMA Partners with Bounce Back Project to present resilience conference

n its efforts to bring the joy back to medicine for thousands of physicians across the state, the MMA is partnering with the Bounce Back Project to present a resilience conference December 4–5 in Plymouth.

The conference, which is dedicated to improving physician and other health professional well-being and resiliency, is a collaboration of physicians, nurses and hospital leaders from multiple health systems.

"One of the MMA's top priorities is to support professional satisfaction," says MMA CEO Janet Silversmith. "So, partnering with the Bounce Back Project to expand and extend their groundbreaking work is an ideal opportunity for MMA, our members and everyone in health care in Minnesota." The conference objectives include:

- Share knowledge, the results of research and lessons learned on the prevalence, drivers and consequence of burnout among healthcare providers.
- Discuss strategies addressing the challenges and barriers we face as health care providers in today's complex health care environment.
- Identify and discuss best practices and experiences in building individual and organizational resilience.
- Foster resilience through the building of relationships and social connections.

Highlighted speakers for 2019 include:



Joel Carter, MD, will speak on "Meaning, Medicine & Parallel Process— Stories of Hope & Healing on Both Sides of the

Stethoscope." His keynote will include stories and reflections to remind attendees what's most important—and the gifts of being a part of the healing journey of patients.



Amit Sood, MD, will speak on "The Resilient Option." His presentation will share the neuroscience and psychology of

stress and resilience, and will present the evidence and components of a structured program to decrease stress and enhance resilience.



MPR's *Cathy Wurzer* will present "Talking About Death Won't Kill You." Wurzer has convened community conversations

about living and dying across Minnesota. She has always believed in the power of sharing stories. She helped create the non-profit End in Mind to inspire and empower people to be engaged participants in all stages of their lives, but especially at the end of life.



Amaryllis Sánchez Wohlever, MD, will discuss "Recapturing the Joy of Medicine." The closing keynote presentation will

inspire physicians to recapture their original call to medicine and provide strategies to help nurture that mindset in practice. Discussion will include ways to remain engaged and joyful in medicine despite the many challenges we face.

Register at www.bouncebackproject. org/events. Cost is \$395.

Founding partners include Stellis Health, Allina Health and CentraCare Health.



Janet Silversmith MMA Chief Executive Officer

FROM THE CEO

s CEO of the MMA,

I am delighted to
launch this new column in *Minnesota Medicine*.

In every issue, I hope to give
you a glimpse into the inner
workings of the MMA, to
highlight some of our recent
and upcoming activities and
to showcase the impact of
your membership support.

More than 400 members voted during the MMA's annual leader-ship election in August—thank you! In addition to adopting changes to MMA bylaws, new leadership was elected. See page 24 for more details.

The MMA held its Annual Conference September 20–21 in Duluth.

It was a great event that focused on ensuring patient access to care. There were educational forums on access to obstetric care, suicide prevention, prescription drug costs and Medicare for All, and policy discussions on member-submitted proposals ranging from racism in health care to gender equity in medicine to parental leave in GME programs to insurance coverage for scalp-cooling treatment. Keith Stelter, MD, was inaugurated as the MMA's new president at the conference. It was particularly exciting to have Gov. Tim Walz close the conference and offer his strong support for boosting Minnesota's vaccination rates. See page 24 for more about the conference.

The members of the MMA are organized today into either at-large areas (geographic areas without a defined component medical society) or into one of 19 component medical societies, which are charted by the MMA and have unified membership. Two decades ago, there were more than 30 components but, over time, some have merged, closed or otherwise struggled to remain active or to retain volunteer leadership. Component medical societies in the Twin Cities, Rochester, St. Cloud and other areas have remained active and engaging for members. The MMA convened a work group earlier this year to examine component activities and develop a new model to strengthen

MMA-component relationships. The MMA is in active discussions now with component society leadership and welcomes your input on how to add value to your membership and support local involvement.

Effective January 1, 2020, the MMA's endorsed professional liability carrier, COPIC, will be offering MMA members a 10 percent premium discount. I am thrilled that MMA is partnering with COPIC—a physician-developed and physician-led company that is focused first and foremost on patient safety and high-quality care. To learn more about this new and significant membership benefit, contact the MMA (mma@mnmed. org) for more information.

It's membership renewal time!

Please renew your MMA membership for 2020 now and invite a colleague to join, too! Membership fuels MMA's work and your support is critical to ensure that the voice of physicians is heard.

Did you know? The MMA accredits 21 health care organizations in Minnesota and North Dakota to deliver CME to their physicians and other providers. Because of the MMA's accredited and direct and joint CME activities, we facilitated more than 28,500 interactions with physicians and supported the delivery of more than 7,300 CME credits through more than 1,200 educational activities.

Please contact me (jsilversmith@ mnmed.org) at any time to share your ideas and thoughts. **MM**

News Briefs



MMA testifies to improve insulin legislation for physicians

In late September, MMA staff shared concerns on behalf of the state's physicians regarding a new Senate proposal that would provide insulin free-of-charge for up to 12 months for patients who qualify.

The Senate Health and Human Services Finance and Policy Committee met and heard testimony on a new proposal from Sen. Eric Pratt (R-Prior Lake) that would ensure ongoing affordable access to insulin for those earning less than 400 percent of the federal poverty level.

The proposal calls for physicians to submit forms to drug companies that would in turn deliver insulin back to clinics for prescribing.

"Most clinics are not designed to store and dispense insulin," Dave Renner, MMA director of advocacy, told the committee. "The administrative costs to accommodate this would be large. In addition, it has the potential to create confusion for patients with co-morbidities who would need to go to the pharmacy for one drug and the clinic for their insulin."

Renner suggested to the committee that the proposal be modified so it's similar to the current use of manufacturer's drug coupons. Once the patient qualified for Pratt's Minnesota Insulin Assistance Program, the physician would provide the patient with

On the calendar

Event	Date	Location
Bounce Back Project's 4th Annual Healthcare Provider Resilience Conference	December 4–5	Plymouth
MMA Day at the Capitol	March 4, 2020	St. Paul

the needed prescription. The patient would then take that to the pharmacy to be filled, and the pharmacy would submit the benefit card for reimbursement by the drug manufacturer.

Several committee members commended Pratt for his proposal; others said it did not sufficiently address emergency cases of patients like Alec Smith, who rationed his supply of insulin because he couldn't afford the prescribed dosage. He died of diabetic ketoacidosis. His mother, Nicole Smith-Holt, testified that more was needed to include an emergency provision.

No action was taken on the bill. Pratt expressed an interest in continuing his work on the bill and incorporating suggested changes.

House Democrats continue to pursue legislation, HF 485, known as the Alec Smith Emergency Insulin Act, introduced by Rep. Mike Howard (DFL-Richfield). The bill would provide a 90-day supply of insulin, free-of-charge, for low-income Minnesotans who cannot afford their insulin, funded by a new registration fee on insulin manufacturers and distributors.

MMA member joins influential opioid advisory group

MMA appointee Halena M. Gazelka, MD, who practices pain and palliative medicine at the Mayo Clinic, is part of a 19-member Opioid Epidemic Response Advisory Council, announced in mid-September.

The council also includes another physician, Anne Pylkas, MD, representing the Minnesota Chapter of the American Society



Halena Gazelka, MD

of Addiction Medicine. Pylkas will serve as the group's chair.

The group will help guide Minnesota's efforts to combat a drug and overdose epidemic that has spread to every region of the state. It held its first meeting in late September. Its first report and project funding recommendations are due in March 2020.

Among other things, the council will make recommendations about projects and initiatives to be funded through the Opiate Epidemic Response Fund, which is expected to raise \$20 million annually through fees collected from drug manufacturers and dis-

Along with Gazelka and Pylkas, voting members include:

- Willie Pearl Evans, public member, Anoka
- Kathryn L. Nevins, DNP, public member, Nevis
- Darin Prescott, DNP, tribal representative, Morton
- Nicole Anderson, tribal representative, Onamia
- Esther Muturi, mental health advocate representative, New
- Alexia Reed Holtum, nonprofit organization representative, Minnetonka
- Wendy Burt, Minnesota Hospital Association representative,
- Roy Sutherland, Licensed Opioid Treatment Program, Sober Living Program, or Substance Use Disorder Program Representative, Minneapolis

- Sarah Grosshuesch, local department of health representative, Delano
- Toni Napier, alternative pain management therapies representative, Ogema
- Judge D. Korey Wahwassuck, Grand Rapids
- Peter Carlson, Minnesota Ambulance Association representative, Cannon Falls
- Katrina Howard, PharmD, Board of Pharmacy representative, Minneapolis
- Rep. Erin Koegel, Spring Lake Park
- Rep. Dave Baker, Willmar
- Sen. Mark Koran, North Branch
- Sen. Chris Eaton, Brooklyn Center

Non-voting members include:

- Commissioner of the Department of Human Services or a delegate
- Commissioner of the Department of Health or a delegate
- Commissioner of the Department of Corrections or a delegate

Surgeon General visits with physician in Rochester

Vice Admiral Surgeon General Jerome Adams, MD, visited Minnesota in late August to meet with Mayo Clinic staff and trainees, as well as local physician leaders from Olmsted County's public health office, physicians from Olmsted Medical Center, representatives from innovative social service organizations and members of the Zumbro Valley Medical Society (ZVMS).

During their time with the Surgeon General, these leaders shared their multi-level collaborative efforts to not only address disease and illness, but also "to go upstream" to address prevention and the social determinants of health, which contribute to poor health outcomes and health disparities.

Dionne Hart, MD, an MMA board member and ZVMS co-president, says she was pleased to learn that ZVMS's collective efforts align with the Surgeon General's priorities.

"Dr. Adams' visit invigorated us, as we discussed opportunities to expand our collaborations and utilize our resources even more efficiently," Hart says.

Fairgoers favor recreational cannabis and stricter gun laws

Informal polls at the Minnesota State Senate and House of Representatives booths at the Minnesota State Fair revealed that fairgoers are in favor of recreational cannabis legalization and stricter gun laws.

During the 12-day event, 11,239 people filled out the poll at the House exhibit, and more than 6,900 took part in the Senate poll. Poll questions included topics currently being discussed at the Capitol. Both bodies asked fair-goers to weigh in on 12 questions.

Here's a sampling of what was asked regarding health care issues: At the Senate booth:

• 55 percent said recreational cannabis should be legalized in Minnesota for those 21 and older.

- 85 percent said law enforcement agencies should be authorized to remove firearms from people who the court determines are an immediate danger to themselves or others.
- 52.2 percent said they believe that the immunization exemption for conscientiously held beliefs should be eliminated.

At the House booth:

- 56.3 percent of respondents favored legalizing recreational cannabis for people age 21 and older.
- 89 percent of respondents favored background checks on all gun sales including private sales and gun show transactions.
- 74.4 percent favored a ban on so-called conversion therapy.
- 61.7 percent opposed a ban on abortions for women who are more than 20 weeks into their pregnancy.

Health commissioner deliberates on medical conditions for cannabis program

Physicians and members of the public were asked earlier this fall to provide comments to Minnesota Department of Health (MDH) Commissioner Jan Malcolm as she deliberates on adding two new medical conditions to the state's medical cannabis pro-

For consideration in 2019, MDH has accepted two petitions for age-related macular degeneration and chronic pain.

State law gives the health commissioner authority to add to the list of qualifying medical conditions and allowable delivery meth-

The public may petition the commissioner to consider adding conditions from June 1 through July 31 each year; a seven-member citizen review panel assists the commissioner in this process.

The original qualifying conditions in the program include:

- Cancer associated with severe/chronic pain, nausea or severe vomiting, or cachexia or severe wasting
- Glaucoma
- HIV/AIDS
- Tourette Syndrome
- Amyotrophic Lateral Sclerosis (ALS)
- Seizures, including those characteristic of epilepsy
- Severe and persistent muscle spasms, including those characteristic of multiple sclerosis
- Inflammatory Bowel Disease, including Crohn's Disease
- Terminal illness, with a life expectancy of less than one year, if the illness or treatment produces severe/chronic pain, nausea or severe vomiting, cachexia or severe wasting

Additional conditions were added through the petition process as follows:

- 2015: Intractable pain
- 2016: Post-Traumatic Stress Disorder
- 2017: Autism Spectrum Disorder, Obstructive Sleep Apnea
- 2018: Alzheimer's Disease
- 2019: TBD

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VIEWPOINT

Every successful sheriff needs many deputies

didn't realize what I was getting into when I first joined the MMA 23 years ago. I thought I would participate in some committee work, then perhaps step back and do something else. Yet something drove me toward getting more involved.

Lately, I have been thinking a lot about why I joined that committee in the first place and why I continued my involvement

After some self-analysis, the answer I kept coming to was this: "I thought I could make a difference." After all, isn't that why we all do what we do, day in and day out? We seek to make a difference in the lives of our patients and our communities, and change them in positive ways. We all seek lives of purpose. Sometimes it might be hard to see our purpose and what difference we are making, but it is there.

The MMA exists to make a difference. It exists to help us in our lives of service and can help us by deepening that sense of purpose. The MMA is the organization that collectively channels our ideas and energies to make a difference in our lives, the lives of our patients and the communities in which we live. The MMA is the framework for all of us to work together across specialty lines and organization boundaries, thereby making Minnesota the best place to practice medicine.

We all know that there is an incredible amount of work to do to continue improving medical care in Minnesota and beyond. Problems like mental health care access, cost of medications, increasing health disparities and many, many other

things continue to plague our daily lives and, more importantly, the lives of our patients.

For the MMA to continue this work and advance our goals, we need physicians of all specialties, skill sets and employer affiliations to work toward solving these wicked problems.

In my mind, being elected MMA president is like being elected the county sheriff. He or she may be the one called on to make public comments about investigations and other happenings in the county, but the sheriff isn't the one who does most of the work. For that, there needs to be a large cadre of dedicated and talented deputies who work in many facets to keep the people in the county safe.

I encourage all Minnesota physicians to think of themselves as deputies serving in your area of expertise. Your efforts, big or small, many or few, together and facilitated by the MMA, will create a force that can truly make a difference and change the world.



Keith Stelter, MD MMA President

The MMA is the organization that collectively channels our ideas and energies to make a difference in our lives, the lives of our patients and the communities in which we live.

Requiring physicians to disclose mental illness regardless of current impairment is discriminatory and dangerous

BY JENNIFER ZICK, PHD, BRIANNA ENGELSON AND SAMEENA AHMED-BUEHLER

resident looked out at the room full of physicians from around the state. We had just introduced a resolution that asked the Minnesota Academy of Family Physicians (MAFP) to advocate for a change in mental health disclosure questions on credentialing and licensing applications, and the floor was open for testimony.

Dr. A. stood up in front of his colleagues and supervisors to share a secret: during his third year of medical school, he suffered alone while fearing that seeking treatment for his medical condition would interfere with his ability to find a job. In the audience, heads were lifted, and phones were set down. Dr. A. said he eventually sought treatment and his health improved, but he felt the same fear when he applied for his medical license in residency.

Unfortunately, Dr. A.'s story is familiar to many. More than a quarter of medical students and residents screen positively for depression—between two and five times the rate in the general population. More than one physician dies by suicide every day, a rate of 28 to 40 per 100,000. That's at least twice the rate of the general population.

Structural barriers

Despite familiarity with the diagnosis and treatment of psychiatric conditions, many physicians are reluctant to seek out the same resources they would recommend for their patients. Of medical students who screen positive for depression, only one in six seek treatment. This pattern appears to be similar in practicing physicians. When physicians do seek treatment, they often take additional steps to maintain confidentiality that are inconvenient, costly and potentially dangerous. For example,

20 percent of depressed physicians in one study reported traveling outside their own medical community to receive treatment and/or paying for services with cash to avoid billing insurance. Ten percent reported having prescribed antidepressant medications for themselves.

Some of the reasons physicians avoid treatment parallel those of individuals in the general population, such as cultural stigma or a belief that treatment is not needed. However, physicians also frequently cite concerns related to confidentiality, professional reputation and the potential loss of medical licenses or staff privileges as major factors. Many state boards and credentialing departments require physicians to disclose their mental health history, sometimes requiring extensive and burdensome documentation. Others require participation in remediation programs, regardless of the physician's current level of function. In a convenience sample of 2,000 female physicians, 75 percent agreed that these requirements impact physicians' decisions about seeking treatment, and 44 percent of those who had personally met criteria for a psychiatric diagnosis avoided seeking treatment in order to prevent having to report such treatment to their state medical board or hospital.

Currently, the Minnesota Board of Medical Practice Physicians License Application asks, "Have you within the past five years been advised by your treating physician that you have a mental, physical, or emotional condition, which, if untreated, would be likely to impair your ability to practice medicine with reasonable skill and safety?" Additionally, most clinics and hospitals in Minnesota require further disclosure of personal mental health illness

and treatment; many even require that physicians who recommend credentialing for others attest that they are unaware of any mental illness in the applicant.

The intended goal of asking broad questions like this is to protect patients. However, there is no convincing evidence that they have the intended effect. When considering the most common mental illnesses, such as anxiety and depression, a past episode does not necessarily predict current functioning or risk, especially if the individual has succeeded in overcoming systemic barriers and received appropriate treatment. Current function is more relevant than health history. Furthermore, because physicians' own health impacts their health and prevention counseling, untreated depression in physicians has the potential to limit effective treatment for

In addition to being a barrier to seeking mental health treatment, disclosure requirements often invade the privacy of individuals. Many institutions require that applicants release their entire medical record if they attest to a history of treatment, including a release of all liability if the records are not stored securely. As far back as 1984, the American Psychiatric Association published a statement that read, in part, "no convincing argument has been advanced to show that a patient should be deprived of the right to the privacy of his or her medical record simply because he or she has chosen to study or practice medicine." However, such disclosure continues to be required for credentialing and licensing in Minnesota.

Some current disclosure requirements may also be illegal. A review of state licensing applications by legal counsel in 2005 found that 69 percent of applications contained "likely impermissible" or "impermissible" questions under the ADA. Minnesota's application had two "likely impermissible" questions. Additionally, the seemingly benign placement of mental health history

and criminal history disclosure questions in similar location on applications can give the perception that punitive measures will be taken against physicians with mental illness, potentially exacerbating the already problematic

stigma around mental illness in the medical field.

With a paucity of evidence that the current disclosure requirements for licensing and credentialing is protective of patients and clear demonstration that they are discriminatory and harmful to providers, it is difficult to justify leaving them in place.

Proposed solutions

The Federation of State Medical Boards released a report in 2016 that became policy in 2018. It states that "the duty of state medical boards to protect the public includes a responsibility to ensure physician wellness and to work to minimize the impact of policies and procedures that impact negatively on the wellness of licensees, both prospective and current." They recommend focusing health disclosure questions on current functional impairment instead of diagnostic or treatment history. The report argues that state medical boards have an opportunity to "declare, directly or indirectly, that it is not only normal but anticipated and acceptable for a physician to feel overwhelmed from time to time and to seek help when appropriate."

To further ensure that physicians and other health care professionals are not discouraged from seeking treatment, the FSMB also recommends that hospitals/ employers revise their credentialing questions and that insurance carriers revise their professional liability insurance questions according to these recommendations. The AMA adopted a similar set of policies and recommendations in 2018.

As we progress through training in this profession, we sometimes see our men-

"

Hello

Meredith and I have

Depression.

Is it an impairment to say, something is wrong and

I need help? Is it an impairment to then seek

out help? If anything, caring for patients kept me grounded. It was the anxiety around losing that, losing what I enjoyed doing, that gave me the most difficulties."

Physician who experienced mental health problems during medical school

tors and peers suffering. This matters to us. We are writing resolutions, providing testimony, and submitting op-eds and commentaries. We are reaching out to our networks, advocating for a change. We are doing what we can. Now, we look to you. We hope you will consider the individual stories, data, and recommendations made by local and national physician organizations—just as you would when managing any medical condition in the course of your practice. Please do what you can do to make health care a safer place for us.

As medical students, we are requesting that you:

- Contact the Minnesota Board of Medical Practice (medical.board@state. mn.us or (612) 617-2130) and ask it to change its policies to reflect the recommendations from the FSMB and AMA to limit disclosure questions to focus on current functional impairment.
- Work with your colleagues within your health system or institution to change

- credentialing questions for physicians and other healthcare professionals.
- Consider pushing for changes in state or national legislation to limit the extent to which institutions are legally allowed to discriminate against physicians with mental illness.
- Most important, speak openly with peers and students about your own experiences with mental illness or treatment, the barriers you have faced and what you learned along the way.
 By doing your part to combat stigma, you can help ensure that the practice of medicine remains a safe and fulfilling profession for generations to come. MM

Jennifer Zick, PhD, Brianna Engelson and Sameena Ahmed-Buehler are fourthyear medical students at the University of Minnesota.

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RELUCTANT AND UNCERTAIN

Minnesota physicians' opinions on medical cannabis

BY JEREMIAH STOUT; JOEL PACYNA; JOHN WILKINSON, MD; J. MICHAEL BOSTWICK, MD; HALEN GAZELKA, MD; AND JON C. TILBURT, MD



In 2014, the Minnesota Legislature established the Minnesota Medical Cannabis Program, which allows the legal use of medical cannabis by patients with a qualifying condition, as certified by their provider. Minnesota's medical cannabis program is notable for having taken measures to explicitly address prominent concerns from the medical profession surrounding medical marijuana. Yet five years since the program was established, only 6 percent of physicians licensed and located in the state have registered to certify patients.

In early 2017, with the assistance of a market research partner, we recruited phy-

sicians practicing in Minnesota to participate in online, bulletin-board focus groups on the topic of medical cannabis. In order to promote honest input, participants were separated into two groups, one made up of those who were registered and one of those who were not. The groups were convened over three days and followed a structured interview guide, administered by an independent moderator who posted the questions and interacted with respondents in real time. At the conclusion of the focus groups, the responses were compiled and de-identified. Research team members reviewed the data, identified qualitative themes and coded the transcripts.

Twenty-two physicians participated, eight of them registered and 14 unregistered, from eight different specialties with three to 40 years of experience. Themes identified included the sufficiency of evidence for medical cannabis, the role of cannabis in the therapeutic tool kit, nonscientific factors in physicians' reasoning and understanding of the state law. Even though there is disagreement over whether the scientific evidence is sufficient for medical use, physicians widely agree that cannabis should not be a first-line option. Physicians consider not only the evidence, but also the cost of medical cannabis and the logistical barriers to access. Finally, there are still significant misperceptions about key aspects of the program.

The experiences and opinions we elicited from a range of physicians suggests they are still reluctant and somewhat uncertain about how to navigate this space. A variety of factors including logistics, liability and misperception make physicians hesitant to embrace medical cannabis, even as an option of last resort.

Background

Across the country, the medical use of cannabis (also referred to as "marijuana") and its derivatives continues to be a frequent topic of debate in both legal policy and medical practice. As of July 2019, 34 states had passed legislation making it legal for medical use. Most Americans (62 percent)

think that the use of marijuana should be legalized and 81 percent believe it has at least one benefit. But, despite growing scientific and public interest, cannabis remains a Schedule I drug under federal law with "high abuse potential" and "no accepted medical use."⁴

Physicians want to help patients mitigate symptoms while avoiding toxic side effects of pharmaceuticals, including opioids. But many unanswered questions remain about the efficacy and risks of using marijuana in the medical setting. There is moderately strong evidence to support its use in the treatment of chronic neuropathic pain, but only limited evidence for its use in ameliorating nausea and vomiting induced by chemotherapy, encouraging weight gain in HIV, and treating sleep disorders and Tourette syndrome. But studies have also found that heavy cannabis use increases risk of psychotic outcomes. While long-term marijuana use can lead to addiction, studies of THC-containing medications, dronabinol (synthetic) and sativex (plant extract), have concluded that those medicines have low abuse potential. This complex backdrop makes medical cannabis both a promising and a confounding drug for many physicians.

In 2014, the Minnesota Legislature passed a bill establishing the Minnesota Medical Cannabis Program, which allows the legal purchase, possession and use of medical marijuana by patients with a qualifying condition. Despite the program's provisions for protecting physicians and preventing abuse and misuse, only 6 percent of licensed physicians in Minnesota have registered to certify their patients in the five years since the program was established. This low participation rate among physicians could reflect low patient demand, or it could suggest physician reticence to participate in the program. In order to better understand the experiences and opinions of the Minnesota medical community regarding medical cannabis, we recruited physicians practicing in the state to participate in online, bulletinboard focus groups on the topic of medical cannabis. We invited physicians who had been practicing for at least one year, were aware of Minnesota's medical cannabis program and practiced one of several specialties managing patients with at least one of the qualifying conditions.

We partnered with KJTgroup, a market research firm with expertise in moderating invitation-only online discussion boards. The bulletin boards followed a structured interview guide developed with content experts from our team and KJTgroup. Participants were clustered into two groups by their registration status at the time of recruitment in order to promote honest input. Each online focus group was open for three days and required a total of about 60 minutes of each physician's time. Upon completion of the focus groups, the transcripts from the two groups were compiled and de-identified. Research team members independently reviewed the data, then together identified qualitative themes and coded the transcripts.

> Physicians want to help patients mitigate symptoms while avoiding toxic side effects of pharmaceuticals, including opioids. But many unanswered questions remain about the efficacy and risks of using marijuana in the medical setting.

The evidence for medical cannabis

There was a noteworthy lack of consensus about the available evidence supporting the use of cannabis derivatives for medical purposes. While all but one of our participants agreed that the evidence for medical cannabis is not conclusive, they were sharply divided over whether or not that limited evidence is sufficient to justify patient use. Among the 17 participants who commented directly on the sufficiency of the evidence for medical cannabis, nine explicitly stated that the evidence for medical cannabis is "sufficient" or "adequate" for justifying its use. Eight said the opposite.

- Sufficient: "I think the available studies are sufficient to allow patient use in certain circumstances, but not rigorous enough to be absolutely conclusive. Adequate evidence is clearly necessary and continued studies should be done to guide patient use." (Registered)
- Insufficient: "I don't think the current evidence [is] either conclusive or sufficient to use cannabis and may need further research and guidelines." (Unregistered, would consider registration)

Not only were our participants sharply divided on whether or not the evidence is sufficient, their stated opinions about the sufficiency of the evidence did not always match their self-reported registration status and practices. Most (67 percent) of the physicians who said data was insufficient were not registered, and most (75 percent) of those who said it was sufficient were. But a handful of physicians in the group who stated that the data is sufficient do not certify patients. Still others who said that the data is not sufficient have certified patients to obtain cannabis for medical use.

- Sufficient: "I believe there is fairly strong evidence for treatment of nausea, poor appetite and other symptoms with marijuana products. The evidence is sufficient for medicinal use of cannabis products" (Unregistered, would not consider registration)
- Insufficient: "I don't feel the evidence is conclusive or sufficient, and the journal articles seem very non-conclusive." (Registered)

"I have some experience with medical cannabis in cancer-related pain and anorexia, but I would only consider it in patients that don't respond to conventional

> medications. which is a small minority of patients."

The role of medical cannabis in the therapeutic toolkit

We asked participants to describe the role medical cannabis has in the "overall therapeutic toolkit." Most participants (77 percent) described it as second-line or a last resort (i.e. "last option," "supplemental," "adjuvant" or "palliative"). Only two participants described it as an equally viable alternative to treatments that are conventional, primary treatments.

"In general, medical cannabis is recommended as a choice if other treatments have failed. I support this. I would not prescribe it as first line treatment for any of the above conditions until more evidence is available to support its efficacy and we know more of the side effects profile." (Unregistered, would not consider registration)

"I have some experience with medical cannabis in cancer-related pain and anorexia, but I would only consider it in patients that don't respond to conventional medications, which is a small minority of patients. I would first be certain that all

available standard treatments have been tried." (Registered)

Other factors

Participants were also asked about whether or not other factors, including cost, were relevant in their consideration of medical marijuana. More than half (55 percent) affirmed that cost was a major consideration for them, while only one stated explicitly that cost was not a factor. Other than cost, travel to a state-approved distribution center was another frequently mentioned logistical issue. Many physicians in our study reported practicing one to two hours away from the nearest location.

- "Cost has been a major reason why my patients do not pursue medical cannabis." (Unregistered, would not consider registration)
- "Cost is the number one logistical factor and second would be travel to a dispensary." (Registered)

Knowledge of the state program

Our data also suggest significant gaps in physicians' understanding of Minnesota's medical marijuana program. Nearly half (43 percent) of the unregistered physicians in our study admitted to having little or no knowledge of the steps the law has taken to mitigate the risks of medical marijuana for both patients and providers. Both registered and unregistered physicians expressed concerns about patients smoking marijuana, even though the Minnesota law forbids smoking. Additionally, several unregistered physicians cited their concern about liability of "prescribing" among their reasons for not registering, despite the fact that the program does not expect physicians to prescribe the drug. This comment exemplifies the misconceptions of some participants about the program:

• "Lots of things might reduce my willingness to prescribe cann[abis]. These include legal problems related to prescribing and maybe not prescribing, side effects and habituation, lung damage if smoked, and being labeled a 'pot doc' who is a loose prescriber of this class of drugs." (Unregistered, would not consider registration)

Discussion

Many of the perspectives expressed in our focus groups echo existing survey data on physicians views of medical marijuana. At the state level, a New York survey has found that a majority of physicians believe medical marijuana should be an option. A recent survey in Minnesota has shed light on physicians' concerns about the impact of cost on the availability of medical cannabis. And studies from Colorado and Washington have revealed that physicians perceive a need for additional knowledge and guidelines.

The medical community's stance on cannabis seems contradictory. Braun and colleagues found in a nationwide sample of oncologists that nearly half were recom-

Physicians who took part in focus group

PRIMARY SPECIALTY	SECONDARY SPECIALTY	REGISTRATION	YEARS IN PRACTICE
Oncology	None	Registered	30
General/Family Practice	None	Registered	20
Neurology	Pain	Registered	19
Oncology	None	Registered	24
General/Family Practice	None	Registered	36
General/Family Practice	Integrative and Functional Medicine	Registered	27
GP/FP	None	Registered	3
General/Family Practice	Functional Medicine	Registered	15
Internal Medicine	None	Not registered; would consider registration	12
Internal Medicine	Oncology	Not registered; would consider registration	4
Palliative Medicine	General Family Practice	Not registered; would consider registration	31
GP/FP	None	Not registered; would consider registration	13
Internal Medicine	None	Not registered; would consider registration	7
Anesthesiology	Pain	Not registered; would consider registration	16
Pain	General Family Practice	Not registered; would consider registration	4
Neurology	None	Not registered; would consider registration	8
Neurology	Pain	Not registered; would consider registration	6
GP/FP	None	Not registered; would not register	15
Internal Medicine	None	Not registered; would not register	9
GP/FP	None	Not registered; would not register	40
Neurology	Pain	Not registered; would not register	40
Rheumatology	Pain	Not registered; would not register	28

mending cannabis, even though 70 percent felt inadequately informed to do so. Most physicians in our study acknowledge that the evidence for medical cannabis is far from conclusive, so they approach it only as a second- or third-line option for patients who have already failed to gain relief from more conventional therapies (that presumably have greater evidence or a more established clinical track record for their use). When patients face high symptom burdens and when conventional treatment options have failed, a lower evidence threshold begins to apply. In such circumstances, pragmatism takes priority over strength of evidence. What matters most to these practicing doctors is that options are available for their patients.

Physicians' consideration of cost and travel raises important questions about other influences on their decision-making around medical cannabis. Physicians' reasoning about the evidence appears to be coherent. However the limitations of our study—a group setting on a digital platform—prevent us from gauging whether physicians are reasoning to their conclusions or from them. In a space as ambiguous and socially charged as medical cannabis, considerations we observed of non-medical factors like cost and travel, together with mixed opinions about the evidence, create the possibility that some degree of paternalism may be impacting physicians' decisions about whether or not to register and certify their patients.

Regardless of physicians' opinions about the scientific evidence for medical cannabis, misperception and misunderstanding of the program abound. Our data highlight a lack of knowledge among Minnesota physicians about the program in which they would be participating. Further research could help clarify the ways that physicians are reasoning about medical cannabis by exploring the role these misperceptions may play. The need for further scientific study and legal rescheduling of cannabis has been well established. But we have found that those are not the only factors at play. To better engage physicians in programs like Minnesota's, there is additional need to

identify ways to effectively address the other factors, such as cost for patients and education for professionals, that impact physicians' decision making. MM

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DOUG WOOD, MD, MMA PRESIDENT

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MARK ROSENBERG, VICE DEAN FOR EDUCATION AND ACADEMIC AFFAIRS, UNIVERSITY OF MINNESOTA MEDICAL SCHOOL

Community Preceptor Toolbox

The MMA, in partnership with the University of Minnesota Medical School, has created a set of tools and resources to improve the training and support for clinical preceptors. **Visit our Community Preceptor Toolbox to learn more!**





2019 submissions

More than 30 students, residents and fellows submitted abstracts and case studies to Minnesota Medicine. Five of those considered of exceptional quality—although quality overall was very good—were published in the November/December issue of Minnesota Medicine. Four are published in this issue and another four will be published in the January/February 2020 issue.

Physician reviewers looked at each manuscript to determine whether the research or case description was clear and complete, whether the methodology was sound, whether the scientific literature review was sufficient and whether the findings had implications for future research.

We thank our reviewers: Devon Callahan, MD; Siu-Hin Wan, MD; Zeke McKinney, MD, MHI, MPH; and Barbara Yawn, MD. Callahan and Wan are members of the Minnesota Medicine Advisory Board; Yawn, now retired, is a former member. McKinney is chief medical editor of *Minnesota Medicine*.

AS GOOD A TIME AS ANY?

Patient attitudes toward advance care planning discussion during pre-operative visits

BY MICHAEL BERRES, BS; DARRELL RANDLE, MD; JOYCE WAHR, MD; KATHLEEN HARDER, PHD; KAREN PETERSON, RN; AND HEIDI MEYERS, RN, MBA, MHCM

Background / Objective

lthough its value to clinicians, patients,1 and healthcare costs² is undisputed, completion rates of advance care planning (ACP) of any type are estimated at a third of U.S. adults.3 A principal reason for not completing ACP is lack of provider initiative.1,4 Because patients require an appointment with a provider before planned surgery, and because minimal studies of ACP in the pre-operative setting have been

FIGURE 1

Patients' perceived best time to discuss ACP, n (% of total)

WHEN IS THE BEST TIME TO DISCUSS ACP?		
With primary care provider	33 (34%)	
During pre-op appointment	20 (21%)	
With family and friends	34 (35%)	
During hospital stay	9 (9%)	

conducted,5 our aim was to evaluate patient attitudes toward ACP discussion in a pre-operative assessment center (PAC) as a means to increase ACP completion.

Methods

A 13-question paper survey with an introduction about ACP was distributed to all patients over age 18 visiting the PAC at the University of Minnesota. Questions ranged from demographics, anxiety regarding the operation, beliefs regarding ACP, and perceived optimal time for ACP discussions.

Results

Ninety-six patients completed the survey, with 47% of respondents having previously completed some form of ACP. Of those who had not previously filled out any type of ACP, the most common reason (38%) was not being asked to complete one by

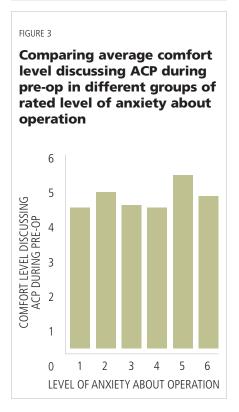
a provider; four people stated they had no desire to complete any form of ACP. Patients' views of when is the best time to discuss ACP and patients' rating of comfort with speaking about ACP during a pre-operative appointment are shown in Figure 1 and Figure 2.

Discussion

Our primary goal was to assess patient reception to discussing ACP during a preoperative appointment with a provider

Number of respondents for each rating of comfort level in discussing ACP during pre-op appointment, n (% of total)

I WOULD FEEL COMFORTABLE S WITH A PROVIDER ABOUT ACP I PRE-OP APPOINTMENT	,
Response	n (%)
1 (STRONGLY DISAGREE)	10 (12%)
2	6 (7%)
3	3 (4%)
4	10 (12%)
5	14 (17%)
6	12 (14%)
7 (STRONGLY DISAGREE)	28 (34%)



other than their usual primary care provider (PCP). Results from Figure 2 show the most common response was patients strongly agreeing to feeling comfortable discussing ACP during a pre-op appointment, and that 64/83 (77%) of responders were neutral (response of 4) or better in regards to discussing ACP during a preop assessment. This, coupled with results from Figure 1, demonstrate that although patients still preferred their PCP for ACP discussions, 21% of respondents would choose pre-op as the best time to discuss ACP, and discussing ACP during pre-op would only be deemed uncomfortable for a small percentage of patients.

Providers may be leery of such a discussion during a pre-operative appointment at the risk of increasing stress for an already anxious patient. However, as seen in Figure 3, there was no correlation (R2 0.002) between anxiety level and average comfort level discussing ACP during the pre-operative appointment.

Future research will revolve around gathering provider input and optimizing interventions in the pre-operative assessment theater. MM

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Advancing effective healthcare for sexual and gender minority pediatric patients: an evaluation of the LGBTQIA+ symposium

BY BAILA ELKIN, TOBIAS DONLON, ANNA DOVRE, MARVIN SO, KATHERINE BECK-ESMAY, KRISTIN CHU, AND KYLIE BLUME

Background

ulti-level factors including stigma, social inequity, and lack of awareness among health care providers drive health disparities experienced by LGBTQIA+ populations. To address this, the Sexual and Gender Minority Health Initiative organized a three-hour symposium focusing on care for LGBTQIA+ children and youth. We hypothesized that participating in the symposium, involving interprofessional didactic and active learning components, would promote increased effectiveness working with this population.

ate students (12%). The survey assessed five indicators of the symposium's effectiveness: knowledge about this population, comfort in discussing their healthcare needs, confidence in finding resources, comfort in interacting with this population, and comfort in recommending care for this population. We conducted 1-tailed paired t-tests to evaluate the effectiveness of the symposium, and ANOVA tests to compare differences by professional role.

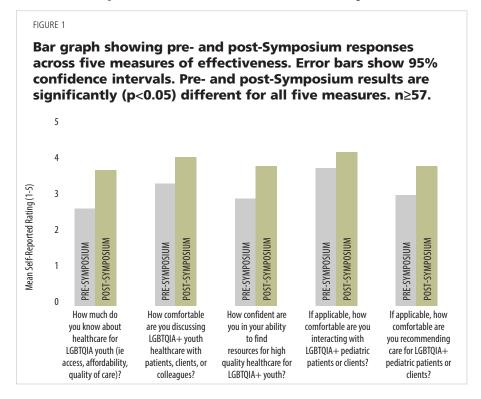
munity members (19%), and undergradu-

Methods

Sixty-seven individuals completed a retrospective pre-then-post evaluation survey. Respondents included graduate students (48%), healthcare providers (21%), com-

Results

Participants reported significantly higher (p<0.001) scores across all five measures of effectiveness from pre- to post-symposium. By role, scores significantly improved (p<0.05) for all measures except comfort in interacting with LGBTQIA+



pediatric patients or clients among (1) undergraduates and (2) community members. Although not significant, we found a trend showing healthcare providers seeing the greatest value and relevance in the symposium's active-learning component compared to other groups. Groups who did not find the session relevant (average rating of <4 on a 1-5 scale) found it useful in contextualization.

Conclusions

Our results indicate that the Symposium significantly increased participants' self-reported effectiveness in serving LGBTQIA+ pediatric patients. Limitations include low survey response rate (32%) and recall bias, since the pre- and post-symposium survey was filled out retrospectively. Our data demonstrate that an educational model including interprofessional didactic and

active learning components is an effective way to increase proficiency in pediatric LGBTQIA+ health and other specialized topics that may not be sufficiently addressed by traditional education. MM

Baila Elkin, Tobias Donlon, Anna Dovre, Marvin So, Katherine Beck-Esmay, Kristin Chu, and Kylie Blume are students, University of Minnesota Medical School.

Levamisole-induced vasculitis leading to bilateral leg amputation

BY ADARSH RAVISHANKAR, BS; ROBERT PUERINGER, MD; AND SAMUEL IVES, MD

evamisole is an antihelminthic medication frequently used as a cutting agent in cocaine. It is increasingly associated with an autoimmune vasculitis that can result in formation of necrotic bullae.² The syndrome typically improves with cocaine cessation, but has been reported to cause irreversible damage.² We report a case of severe levamisoleinduced vasculitis resulting in bilateral lower extremity gangrene and subsequent amputation.

Case Report

A 55-year-old male with known COPD, systolic heart failure, and severe cocaine and alcohol use disorders, was admitted with altered mentation, dyspnea, and acute onset bilateral lower leg pain. He was found to have acute crack-cocaine intoxication, acute alcohol withdrawal, and sepsis with acute respiratory failure from pneumonia, necessitating intubation. Examination was notable for painful, purpuric, retiform, and bullous skin lesions with central ulceration on his lower extremities. Labs revealed thrombocytopenia.

The evening of admission, the patient's cutaneous lesions rapidly evolved into necrotic bullae and spread to his ears, nose, and shoulders. Examination by dermatology showed progression of the skin lesions with enlarging fluid-filled bullae with central necrotic ulcerations (Figure 1). Given the clinical history, rapidly evolving



FIGURE 1 Right lower extremity showing bullae

skin lesions, and newly-discovered documentation referring to biopsy-confirmed levamisole-induced vasculitis three years prior, there was concern for levamisoleinduced vasculitis.

Over the next few months, the patient's skin lesions became progressively necrotic and he developed secondary bacterial infections of both legs, ultimately resulting in bilateral lower extremity amputations (Figure 2).

Discussion

Levamisole is an anthelmintic medication that works as a ganglionic nicotinic



FIGURE 2 Bilateral lower extremities with development

agonist. Although indicated for veterinary helminthic infections, over the past two decades levamisole has been increasingly used as a "cutting agent" for cocaine.2,3 It increases bulk, boosts purity, and may potentiate the stimulant effects of cocaine. In 2009, the DEA reported 69% of adulterated cocaine contained levamisole.2,4

Levamisole is known to cause bone marrow suppression that can result in various cytopenias. It is also associated with an autoimmune vasculitis that presents with painful, purpuric, retiform (net-like) rashes with hemorrhagic bullae that progress to necrotic ulcerations. 1, 2, 4 The lower extremities are most often involved followed by the ears, nose, and cheeks. Although there have been case reports of levamisole-induced vasculitis leading to unilateral lower extremity gangrene and amputation, this is the first known case to result in bilateral lower extremity amputations. ^{1,5,6}

Diagnosis is based upon clinical history and biopsy results. Histologically, the cutaneous lesions are characterized by microvascular thrombi and/or leukocytoclastic vasculitis indicative of a combined thrombotic vasculopathy and small vessel vasculitis. Laboratory analysis often shows positive ANA titers, anti-MPO/PR3 antibodies, or p-ANCA. Management of levamisole-induced vasculitis involves cessation of levamisole-laced cocaine use and supportive cares. Corticosteroids have not shown clinical benefit in reported cases. Major disease or skin necrosis

should be managed in a burn unit with a multidisciplinary care team.¹⁰

In conclusion, levamisole-induced vasculitis is a severe autoimmune reaction that can result from recent cocaine exposure. Although often reversible, symptoms may progress to the point of limb gangrene that requires amputation. Early detection and cessation of cocaine exposure are essential. MM

Adarsh Ravishankar, BS, is a medical student, University of Minnesota Medical School. Robert Pueringer, MD, and Samuel Ives, MD, are internists at Hennepin County Medical Center.

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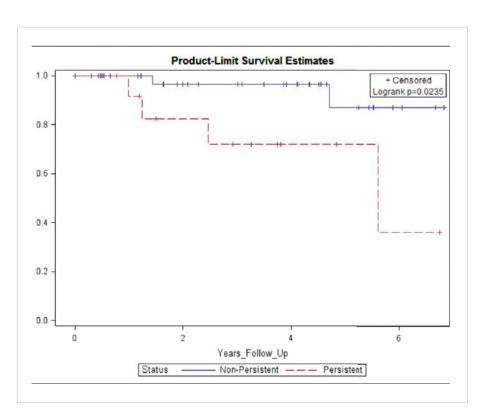
Persistent confirmed Barrett's associated low-grade dysplasia is a risk factor for progression to high-grade dysplasia and adenocarcinoma in U.S. veterans

BY KEVIN SONG, MD

he current management of dysplastic Barrett's esophagus (BE) involves surveillance and endoscopic eradication therapy (EET). Higher degrees of dysplasia confer increased risk of esophageal adenocarcinoma (EAC) and management decisions are made based on the degree of dysplastic changes. While high-grade dysplasia (HGD) and early stage esophageal adenocarcinoma (EAC) are best managed with EET, the management of patients with confirmed low-grade dysplasia (LGD) remains controversial. The benefits of EET for LGD must be weighed against the attendant risks, costs, and uncertain long-term benefits. For these reasons, additional risk stratification can be helpful in charting the management course.

Aim

To determine the incidence of HGD/ EAC in patients with confirmed LGD



and evaluate the risk associated with persistent confirmed LGD as compared to non-persistent confirmed LGD in veterans undergoing regular endoscopic surveillance for BE.

Patients and methods

Patients with BE and a histopathologic diagnosis of confirmed LGD between 2006 and 2016 were identified from the Minneapolis Veterans Affairs pathology database (n = 69). Confirmed LGD was defined as LGD diagnosed by pathology consensus conference. Persistent LGD was defined as LGD present on subsequent endoscopic biopsy at least three months after the initial diagnosis of LGD. The electronic medical records system was utilized to collect demographic and clinical variables including past medical history, EGD findings, histopathology, and lifestyle risk factors. The primary outcome was the incidence rate of HGD/EAC in patients with persistent confirmed LGD undergoing endoscopic surveillance for BE. Multivariate logistic regression analysis was

used to assess the association between outcomes and risk factors for progression. Kaplan-Meier curve was used to evaluate progression probability then compared using Wilcoxon signed-rank test.

Results

In total, 16 of 69 patients (23.2%) with confirmed LGD developed HGD/EAC during a median follow-up of 3.74 years (IQR, 1.24-5.45) and median 6.00 endoscopies (IQR, 2.75-9.25). The overall annual incidence rate of HGD/EAC was 6.08 cases per 100 patient-years (95% CI, 3.60-9.67). For patients with persistent confirmed LGD the rate was 6.44 (95% CI, 2.61-13.40) compared to those with nonpersistent LGD where the rate was only 2.61 cases per 100 patient-years (95% CI, 0.83-6.30). A Kaplan-Meier curve (Figure) displays the statistical difference between persistent and non-persistent confirmed LGD (p=0.0235). Persistent confirmed LGD was found to be an independent risk factor for the development of HGD/ EAC with OR of 4.18 (95% CI, 1.03-17.1).

Hiatal hernia was also associated with dysplastic progression (p=0.047). Other risk factors did not impact the risk of developing HGD/EAC.

Conclusion

In this retrospective VA cohort study, persistent confirmed LGD is an independent risk factor for the development of HGD/ EAC. Patients who fail to show evidence of confirmed LGD at follow-up endoscopy are at lower risk of progression. Close surveillance may, therefore, be an appropriate initial strategy for confirmed LGD, with triage to EET versus continued surveillance decided after evaluation for persistence. The predictive value of persistence or non-persistence with respect to risk of progression can be used to make more informed decisions about the potential benefits and harms of EET or continued surveillance. MM

Kevin Song, MD, is a chief resident in internal medicine, University of Minnesota, Minneapolis VA Health Care System.



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Colophony (rosin) allergy: more than just Christmas trees

BY LINDSEY M. VOLLER, BA; REBECCA S. KIMYON, BS; AND ERIN M. WARSHAW, MD

Colophony (rosin) is a sticky resin derived from pine trees and a recognized cause of allergic contact dermatitis (ACD), a type IV hypersensitivity reaction. It is present in many products (Table 1) and is a common culprit of allergic reactions to adhesive products including adherent bandages and ostomy devices. ACD to colophony in pine wood is less common although has been reported from occupational exposures, as well as consumer contact with wooden jewelry, furniture, toilet seats, and sauna furnishings. We present a patient with recurrent contact dermatitis following exposure to various wood products over the course of one year.

Case Description

A 34-year-old otherwise healthy man presented with a one-year history of intermittent dermatitis associated with handling pine wood products. His first episode occurred after building shelves using spruce-pine-fir (SPF) lumber. Symptoms began with immediate burning of the skin followed by a vesicular, weeping dermatitis three days later on the forehead (Figure 1), forearms (Figure 2) and legs. He received oral prednisone from Urgent Care with subsequent resolution. Later, he developed a similar rash on his hands after handling a pine Christmas tree, as well as on his nasal bridge after applying Nerdwax®, a tacky substance used to prevent slippage of eyeglasses. Two weeks prior to presentation to our clinic, he developed a facial and forearm dermatitis after assembling wooden furniture. He denied symptoms from bandages or adhesives or from personal care products. The patient worked as a high school English teacher and had no occupational contact with wood.

Patch testing was performed to the 2019-2020 North American Contact Dermatitis Group screening series, selected allergens on the plant/wood and emulsifier series, and multiple home items including Nerdwax®, pine sawdust, and



FIGURE 1

Erythema and vesicle formation on the upper left forehead following exposure to spruce-pine-fir lumber.

samples of the pine Christmas tree from the previous season. Final patch test reading on day 5 demonstrated strong or very strong (++ or +++) reactions to colophony, abietic acid, abitol, pine sawdust, Nerdwax*, and his Christmas tree (Figure 3). He also had doubtful (+/-) reactions to wood tar mix (containing pine) and several fragrances. Propolis (bee glue), white beeswax, yellow beeswax,

TABLE

Potential sources of colophony

Adhesives, bandages	Inks (pen, ceramic, printing)
Chewing gum	Laundry soaps
Cigarette filters and paper	Leather cleaner and lubricant
Cosmetics (particularly mascara)	Linoleum, floor tile, carpet adhesive
Dental materials	Medicated creams and ointments
Depilatory, hair removal wax	Ostomy devices
Disposable diapers, sanitary napkins	Paints, lacquers, varnishes
Glues for shoes, boots, and insoles	Paper products
Grip aids (e.g., gymnastics, rock climbing)	Pine oil cleaner, pine/spruce sawdust
Firewood, match tips, fireworks	Polishes (shoe, floor, car, furniture)
Furniture/floor polishes, stains	Rosin for shoes, string instruments
Hair spray, pomade	Shoes, shoe polish, shoe wax
Hydrocolloid dressings	Sunscreens



FIGURE 2

Erythema, edema, and multiple clustered vesicles on the left dorsal hand and medial forearm following exposure to spruce-pine-fir lumber.

coconut oil, and peppermint were negative; the reaction to Nerdwax* was attributed to gum rosin, a form of colophony (Figure 4).

Discussion

Allergic reactions to colophony are common but are usually due to adhesive sources (e.g. bandages, shoe glue). ACD to colophony in pine wood is relatively

TABLE 2

Examples of products with colophony-free alternatives¹³

PRODUCT TYPE	COLOPHONY-FREE ALTERNATIVES
Adhesive tapes	Dermicel, Micropore, Scanpor
Bandages	BandAid Sheer Strips
Diapers, feminine hygiene products	Cloth diapers and pads
Grip aids	Chalk, Zeasorb powder
Glues	Elmer's Glue-All
Epilating wax	Depilatory creams or lotions, sugar wax
Grocery bags	Plastic preferred over paper (rosin found in some recycled paper)
Hydrocolloid dressings	DuoDERM original wound dressing or Flexible Collodion USP
Rosin (baseball, bowling)	Talc
Rosin (violin, viola)	Super Sensitive Clarity Spectrum Hypoallergenic Violin/Viola Rosin
Shoes	Wesco boots, Crocs, Saucony, Servuc Injection Molded Footwear

uncommon and allergens other than colophony may be causative. 4,5 Prior case reports of pine wood allergy have primarily been noted among individuals with repeated occupational exposures (e.g., cabinet makers, carpenters, and sawmill workers).6-8 Non-occupational allergy to colophony in finished wood products is exceedingly rare but has also been reported, usually in settings of routine or prolonged exposures such as with furniture and wooden jewelry.3,9 Clinical symptoms of pine wood allergy include dermatitis of body areas directly contacting pine, in addition to airborne facial patterns if exposure entails wood dust/shavings.^{2,3}

Resulting dermatitis presents up to four days following last exposure consistent with a type IV, delayed type hypersensitivity reaction (allergic contact dermatitis).² Our patient noted facial involvement three days after wiping sweat from his brows while building shelves composed of pine wood.

While the majority of ACD cases to pine wood occur occupationally, most cases of isolated colophony allergy are due to adhesives, plasters, dental materials, hair removal waxing products, and certain cosmetics, especially mascara. 6.10 Rosin is used as a grip aid for gymnasts, baseball players, bowlers, and rock climb-







FIGURES 3A, B, AND C
Positive (++ or +++) read

Positive (++ or +++) reactions demonstrated on day five patch test reading to colophony, pine sawdust, abietic acid, and abitol.



FIGURE 4

Positive (++) reaction demonstrated on day five patch test reading to Nerdwax. Nerdwax declares gum rosin in its ingredient label, along with beeswax, coconut oil, and peppermint.

ers. It is also used to coat violin bows. As seen in this case, some individuals with colophony allergy also have difficulty with pine trees and pine decorations (i.e., "Christmas tree allergy"). 11 Three main types of colophony exist—gum rosin (the most commonly used), wood rosin, and tall oil, with primary differences based on the method of manufacturing. Main components of colophony include resin acids, largely abietic acid, and a smaller "neutral fraction" consisting of dihydroabietic acid and dehydroabietic acid. 10 Although both unmodified and modified forms of colophony have allergenic potential, modified colophony products, such as abitol, are strong sensitizers.4 Notably, fragrance and propolis (bee glue) are common cross-reactors to colophony.¹² Our patient reacted to several fragrances but propolis and beeswax were negative.

This patient's noted patch test reactions, in addition to relevant clinical exposures, aligned well with pine wood and colophony allergies. He was likely sensitized to pine wood, colophony, and their derivatives through previous furniture assembly projects. Future avoidance of colophony-containing products, including pine wood, was recommended, as well as wearing protective clothing when contacting pine wood and avoidance of pine sawdust, which could result in significant airborne exposures. He did not report any prior issues with bandages or adhesives; however, given his strong reaction to colophony, specific alternatives for tapes and wound dressings without colophony and rosin were provided (Table 2). He was also prescribed a three-week oral prednisone taper to resolve remaining dermatitis; if systemic steroids are indicated, it is important to provide a three-week taper (rather than a three- or five-day course) to prevent rebound from partially treated ACD.

We present this case to raise awareness regarding the clinical presentation of colophony allergy from a pine wood source. As a type IV hypersensitivity reaction, ACD typically presents two to three days after the last exposure and lasts for three weeks. Avoidance of products containing colophony, pine, and related derivatives is mainstay therapy. MM

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MEET MMA PHYSICIANS

SARAH TRAXLER, MD

- Chief medical officer, Planned Parenthood North Central States, and adjunct faculty, Department of Obstetrics and Gynecology, University of Minnesota Medical School
- MMA member since 2009
- Grew up in Alexandria, Louisiana, and graduated from Tulane University. Worked with the homeless in Austin, Texas, as a volunteer with AmeriCorps VISTA. Spent seven years working in nonprofits that serve the homeless before going to medical school at Oregon Health and Science University. Residency in OB/GYN at University of Minnesota, then a fellowship in family planning and contraceptive research at University of Pennsylvania. Master of Science in health policy from University of Pennsylvania.
- Husband Billy Menz is a high school ELL teacher and JV baseball coach at Edison High School in Minneapolis. Two children, Ellie, 16, and Clark, 12, and dogs Avalanche and Persephone.

Became a physician because ...

While I was working in non-profits in Austin, Texas in the late '90s, my primary work was with homeless youth, ages 15-25, many of whom were IV drug users and/or involved in survival sex work. I saw many of them struggle to get access to basic health care, especially reproductive health care, and I witnessed them navigate a system that was often unfriendly and intolerant of them. Much of my time was spent helping them through the health care system, and I often accompanied women to reproductive health appointments. There were only a few providers that I interfaced with that were unfailingly kind and generous. This, in stark contrast to other providers who dismissed the kids I worked with, inspired me to become a physician and to emulate their compassion to try to affect change within the medical system.

Greatest challenge facing medicine today ...

My line of work is embroiled in politics even as we face increasing maternal morbidity and mortality, especially for women of color, because there are vast health inequities that still plague our communities. Access issues related to geography, insurance status, etc. are ever more concerning, yet we have not been unable to create lasting innovative solutions to ensure patients are able to access the care they need in the communities that they live.



Favorite fictional physician ...

I love Dr. Strange, mostly because I love Marvel comics, but I also appreciate his transformation from an arrogant neurosurgeon to a magician who wants to help for more altruistic reasons. The story reminds me to approach the world with humility

If I weren't a physician ...

I would definitely open an easy-going, late night dessert spot. I love to bake and use food as a way to connect and show people that I care. Baking could never be work for me—and it's delicious!

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HOW HOSPITALS CAN BECOME MORE ENERGY EFFICIENT

by Jennifer Kimmen, Services Manager

When we think of energy use in hospitals, we likely consider the medical equipment that assists patients. X-ray and MRI machines, CT scanners and other technical devices consume high amounts of energy. These are but one of the components that contribute to the high energy consumption of hospitals.

For instance, hospital kitchens house many commercial appliances, from stoves

and refrigerators to dishwashers and other specialized food service equipment. EnergyStar.gov reports that inefficient kitchen appliances for cooking and storage are among the greatest energy drains for food service establishments. Hospital lighting, which runs constantly, is another large energy user.

Hospitals also need high ventilation rates to reduce the risk of microbial

contamination. Because of this requirement, the U.S. Department of Energy indicates that heating, ventilating air-conditioning systems (HVAC) can account for nearly half of a hospital's

energy consumption.

With all this energy being consumed, it's important to consider what opportunities for conservation exist.

Minnesota Energy Resources offers several programs that hospitals can use to help achieve both short-term and long-term cost savings.

Energy savings audits

While fixing inefficiencies such as outdated or malfunctioning equipment may seem obvious, a professional energy audit is the best way to start. An audit helps identify equipment to be repaired or replaced, pinpoints behavior that could be contributing to energy inefficiency, and provides proactive steps to be taken. Energy audits can pay for themselves in the cost savings they identify, and electric or natural gas companies such as Minnesota Energy Resources often offer rebates to help pay for them.

General maintenance and tuneups

Regular maintenance and tuneups of equipment and energy systems are critical to maximizing their efficiency and life. Failing to properly maintain HVAC systems, water heaters and food service equipment, for example, not only results in higher energy use and operating costs but can also shorten their lifetime and may even put at risk the health and safety of employees and patients. Tuning up equipment incurs costs in the short-term, but will result in savings over the long-term. Programs offered by electric and natural gas companies can even offset the costs for tuneups and maintenance items.

Energy efficiency rebates

Hospitals face a variety of energy use

challenges. Uncertain fuel prices, freezes on capital spending and corporate requirements for rate of return make energy efficiency a must in order to prepare for unexpected budget or cost changes. Hospitals looking to cut back on energy expenses can take advantage of rebates available for a variety of energy-saving purchases, from installing insulation to replacing larger equipment such as boilers, chillers, building controls, water heaters or food service equipment.

Minnesota Energy Resources also offers hospitals that use 100,000 therms or more of natural gas per year a turn-key efficiency program to help them reduce monthly energy costs and shorten the payback period of new high-efficiency equipment and processes. The turn-key program helps hospitals create a long-term energy plan for project prioritization and implementation, and provides access to applicable financial tools including local, state and federal resources.

Recently, Minnesota Energy Resources' turn-key program helped the Mayo Clinic in Rochester, Minnesota, receive over \$11,000 in rebates for the purchase and installation of a new control system and venting unit in one of its buildings. Working one-on-one with a turn-key program energy adviser, the Mayo Clinic's

project was part of their long-term plan for energy efficiency.

The earlier, the better

Of course, the construction of a new facility presents the optimal opportunity to incorporate energy efficiency right from the start. Partnering with Minnesota Energy Resources during construction planning can put many energy and cost saving options and procedures in place. Together, with the architects and engineers, they can evaluate the design of the building and offer advice for best results.

Installing high efficiency boilers, furnaces and domestic hot water heaters, energy management systems, energy recovery systems and a high performance building envelope will also be great first steps toward saving. Minnesota Energy Resources can guide hospitals with these kinds of choices to help them make the right decisions and save money.

Being proactive about saving energy has countless benefits, from immediate savings and extended equipment life to improved air quality and a healthier environment for patients and staff. Working with an energy efficiency program early on helps hospitals avoid energy inefficiencies and the costs that come with them.







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