

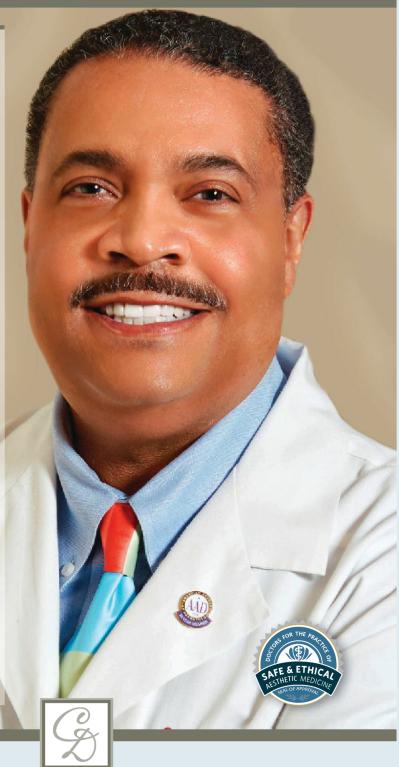
Booster shots for MENINGOCOCCAL DISEASE PAGE 29
Should physicians JOIN A STRIKE?
PAGE 32

2019 ABSTRACTS from students, residents and fellows PAGE 43



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.



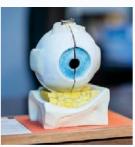
CRUTCHFIELD DERMATOLOGY

Experience counts. Quality matters.

Mayo Clinic Medical School Graduate | University of Minnesota Dermatology Trained
Top Doctor Minneapolis St. Paul Magazine | Best Doctors for Women Minnesota Monthly Magazine
Team Dermatologist for the Minnesota Twins, Vikings, Timberwolves and Wild



























We're making business banking easier.

At PNC, our team of dedicated Healthcare Business Bankers understands your business challenges and the important role that cash flow plays in your success. That's why we offer a range of solutions to help optimize management of your practice's revenue cycle and payables, so your business can run with less complexity and payments can be received promptly.

Learn more at pnc.com/hcprofessionals or by calling 877-566-1355



CONTENTS

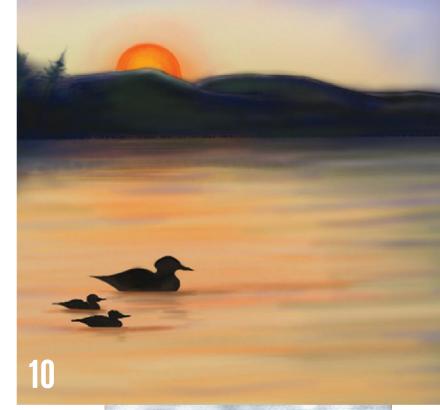
Sep/Oct 2019 | VOLUME 102 | ISSUE 5



IN THIS ISSUE

Minnesota Medicine talked with physicians in rural areas to get a sense not only of the kinds of challenges they face but of the strong bonds they have with their patients and their communities. Their stories—in their

own words—begin on page 15.



FEATURES

ON THE COVER

Health care and physicians in rural Minnesota

10 The challenges

Technology and innovative approaches to care are needed.

15 Physicians working in rural communities

They choose rural practice because they love the work and it's home.

BY LINDA PICONE

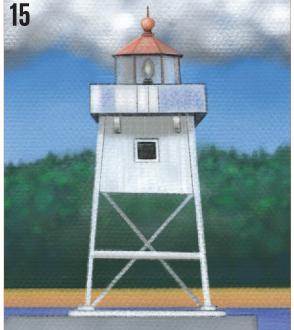
26 Training physicians for work in Greater Minnesota

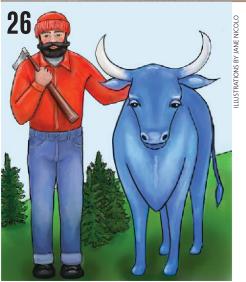
The key is finding people who want to return to their roots. BY PAULA TERMUHLEN, MD

Student, Resident AND Fellow Research

- **43** Some of the top submissions from the Minnesota Medical Association's annual invitation.
- **50** Community awareness and perception of concussions in central Minnesota.

BY RYAN CHRISTOPHER JAMESON, BA, AND JON EDWARD DENNIS, MD, MPH, FAAP





DEPARTMENTS

4 EDITOR'S NOTE

6 GOOD PRACTICE

Students learn about cardiac care in rural areas through an Essentia Health intern program.

BY CATHERINE BENZIGER, MD, MPH; MICHAEL MOLLERUS, MD; VICKI PINK, RN; JOSEPH DOERER, MD; AND KATE DEAN, MBA

32 ETHICS

Can physicians ethically participate in a strike?

BY JULIE K. ANDERSON, MD, FAAFP, AND EMILY ONELLO, MD

34 THE PHYSICIAN ADVOCATE

What to look forward to at the 2019 MMA Conference, Prior authorization, Medical cannabis and PTSD. New laws in effect. Prescription medicine pricing.

53 EMPLOYMENT OPPORTUNITIES

COMMENTARY

Protecting young adults from meningococcal disease

Many lag in getting the important booster vaccination.

BY JENNIFER HEATH, DNP, MPH, RN

ON CALL

STRIKE STRIKE

MEDICINE

CONTACT US

Minnesota Medicine 1300 Godward Street, Suite 2500 Minneapolis, MN 55413 PHONE: 612-378-1875 or 800-DIAL-MMA EMAIL: mm@mnmed.org WEB AND DIGITAL EDITION: mnmed.org

OWNER AND PURI ISHER

Minnesota Medical Association

EDITOR

Linda Picone

CHIEF MEDICAL EDITOR

Zeke McKinney, MD, MHI, MPH

DIRECTOR OF COMMUNICATIONS

ART DIRECTOR

CIRCULATION/WEB CONTENT

Mary Canada

ADVISORY COMMITTEE

Devon Callahan, MD Amanda Day, DO Mark Eggen, MD Jon S. Hallberg, MD Dan Hauser

Charles R. Meyer, MD Gregory Plotnikoff, MD Janet Silversmith Siu-Hin Wan, MD

COPYRIGHT AND POST OFFICE ENTRY

Minnesota Medicine (ISSN 0026-556X) is published bi-monthly by the Minnesota Medical Association, 1300 Godward Street NE, Suite 2500, Minneapolis, MN 55413. Copyright 2019. Permission to reproduce editorial material in this magazine must be obtained from *Minnesota Medicine*. Periodicals postage paid at St. Paul, Minnesota, and additional mailing offices. POSTMASTER: send address changes to Minnesota Medicine, 1300 Godward Street, Ste 2500, Minneapolis, MN 55413.

SUBSCRIPTIONS

Annual subscription: \$45 (U.S.) and \$80 (all international)

MISSING ISSUES AND BACK ISSUES

Missing issues will be replaced for paid subscribers at no additional charge if notification is received within six months of the publication date. Replacement of any issues more than six months old will be charged the appropriate single back issue price. Single back issue price. Single back issues of *Minnesota Medicine* can be purchased for \$25 (U.S.) and \$30 (Canada, Mexico, and other international). Send a copy of your mailing label and orders to Mary Canada, 1300 Godward Street, Ste 2500, Minneapolis, MN 55413 or fax it to 612-378-3875.

56 Meet MMA physicians

Matt Klein, MD, FACP, and Katie Smentek, MD, FAAP

🚮 Like us on Facebook [Follow us on Twitter @MNMedMag

TO ADVERTISE

Contact Andrew Luedtke PHONE: 612-986-1222 EMAIL: aluedtke@thehedlundgroup.com

Minnesota Medicine is intended to serve as a credible forum for presenting information and ideas affecting Minnesota physicians and their practices. The content of articles and the opinions expressed in Minnesota Medicine do not represent the official policy of the Minnesota Medical Association unless this is specified. The publication of an advertisement does not imply MMA endorsement or sponsorship.

To submit an article

Contact the editor at mm@mnmed.org

The editors reserve the right to reject editorial, scientific or advertising material submitted for publication in Minnesota Medicine. The views expressed in this journal do not necessarily represent those of the Minnesota Medical Association, its editors or any of its constituents.



MINNESOTA MEDICAL Association

PRESIDENT

Douglas Wood, MD

PRESIDENT-ELECT Keith Stelter, MD

CHAIR, BOARD OF TRUSTEES Randy Rice, MD

SECRETARY/TREASURER

Edwin Bogonko, MD PAST PRESIDENT

George Schoephoerster, MD

CHIFF EXECUTIVE OFFICER Janet Silversmith



Zeke J. McKinney, MD, MHI, MPH

Can [physicians] be comfortable if their identity gender, race/ ethnicity, geographic background, religion, or principle values—is different from that of the community?

Overcoming identity differences to meet the needs of the medically underserved

ove Thy Neighbor, the recent book by Ayaz Virji, MD, provides an interesting perspective on working as a doctor in rural Minnesota. Virji is of Indian descent and a practicing Muslim. He describes how much he felt embraced by the community—until after the 2016 presidential election.

He was attached to a place he felt had become his home, where he could serve as a needed physician, and then progressively began to feel it was less safe and welcoming for him and his family.

Virji discusses the medical needs of rural communities in Minnesota and suggests that the recent outpouring of xenophobia may limit which physicians choose to serve these communities. Can they be comfortable if their identity-gender, race/ ethnicity, geographic background, religion, or principle values—is different from that of the community?

Many communities receive care differentially because of systemic biases-including biases on the part of physicians against gender, race/ethnicity, geography and many other factors. What about the inverse case, where clinical care is affected when there is a patient preference for the kind physician they wish to see?

Ann Garran and Brian Rasmussen, in a commentary in the June 2019 issue of the AMA Journal of Ethics, contend that it is the duty of organizations to address racism, particularly assaults, against health care workers. They write that recurrent racial aggressions "leave a person of color in a state of disequilibrium, with nowhere to turn."

Virji describes conflicts and threats primarily outside of clinical settings, which raises even larger questions in the context

of communities with limited numbers of practicing physicians. How can a physician serve the needs of a community where they do not feel welcome nor safe, and how does this exacerbate disparities in health equity for communities where health care resources are scarce? These two problems of cultural discordance and health equity are ones we must continue to address as physicians.

The logistical challenges of having a perfectly concordant physician locally available for all patients are innumerable, especially for medically underserved areas. Physicians must continue to support community engagement and health education—including engagement and education on cultural identity and how it can impact care.

We must tell—and show—patients how the four basic principles of medical ethics (autonomy, beneficence, non-maleficence and justice) are at the heart of our care for patients. For both physicians and patients, identity discordance should not be a barrier to a successful physician-patient relationship.

In Minnesota, we know and can find our underserved communities—geographically and culturally. They must be our partners in public and individual health to ensure the best environment for physicians and patients. MM

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



As their doctor, don't forget to:

- Vaccinate your adolescent patients at age 16 years with a meningococcal (MenACWY) booster dose.
- Catch your adolescent patients up on the vaccines they need like human papillomavirus (HPV), tetanus, diphtheria, pertussis/whooping cough (Tdap), and other childhood vaccines they may have missed.
- Begin a conversation about meningococcal B (MenB) vaccine.



wevaxteens.com



Essentia Health Summer Internship program

BY CATHERINE BENZIGER, MD, MPH; MICHAEL MOLLERUS, MD; VICKI PINK, RN; JOSEPH DOERER, MD; AND KATE DEAN, MBA

Rural pre-medical and medical students gain clinical and research experience in cardiology through a pilot program that offers mentored training.

Through the program, students better understand the importance of research-based evidence and how it impacts clinical medicine—especially in the rural communities from which many of them come.

In the fall of 2018, two medical students from the University of Minnesota Medical School, Duluth Campus, completed the inaugural Essentia Health Summer Research Internship program, which is structured to provide mentoring in clinical research, educational experiences in clinical cardiology, and early exposure to medicine in a large health care facility that primarily services a rural population.

The students' response was enthusiastic. One student said: "I would suggest this internship to others, especially those interested in cardiology. It provides you with valuable exposure to the specialty, you will learn a ton, you will already have research experience with manuscripts and abstracts, and possibly the most important part is you start to make connections and relationships with people who can be valuable mentors in your future career."

Students in northern Minnesota and Wisconsin face several barriers to gaining early experience in both clinical medicine



and clinical research. On the one hand, institutional risk concerns and regulations regarding patient privacy and access make access to clinical medicine more difficult. Likewise, academic workloads in the first several years of medical school make exposure to clinical medicine more difficult. On the other hand, opportunities for clinical and research training in rural areas are limited because of the paucity of academic medical centers in these areas of the country. In order to fill these gaps, especially in

the rural Northland, the Essentia Health Summer Research Internship program (EHSRI) was started for pre-medical and pre-clinical (MS1) medical students.

Minneapolis program was a model

The model for this program was inspired by Timothy Henry, MD, and the Minneapolis Heart Institute Foundation (MHIF) Summer Research Intern Program at Abbott Northwestern Hospital in Minneapolis. Many of their students went on to

Sample timeline for six-week medical student summer research program.

| Week 1 | Orientation, project assignments, statistical methodology learned, literature search, clinical experience (cardiac catheterization lab) |
|--------|---|
| Week 2 | Literature search, database construction, clinical experience (echocardiogram) |
| Week 3 | Database modification, manual chart review, clinical experience (exercise stress test) |
| Week 4 | Data analysis, manual chart review, manuscripts preparation |
| Week 5 | Data analysis, manuscripts revised, and presentation preparation, clinical experience (electrophysiology lab) |
| Week 6 | Oral presentation, exit survey, clinical experience |

IDEAS THAT WORK GOODPRACTICE



Essentia Health Summer Research Interns. (Left to right: Jaylon Holmes, Bethanie Borg, David Supinski, Katie Schmitz, Erik Engelsgjerd, Nicole Groth, Sam Himes, Macaela Rudeck, and Catherine Benziger, MD.)

medical school and health-related fields. A considerable number chose cardiology as their specialty, based on their early exposure to the specialty and mentors. In fact, two of the co-authors of this article completed this internship as undergraduate students. After completing medical school, internal medicine residency and cardiology fellowships, both cardiologists decided they wanted to give back by providing students in their community the same opportunities they were given at a critical time in their development.

After its initial year, EHSRI expanded from two to nine students (five premedical and four medical) in the summer of 2019. The program recruited students from rural areas to give them early exposure to specialty practice (cardiology) and rural medicine, as well as a mentored research experience not widely available in rural areas. Students were selected based on academic merit and a personal statement indicating interest and passion for medicine and research. The program was run by volunteer faculty from the Essentia Health Heart and Vascular Center, a tertiary care center serving northern Minnesota and northern Wisconsin, and it provided students the unique opportunity to learn about cardiovascular research while seeing patients in the hospital and clinical setting with various cardiovascular conditions. Weekly attendance at journal club, multidisciplinary heart team meetings and valve conference were encouraged, as well as mandatory attendance at summer intern-specific lectures on various topics, including research study design, quality improvement, cardiac anatomy, electrocardiograms, coronary artery disease and cardiac imaging.

Medical students were paid a stipend for their participation, equivalent to that of other students doing basic science research. Undergraduate students were paid by hour of participation.

Orientation is critical

A critical aspect of the summer research program was the initial orientation. Students were supervised in a step-by-step process to satisfy requirements for patient contact and research. Each student was given an orientation guide, which included guidelines on appropriate dress code, guidelines for interactions with physicians and staff, a schedule template, information about their research projects, protected health information and confidentiality requirements and a final presentation guide. Students completed the necessary institutional requirements for patient contact, providing a more complete understanding of clinical etiquette and research best practices than would otherwise be available.

The research experience required students to read the study protocol and complete a thorough literature search, including downloading and becoming familiar with a reference manager, prior to starting data analysis or drafting a manuscript. During orientation, the students were given two half-day research lectures on study design and basic statistical analysis. Research staff at the Essentia Institute of Rural Health (EIRH) volunteered to guide students in data analysis and understanding data. Students were required to meet with the EIRH informatics team to learn how clinical Electronic Medical Record (EMR) data are stored in large databases, how to communicate effectively with non-clinical informaticists on merging datasets, and how to best extract data from the EMR.

All research projects were Institutional Review Board approved, investigatorinitiated projects and focused on cardiovascular disease disparities seen in rural areas. The student research experience included literature review, retrospective chart review, updating and analyzing heart and vascular registries, data analysis and manuscript development. One cardiologist was responsible for ongoing project progress, bi-monthly student check-ins, reviewing the weekly intern reflection journals and providing general medicine and cardiology-specific career expertise, information and advice. Regarding mentoring, one student wrote, "My meeting with Dr. [X] was the most enjoyable aspect of the week because it was a good break from the day-to-day routine of chart review and got me thinking more in the future about my career and it was fun planning and getting excited about my options ahead."

Students record experiences

Students completed a weekly reflection journal to record challenges and successes, as well as reflections on the skills and knowledge they acquired each week. While describing the challenges and successes, one student wrote, "I learned this week that the methods section of papers is a crucial marker for whether the paper should be read. This has enabled me to better understand what variables and methods have been use in previous studies." Another wrote, "Through lots of trial and error, questions and answers, I've been able to create a somewhat comprehensive document that acts like a table of contents or glossary for all the variables I need to collect. This process of getting a standardized method written out for a procedure such as a chart review is valuable for further research to ensure a sound and reproducible scientific investigation."

There were opportunities for education in the echocardiography lab and exercise stress laboratory, as well as the cardiac catheterization and electrophysiology laboratories. Regarding exposure to clinical medicine, one student wrote, "As I continue to learn about cardiology, I become stronger in the field. In studying for my

GOODPRACTICE IDEAS THAT WORK

MCAT, any question about cardiology I immediately know because of what I have learned from this research experience so far, not to mention a few topics within the psychology/social sciences and physics/math portions that have to do with research and the ethics behind research." Students also participated in a full-day simulation catheterization lab experience, where they experienced the hands-on deployment of cardiac stents, toured the manufacturing facilities where stents and other cardiac devices are assembled and participated in an in-depth learning experience reviewing imaging of the heart at a large device company in Maple Grove.

At the end of the summer, each student was required to give a 15-minute presentation, including a summary of the background, methods and preliminary results of their project, and then a highlight of clinical experiences, including lessons learned. The presentation concluded

with time for heart and vascular, clinical trial and research staff to discuss findings and ask questions. The presentation allowed students to gain formal experience presenting and interacting with clinical and research staff, as is often expected in clinical medicine, and demonstrated how research informs clinical practice.

The program is a long-term investment for the communities in the Northland where the results will be seen years from now, when today's interns complete their medical training. In the short term, the number of peer-reviewed abstracts, manuscripts, presentations and knowledge acquisition of cardiology concepts and clinical research will continue to be evaluated.

Medical students are eager to engage in clinical and research activities. Opportunities to do mentored clinical research are limited, given the heavy burden of coursework and limited free time during medical school. The summer provides an ideal opportunity

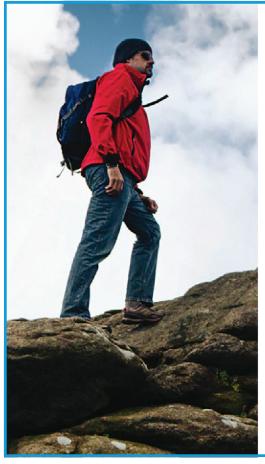
for a program that involves active clinical experience and research experience for eager pre-medical and medical students. Programs such as this are important to provide the rural medical community with practitioners who are better trained in research, understand study design, basic statistical analyses, and evidenced-based medicine. MM

Catherine Benziger, MD, MPH; Michael Mollerus, MD; and Joseph Doerer, MD, are cardiologists in the Division of Heart and Vascular, Essentia Health, Duluth. Vicki Pink, now retired, was a nurse in the Division of Heart and Vascular, Essentia Health. Kate Dean, MBA, is executive director of the Essentia Institute of Rural Health.

Acknowledgements

Funding for the EHSRI was made possible by the Essentia Health Duluth Clinic Foundation. The authors wish to thank Christine Leone, Kaitlyn Rikkola, Brianna Lemke, Ryan Theil and Paula Termuhlen, MD, for their assistance with making the program possible and Wilson Ginete, MD; Kalkidan Bishu, MD; Richard Mullvain; Anne Meyer; Ross Blood; Paul Hitz; and Nick Cameron for providing data and mentoring.

For more information, go to https://www.essentiahealth.org/education-research/essentia-health-summer-research-intern-program/



Save the date for

MOVING FROM SURVIVING TO

A Health Care Provider Resilience Conference

December 4 – 5, 2019

Crowne Plaza Minneapolis West

What we do matters, but the care we provide comes at a cost.

This conference is a collaboration of health care providers & leaders from multiple health systems coming together to learn simple tools to develop resilience and a stronger sense of well-being.

Visit BounceBackProject.org for details.





1,000 TO 28,000 Square Feet

MEDICAL SPACE FOR LEASE



New Location. Efficient Space. Medical Neighborhood. Optimal Care.





1,000 to 28,000 square feet AVAILABLE

CUSTOM BUILD your space

Various locations to **EXPAND** your practice

On- and off-campus LOCATIONS

COMPETITIVE rental rates

GENEROUS Tenant Improvement allowance





Leased By:



MIKE FLEETHAM

(952) 767-2842

MFleetham@MedCraft.com

JOLENE LUDVIGSEN

(952) 838-7126

JLudvigsen@MedCraft.com

Owned By:

HARRISON STREET
Real Estate Capital

HEALTH CARE IN RURAL MINNESOTA

Fewer physicians and challenges ahead but a commitment to care

BY LINDA PICONE PHYSICIANS IN RURAL MINNESOTA ≤ 0.5 physicians per 1000 residents ≤ 1.0 physicians per 1000 residents ≤ 1.5 physicians per 1000 residents ≤ 2.0 physicians per 1000 residents ≤ 2.5 physicians per 1000 residents > 2.5 physicians per 1000 residents

ural health isn't in that great of shape," says
Matthew Bernard, MD, co-founder and medical director for The Center Clinic in Dodge Center and
Owatonna. "If we don't get creative in how to solve the
current problem, the problem will worsen."

Paula Termuhlen, MD, regional campus dean, University of Minnesota Medical School, Duluth Campus, says, "In the northwest quadrant of Minnesota, there's only one physician for every 1,500 people. In the Twin Cities, it's one for every 750 people. And the average age of physicians in rural Minnesota is about 55, so you have an aging group."

Shortages in the number of physicians—and of health care professionals at virtually all levels—are likely not only to continue, but to deepen.

Recruitment

Termuhlen is clear on what it takes to train physicians who will work in rural areas: they need to have a personal connection. "It starts with who we bring in the door," she says, "people who come from these communities and want to go back to their communities or communities that are similar."

But rural communities are, in general, shrinking in population. As successful as the training at University of Minnesota Duluth Campus has been, it can't replace every physician who is ready to retire. For physicians who are not going "home," there are obstacles to them choosing to work in a rural area.

"The biggest challenge is probably a mixture of the demand they have on them between working clinic, hospital, rounds at the nursing home ... being the main provider in the community," says Mark Jones, executive director, Minnesota Rural Health Association. "And that workload, matched up with the compensation, makes a higher-paying area more attractive."

Bernard says it's a challenge to incent medical students to look at the idea of rural practice for exactly the reasons Jones cites. "With student debt and just the difference in salary, if I can make \$350,000 vs. \$150,000, that's pretty important. And if

I'm interested in primary care and I go to a rural area and people seem to be extremely overworked, I'm going to be reluctant to do that myself.

"When I came out of residency 26 years ago, that was part of the expectation: being on call, clinic, hospitals rounds, delivering babies ... It was kind of what I signed up for. Now, people are looking for more of a work-life balance."

Even those who may like the ability to fish off their own dock at the end of the day, or the sight of the stars unblocked by urban lights, the lack of cultural amenities they are used to and a sense of being isolated from their professional peers can be significant negatives.

"Workforce is a critical issue outstate," says Nathan Blad, CEO, Renville Hospital and Clinics. "Even more so in areas like Renville County, where we have a large geography but just 10 small communities. A third of our population still live on their

Estimates of physicians per 1,000 residents are based on data from the Minnesota State Demographer's Office and analysis by the Minnesota Department of Health of information from health licensing boards. Data is from 2015, 2016 and 2017.

"You close down a hospital and lose 100 jobs in a town of 2,000. That means fewer people shopping, fewer kids going to school. Anything you can do to preserve the hospital is better."

-NATHAN BLAD, CEO, RENVILLE HOSPITAL AND CLINICS

farms. We don't have all the amenities you would normally highlight to recruit folks. We've been fortunate, but as we look to the future, there will be shortages of physicians, nurses, lab technicians, radiologists ..."

Technology

Some rural clinics and hospitals are already using technology to bridge gaps, provide more services to patients and allow primary care physicians to do what they do best—with the support of special-

"Tele-health is an opportunity for the rural physician," says Jones. "A patient can see a specialist, but never leave the organization the rural physician works for. That makes the primary care physician the hub of their medical care."

In 2014, Renville Hospital and Clinics was one of the first to launch a tele-cardiology program through Allina, according to Blad. That program has subsequently rolled out to several other organizations. Renville also uses Avera Health in Sioux Falls for tele-emergency care. "In rural areas, you have great trained providers, but they don't always see every kind of emergency in a small shop," says Blad. "It's nice to be able to push a button and get a board-certified emergency physician in Sioux Falls looking at the patient."

Renville Hospital and Clinics has launched a tele-neurology clinic as part of its tele-stroke clinic through Centracare, in which people who come into the emergency department with a suspected or possible stroke can have all of their followup appointments at the clinic in Renville through tele-health.

Being able to message specialists, ICU, tele-dermatology and more will allow physicians—and their patients—to know they have the resources they need when they need them, says Bernard.

"I envision a future where you're going to have primary care physicians with pretty comprehensive support from most specialties through tele-medicine," says Terry Hill, senior advisor for rural health leadership and policy, National Rural Health Resource Center in Duluth. "It will allow physicians to do more of what they do best, what they were trained to do."

A couple of key issues limit how quickly and broadly tele-medicine can be used in rural areas:

- Access to broadband—not every area has good connectivity.
- Payment for services provided electronically is still something of a question mark with many insurers.

"The biggest challenge is probably a mixture of the demand they have on them between working clinic, hospital, rounds at the nursing home ... being the main provider in the community."

-MARK JONES, EXECUTIVE DIRECTOR, MINNESOTA RURAL HEALTH **ASSOCIATION**

Affiliation/merger

Affiliation and merger of health care entities is not unique to rural areas; if anything, it may be coming to rural areas later than to the urban cores. "Without some sort of payment reform, I think it's inevitable that the economies of scale will have to be utilized even heavier," says Jones. "Our rural hospitals are barely making it now. The transition of payment based on volume to payment based on value will help, but I just don't see how the independent hospitals and clinics are going to survive on the reimbursement rates they have today without some kind of help from somewhere else."

Jones doesn't see mergers of independent clinics and hospitals as necessarily negative for health care quality: "The push will always be to be better and better, no matter who owns it or how it's affiliated."

But people in rural areas tend to look at their hospitals as part of what makes them a real community. "It's the school and the hospital and the grocery store; everybody supports it," Jones says.

Renville Hospital and Clinics is being transparent about its exploration of merger or partnering with a larger system: it has published the search on its website. Blad says that after about 18 months of strategic planning, the board looked toward the future and saw significant gaps. "We're making our budget, but with the way things are changing, we're going to have to have access to scale, scope, analytics—and we need workforce," he says. "To fulfill our promise to our community, we need to look to partnership."

Renville is looking for partnership from a position of strength, Blad says. It sent out a non-binding RFP to see if there are partners willing to work with the organization in the way it would like. He says there are some potential partners and they will have a clearer picture of how things might go by the end of the year.

Partnership or merger is better than the alternative, says Jones: "I would just hate to see closures. We don't need fewer hospitals—like Texas, Mississippi, Alabama. You close down a hospital and lose 100 jobs in a town of 2,000. That means fewer people

"Right now, the sicker people get, the more we can do, the more we get paid. If we could get credit for keeping people well, that would really change the dynamic."

-MATTHEW BERNARD, MD, CO-FOUNDER AND MEDICAL DIRECTOR, THE CENTER CLINIC IN DODGE CENTER

shopping, fewer kids going to school. Anything you can do to preserve the hospital is better."

Reimbursement

The move to reimburse physicians based on value rather than volume can be good news for rural physicians, according to Hill. "It means primary care physicians have much greater value than they have had in the past," he says. "We're seeing already that reimbursements for physicians using tele-health and tele-medicine are improving."

Bernard agrees that reimbursement based on value allows physicians to focus on health and wellness. "Right now, the sicker people get, the more we can do and the more we get paid," he says. "If we could get credit for keeping people well, that would really change the dynamic."

Innovation

In everything from patient care to providing community services, rural clinics and hospitals are looking at ways to innovate. Focusing on health and wellness can be an important part of that innovation.

"I would love to talk about wellness all day," says Blad. Renville Hospital and Clinics created a director of community wellness and outreach position about a year ago. She started her work by touring all 10 communities the hospital and clinic serve and interviewing about 70 people to ask what health and wellness means to them. "It's a human-centered design approach, to understand what they are looking for, or to articulate what they may not even know they need," Blad says.

Renville has used that work as part of its strategic planning and as the basis for grant applications. With grant funding, the organization was able to have assist schools and the communities it serves to students who have had Adverse Childhood Experiences (ACE). "If you can help our children deal with those at an early age, there are fewer problems in later years," Blad says.

Renville joined an accountable care organization a few years ago and Blad says that helped them realize that providing group activities was not enough, that they need to make individual efforts with patients. "It helped our clinic focus—and has actually helped with costs," he says.

The Center Clinic uses community volunteers to help with people who aren't culturally or legally comfortable accessing health care, Bernard says. "Volunteer" is an important concept at The Center Clinic—all of the physician and physician assistant time is volunteered. Bernard helped start the clinic about 20 years ago, as a way to provide health care for the underinsured and uninsured. He thought it would also be a good opportunity for residents at Mayo Clinic to care for a different patient

population. Grant funding has helped ensure that the clinic's services are consistent.

A recent grant from the Bremer Foundation has created an exciting challenge for The Center Clinic, Bernard says. "The onus is back on us to say, 'Okay, let's see how much more we can do for this community of patients that we serve. What's it look like to do even more?"

Hill says when physicians work in teams, they can work to the top of their license. Although teams are more common in urban areas now, he believes it will be increasingly the model in rural areas.

A number of rural hospitals have incorporated nursing homes and more in the hospital/clinic building itself. In Bigfork, Scenic Rivers Health Services has assisted living and even senior apartments as part of the hospital/clinic complex. "They've created in Bigfork a very strong model of what hospitals will need to do," Hill says.

Mercy Hospital in Moose Lake has a 24-hour Wellness Center for the community with relatively low-cost membership fees and everything from personal training to classes to a range of strength and cardio equipment. MM

Linda Picone is editor of Minnesota Medicine.



Welcome, new exhibitors!













CHECK OUT THEIR BOOTHS FOR MORE INFO





They love the work and living where it feels like they belong





aula Termuhlen, regional dean of the University of Minnesota Medical School Duluth Campus, says physicians who choose to work in rural areas of Minnesota have great satisfaction in their work and

"I think you're going to see a real joy in practice," she says. "People who love the challenge and really appreciate being there."

The challenges of medicine in rural areas can be easy to click off: limited access to specialists, inability to provide some medical services (many-but not all-rural clinics and hospitals have stopped doing obstetric care), feeling like you're on call 24/7, isolation from physicians outside a small practice group, lower pay ...

But for most physicians working in a rural area, that is a choice they made deliberately. And, as Termuhlen has found, they feel like they belong-because often, it's either where they grew up or very much like the place they grew up.

Minnesota Medicine talked with a number of physicians in rural areas of Minnesota, some by phone, some in person. The same themes came up up as they discussed their challenges—and their joy.

> Interviews by Linda Picone, editor of Minnesota Medicine Photos by Rich Ryan Photography



SAWTOOTH MOUNTAIN **CLINIC**

Grand Marais (POPULATION 1,359)

Sawtooth Mountain Clinic is a Federally Qualified Health Center, established in 1979. It offers family practice medical and behavioral health services and a variety of public health services.

Jenny Delfs, MD

- Family practice physician
- Medical training: University of Iowa Medical School; residency in Duluth 1991-1994
- In practice since 1996

elfs wanted to be in a small community, but with more going on than she had seen while in training in Iowa. She looked at clinics in Northfield and Decorah, Iowa, but in each, she would have been the first woman working there. She wanted to make sure that her practice and patient load would be varied; she didn't want to end up doing more women's health and less other kinds of medicine. When she came to Sawtooth Mountain, she was the third woman physician to work there.



Jenny Delfs, MD, knew she wanted to work in a small community with a varied practice.



The challenges

If someone suffers a trauma on the trail, the Golden Hour may be used up getting them out of the BWCA.

The moment they arrive and you know the patient is too sick to stay here, the first thing we do is call the helicopter. We have different protocols because of the distance to Duluth (more than 100 miles away). The ER approach of throwing every test in the book at them is not ours.

I can't recall a time where distance to a major hospital affected a major outcome, but it's possible that some patients have had bad outcomes because of the time it took to get to a major hospital. But I recognize that people choose to live here.

Sick kids are scary. Most go to the pediatric ICU in Duluth. I've sat with newborns sometimes longer than I want to.

Every department in the hospital is recruiting right now. We're fortunate with finding doctors, but other professionals are hard to recruit. Housing is expensive in Grand Marais and living here is not for everyone. Whatever is important to you, some of it we won't have. And how do we keep spouses, who also may have professional degrees? One of our partners left because she had a child with special needs. If you need specialty care, this is a hard place to live.

The joy

We have a lot of say in what we do, a lot of stake in what we do. No one is saying we have to see so many patients per day.

When my husband, Jeff Kern, had a serious head injury, I learned how my community loved me. Sixty neighbors, friends, co-workers cut and stacked wood for us to use that winter. I was on leave for a while, to take him to medical appointments, then when I came back, every patient who came to the clinic would ask, "How's Jeff?"

Catherine Hansen, MD

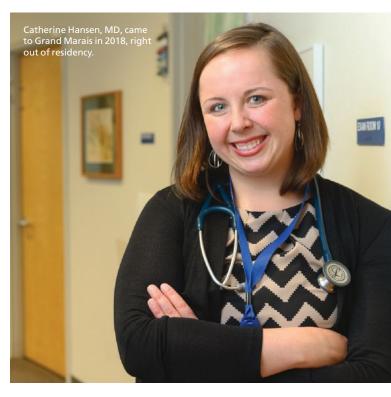
- Family practice physician
- Medical training: University of Minnesota Medical School; residency, the University of Minnesota-North Memorial in Minneapolis
- In practice since 2018

ansen came to Sawtooth Mountain Clinic for two weeks when she was a resident and liked what she saw. "When I was looking for a job, there were a lot of places in rural communities I could have signed on where I would have been the medical director," says Hansen. "But here, there are people I can learn from. It makes me a better doctor."

Hansen is single, and there aren't many unattached single people her age in the area. "I have really wonderful friends, a wonderful community and wonderful hobbies," she says. "I'm really fulfilled in a lot of areas in my life." Being able to take out her kayak on the lake behind the house where she lives, sipping coffee and having her dog along for the ride, is satisfying.

The work

All of the family practice physicians at the clinic do prenatal care, and emergency deliveries may happen in the emergency room—or in the ambulance on the way to the hospital in Duluth—but Sawtooth Mountain Clinic is not equipped to handle surgeries,



SAWTOOTH MOUNTAIN CLINIC Grand Marais Catherine Hansen, MD (CONTINUED)



C-sections or other major medical procedures; there is no anesthesiologist and no operating room. It was tough for me to give up doing deliveries, but there are a lot of different skills I use that keep me challenged.

The challenges

What we have going for us is that we are a Federally Qualified Health Care Center. I hope we can stay in this bubble—but we know it's a bubble.

The joy

I feel like the community has so much pride in this clinic—and so much pride in me. I really feel embraced by all of Cook County.

It would be nice to make it through the grocery store without doing a consult, but as a new person in town, anywhere I go, people know me. I think there is an ownership of the doctors here. We are theirs.



Jeffrey Scrivner, MD

- Family practice physician and chief medical officer
- Medical training: Medical College of Wisconsin, residency at University of Wisconsin Department of Family Medicine, Eau Claire 1978–81
- In practice since 1981

Scrivner grew up in a small town in rural Wisconsin. "Medical school galvanized my thoughts that I did not want to work in a large area," he says. "Being in family practice allows you to work anywhere." He thinks about the number of people and the traffic in the Twin Cities and says, "I want to be in the less-crowded lane going the other direction."

The work

The rural family physician has to have a broader approach to medicine. We all take ER call at the hospital. We have to be able to take care of trauma, cardiac emergencies and the spectrum of urgent care. We stopped doing obstetrics about 15 years ago because the numbers just didn't justify it; medical and nursing staff were not get-

SCENIC RIVERS HEALTH SERVICES

Bigfork (POPULATION 446)

Scenic Rivers
Health Services is a
Community Health



Center and Federally Qualified Health Center, with six medical clinics and four dental clinics spread in three counties and a coverage area of 8,300 square miles. Scenic Rivers includes critical access hospitals in Cook and Bigfork, with round-the-clock patient care.

ting adequate experience to maintain their skills. Now women go to Grand Rapids or Hibbing for obstetric care.

Our family doctors have to have a broader skill set other family physicians don't generally use.

Being a Community Health Center with federal funds allows us to have a robust qual-

ity improvement program. We've pursued quality improvement for about 30 years and have been able to steer the organization to be physician-oriented, not administratively-oriented.

Because we're not part of a big health care organization, we can refer people to the best consultant for specialty care;





we're not restricted to a consultant within a specific system.

We share a lot of clinical experiences and constantly are consulting each other. We do phone consultation with specialists.

We learn to integrate continuing education into our daily work. RPAP students help keep us on our toes-and we offer them experiences they may not get elsewhere.

Because we provide a continuum of care, when people have exhausted their experiences with the oncologist or the surgeon, they come to us for their end-of-life care. We're always the patient's advocate, from birth to end of life.

Once a month, we do a patient care scenario in the ER. All of the nursing and medical staff available attend and we go through an exercise of what we would do in a particular critical/emergency care situation.

The challenges

Helicopters weren't in use when I first started working here. They're great, but they depend on the weather. There are all kinds of things that can interfere with our transporting a patient. If we can't get them out of here for 90 minutes, we have to focus on initial care and stabilization before they go.

Electronic health records (EHR) are really good at organizing data for retrieval, but you also feel like you're collecting data for someone and you don't know why. EHRs require a lot of maintenance. Have they improved health outcomes? That hasn't been shown yet. Have they increased costs? Absolutelyand there's no place to recoup it.

The joy

I am here by choice, not by necessity. If I didn't like my job here, I wouldn't still be here. Part of my joy is having my son in the same practice.

Here I can pretty much be my cynical self, and practice high-quality, evidencebased medicine the way I want.



Eric Scrivner, MD, FAWM

- Family practice physician
- Medical training: University of Minnesota Medical School (first two years in Duluth), Oregon Health Sciences University's Cascades East Family Medicine Residency
- In practice since 2014

crivner was delivered by a physician at the Bigfork clinic who, years later, was retiring just as Scrivner came into the practice—and was given the retiring physician's office. "He literally delivered his replacement," says Yasmin Scrivner, Eric Scrivner's wife.

The work

During tourist season, we have to take everything that comes in the door—trauma, embedded fish hooks, cardiac issues, sepsis and other medical problems.

We're only using tele-medicine now for mental health. It saves a long trip to specialist's office.





The challenges

Everyone has call shifts one day a week and every fifth weekend. where we're covering the urgent care clinic, the emergency department and the hospital for a 24- or 48-hour shift. There's just one person on call at a time to handle everything. The hours can be tough; we'll have our usual 10-hour clinic day on Monday start as our 48-hour weekend hospital shift ends.

The joy

I considered hospitalist work, "but that would require being in a much larger place." I can go home from the clinic and jump in my boat or even just fish off the end of my dock.



Rural physicians are often returning to the community where they were raised, or where they have a personal connection. For Eric and Jeff Scrivner, their medical practice is a real family affair.

FIRSTLIGHT HEALTH SYSTEM

Moro (POPULATION 3,000)

FirstLight Health System is a county-owned hospital and clinic system serving Pine and Kanabec couties with primary and secondary medical services, including surgeries, emergency care and obstetrics. FirstLight includes Mora Hospital, Clinic and Community Pharmacy; Hinckley Clinic; Pine City Clinic; Pine City Pharmacy; and Mora Eve Center. The clinic is affiliated with the Allina Health System.

Ryan Kroschel, MD

- Family practice physician,
- Medical training: University of Minnesota Medical School—first two years in Duluth, finished in the Twin Cities. Family medicine residency at St. John's Hospital, Maplewood
- In practice since 2014

roschel was born in what was then the Mora Hospital—which is where he works today. When he first started working at FirstLight, people would ask, "Are you a Kroschel from Kroschel?" a nearby township. And he would answer, "Yes, of course I am." The family farm and his parents—still live there and he lives about 10 minutes away with his wife, Kathleen Kroschel, MD, and two sons. Kathleen Kroschel is also a family physician at FirstLight.

"I feel really fortunate to have the hospital health system to be able to come back to," says Kroschel, "because it's an impressive little gem in the middle of small town, rural Minnesota."

The work

A typical week is clinic days, 7:30am to 5pm, with 15 to 20 patients a day. Those days can be somewhat complicated if you have a baby to deliver. I'm one of about 10 of us in family practice, so we take turns once every 10 weeks or so being the rounding doctor. Intermixed with all of that is being on call. For us, call means you're the doctor overnight for admitting patients, taking questions from nurses.

All of the family practice doctors here do OB, which is somewhat rare. We have four doctors in our group that do C-sections, but I'm not one of them.

Our group here is really quite incredible in terms of skill sets and being what family practice is all about. The culture here is such that it's really incredibly positive, supportive environment. It speaks to the type of people in the group.

We have a lot of students here through RPAP. This week I have a med student with me and another one in two weeks. I think that's a really important part of keeping up to date and having a culture of learning. It kind of helps hold us accountable. We're the ones doing the teaching, so we better be up to date.

You do your reading, of course, like everybody—and winter seems to be a great time to find a conference somewhere warm. But on a day-to-day basis, having students around and having grand rounds is more important.

The challenges

I've been practicing for five or six years. In my limited experience, medicine is becoming pretty corporatized. There are all these measurements and surveys and patient satisfaction and "quality" measures that really seem to be getting between the patient-doctor relationship. It increases the demands put on doctors tremendously but there isn't a similar increase in resources.

Doctors are going to do the right thing, and sometimes that comes at the expense of their personal life. We know these people. I see them at the grocery store, at church. Can you squeeze Mrs. Johnson in? Well of course I can. But at the expense of my son's T-ball practice.

People know where I live. I've had people swing by at my house and talk to me about doctor stuff.



The joy

I think joy can take many forms in doing what we do. There's nothing much better than delivering a healthy baby after having followed the mom during her pregnancy. That's pretty awesome. At the same time, helping a teenager with anxiety and depression to recover and become him or herself again is personally rewarding. So, too, is helping a critically ill patient in the hospital get better.

If I had my way there would be a lot more family practice doctors because I think that's the heart of medicine. If we're going to lower costs of medicine, good primary care is the way to do that.

ORTONVILLE AREA HEALTH SERVICES AND BIG STONE HEALTH CARE FOUNDATION

Ortonville (POPULATION 1,805)

Ortonville Area Health Services comprises Ortonville Hospital, Northside Medical Clinic and Clinton Clinic, Fairway View Senior **Communities and OAHS Home** Health Agency. Ortonville Hospital is a 25-bed critical access hospital. Big Stone **Health Care Foundation helps** support health care services in the area. Ortonville Area Health Services partners with Sanford Health; Ortonville Hospital is a locally owned nonprofit critical access hospital.

Robert S. Ross, MD

- Family practice physician
- Medical training: University of Minnesota Medical School, residency in the Hennepin County Medical Center Family and Community Medicine program
- In practice since 1977

oss grew up in Ortonville. His parents died when he was quite young and he was taken in by the local physician. When he finished medical school and residency, he came back to Ortonville to go into practice with the man who helped raise him.

The work

We have six family practitioners, soon to be nine. I work five days a week, although most of my partners take the day off after they're on call.

At HCMC, I had the opportunity to spend extra time on what I would need in rural practice. I learned to do appendectomies and I'm competent in some orthopedic surgery. I've delivered 1,500 babies in my career and have at least one more I promised to deliver in December. We deliver 90 percent of the babies in our area—the closest ob/gyn is 90 miles away. I do C-sections if I'm on call. I delivered one of my partners 40 years ago; she's doing the most obstetrics in the practice today.

In order to be successful in rural practice, you have to be good at knowing when you're in over your head; if you start to venture out beyond what you're capable of, you can get into trouble.

The challenges

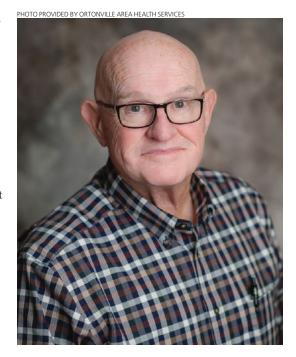
It's hard to recruit physicians to a small town because if there are only a few partners, call is really a burden. We're big enough now where it's easier for us to recruit.

When small hospitals give up obstetrics, that's kind of the death knell.

The joy

I tell medical students that practice in Ortonville is real medicine. I feel like I have to be on my toes every day.

I don't think about retirement; I don't feel burned out at all. I'm a firm believer in not retiring until you're ready to retire.



SANFORD LUVERNE CLINIC

Luverne (POPULATION 4.745)

Sanford Luverne Clinic is part of Sanford Health. The clinic has locations in Adrian and Edgerton, as well as Luverne. The clinic provides primary care and connections to specialty services and is connected to the hospital, with a full emergency department, in-patient care and obstetrics. Currently there are six family physicians, two nurse practitioners, one ob/gyn and one part-time general surgeon.

Diane Kennedy, MD

- Family practice physician
- Medical training: University of Minnesota Medical School, residency in Sioux Falls Family Practice
- In practice since 1993

ennedy grew up in Pipestone, about 30 miles from Luverne. She married her high school sweetheart and has three daughters—one born during her second year of medical school, one during residency and one when she started practice.

"I could have lived anywhere and anyplace," she says, "but my husband was more interested in getting back to a rural area because he wanted to farm and to

raise cattle. I try to go where I'm needed, and this is where my skills were needed the most." She and her husband live on a farm two miles from town.

"I was the first woman physician to come to Luverne—and I was a mom," she says. "People were okay with that; some of the older men maybe weren't so okay, but everyone's gotten used to it. Now we have three women family medicine providers, our ob/gyn is female and my daughter will be joining us when she finishes residency."

The work

On a typical day I do rounds at 7 or 7:30am—usually 24 to 30 patients—then the clinic opens at 8:30. I have a brief lunch, then more clinic, and the end of the day, usually 5:30pm—and then I have one to three hours of lovely charting to do.

We're down to five doctors taking call, so we went to a modified weekly call system. We always have someone available to cover admissions to the hospital and I sign up for shifts in the ER.

We also cover the nursing homes in the area—I cover one in Ellsworth—and we take turns covering patients at the Veterans' Administration Hospital in town.

I also do some outreach, about a half day each week, in our two other clinics. They are covered by a nurse practitioner or a physician's assistant, but for some things, Medicare requires that you see a physician.

I try to attend conferences. I learn on the fly. If I have a case I'm kind of concerned about, I research as I go throughout the day from online courses and then I grab a book. When I send a patient off for referrals, I look closely at what they've recommended. I read practice journals when they come in.

The challenges

I only have so many tests I can do here and only so much knowledge I can draw from. I often need to refer patients on for more, but some specialty physicians don't always understand what I'm working with and what I have to offer. The younger generation of specialty physicians coming out don't have any knowledge of what it's

PHOTO PROVIDED BY SAMEORD IT IVERNE CLINIC



like to be in family practice in a rural area. We refer a patient over and all the tests are repeated. Or when I call from my small outreach clinic and the physician on the other end of the phone says, "why didn't you do this?" There is that sense that we're looked at as less adequate, when actually we're doing more.

When I have a med student with me, it never fails that someone will say, "What kind of doctor do you want to be-or will you just be a GP." I think family medicine as a whole gets overlooked and underappreciated.

The joy

I have never, ever, ever wanted to do anything but this. When I reflect on that, it's all about relationships for me. I have an incredible group of partners. We support each other, we hold each other to a standard of care that I think is exceptional. I love the relationships with the patients. I've now delivered babies of moms that I also delivered—it's that whole cradle to grave philosophy.

My daughter did a rotation with us and when I would introduce her to a patient, it was as if I was introducing her to a friend. MM



We are dedicated to providing patients with best-in-class medical cannabis products and compassionate care.

Medical Cannabis is approved for:

ALS

· HIV/AIDS

Autism

• Tourette Syndrome

Alzheimer's

Sleep Apnea

• PTSD

• IBD & Chron's

Glaucoma

• Chronic Pain

Seizures

• Terminal Illness

Cancer

• Multiple Sclerosis

Visit MinnMed.com to learn more.





AndyAND

Teresa Mitchell

REALTORS

Reliable market information, expert negotiation and just plain hard work.

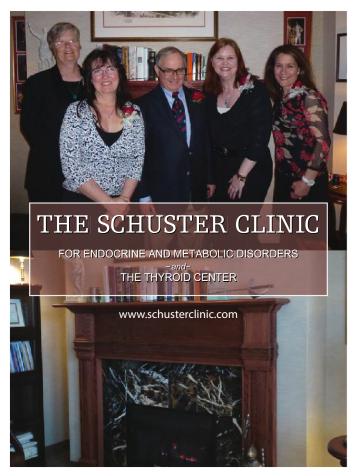
Andy and Teresa possess discretion and appreciation for your motivation and particular needs. Investor-oriented or searching for a unique type of living experience? Downsizing or looking for a larger home? They are agile, meticulous professionals who provide a smooth journey throughout your transaction. You won't see stale listings on their site. They sell them quickly!



EMAIL:

AndyAndTeresaMitchell@EdinaRealty.com

PHONE: 612-242-4514



A FOCUS ON FAMILY MEDICINE

U of M Medical School, Duluth Campus creates physicians for Greater Minnesota By Paula M. TERMUHLEN, MD

he University of Minnesota Medical School, Duluth Campus, has had a mission to train physicians to serve rural and Native American communities for more than **40 years.** As part of the University of Minnesota Medical School one-schooltwo-campuses model, we have trained more than 2,000 physicians, almost half of whom chose family medicine as their specialty. The strong interest of our students to work as family medicine physicians has helped our University of Minnesota Medical School to be named as the Number 1 medical school in the United States for producing graduates who select family medicine as a career. We also are Number 2 in the country for training Native American physicians, another source of pride. Two-thirds of our graduates are primary care physicians and 44 percent of our campus alumni practice in communities with populations of 25,000 or less. Nationally, only 5 percent of medical school graduates on average practice in rural areas.

How do we do it? It starts with a robust admissions process. We receive more than 2,500 applications for 65 positions each year. After an initial screen to identify individuals with the academic skills necessary to succeed in medical school, we use a secondary application process to look for those who are committed to rural practice and who are willing to consider family medicine as a career. In the secondary application, we ask for information on their

hometown and experiences they've had in rural settings. Ultimately, we matriculate a group of individuals who are mostly from Minnesota and who come from small towns. Eighty-eight percent of our current classes come from hometowns of less than 20,000 in population and about a third from towns with populations of less than 2,500. We recruit students who deeply understand what it is like living and working in a rural community and who have the passion to return as a physician.

During the first two years of medical school on the Duluth Campus, we continue to nurture that passion. During that time, our students spend five separate weeks with a family medicine preceptor in rural communities across the state. Most of our clinical teachers are alumni who want to share their love of rural practice with our students. They open their homes and offices to our students to help them learn of the satisfaction and joy of providing care to people in their community. Three faculty members travel the state to visit preceptors and students while they are learning. In addition, I visit a number of preceptors each year to thank them for their time and effort in helping us teach our students. It is a labor of love for our preceptors and we could not have the success in creating rural physicians that we do without them.

Students from both the Duluth and the Twin Cities campuses have the chance for a summer experience between Year 1 and

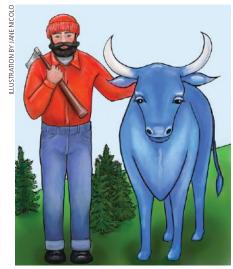
Year 2 to spend time in a rural Minnesota community with one or more physicians. This gives them a close look at other medical specialties in rural communities, in addition to family medicine.

Duluth Campus students can take an elective course, the Rural Academy of Leadership. Local and regional health care, government and community leaders meet with the students to share their experiences with living and serving in rural communities. Participants have the chance to hone their skills by working in the studentrun HOPE clinic in downtown Duluth, in collaboration with student colleagues from the University of Minnesota College of Pharmacy regional campus. Students from the Twin Cities campus can experience rural medicine even before they start medical school; the Rural Observation Experience is a two-to-three-day shadowing experience offering a brief glimpse of the joy of family medicine practice in a rural setting. Students are eligible to participate once they are accepted to medical school.

Once students complete their first two years of medical school, they can immerse themselves in a rural setting to continue their learning by participating in the Rural Physician Associate Program (RPAP). This program, open to students from both campuses, is nationally recognized and one of the first programs in the country to provide a longitudinal integrated clinical experience during the third year of medical school. More than 1,500 of our medical

school alumni have participated in RPAP since it began in 1971. Today, 61 preceptors supervise 37 students located at 34 teaching sites across Greater Minnesota. In total, more than 110 communities in Minnesota and nearby Wisconsin have hosted our medical students in RPAP. Students must apply to be a part of the program and rank up to three sites where they might want to be placed. They spend nine months of their third year of medical school in the community, living, working and learning with their preceptors. Additional teaching to cover subspecialty topics that may not be available at a specific location is provided by University of Minnesota Medical School faculty who travel to each site monthly to hear student presentations and to provide lectures for both students and local health care providers on medical topics. This partnership with communities is our longest running rural experience.

Once students graduate from medical school, they have several opportunities to

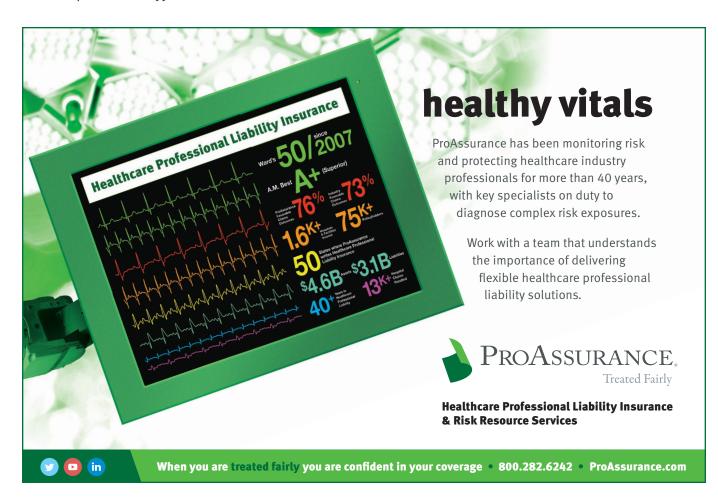


continue to train for rural practice. The University of Minnesota Medical School has a number of residency training sites located in rural settings, beyond those for family medicine. The Department of Family Medicine and Community Health has eight residency training sites across Minnesota and the Department of Surgery has a rural training track in Northern Minnesota; other rural training opportunities are currently being planned.

Creating rural physicians for Minnesota is one of the core missions of the University of Minnesota Medical School. As Minnesota's land-grant institution, the University is mandated to help provide the health care workforce for our state. More than 70 percent of the physicians working in Minnesota have experienced some aspect of their training at the University of Minnesota, but we have more work to do and would love your help. We welcome new people who want to get involved with the education of our students. For those of you who already help us, thank you! I have seen firsthand how much our rural educators love their practices and love teaching our students. We believe it starts with finding the right people who understand rural communities and nurturing that interest along the way.

Join us as we create the next generation of rural physicians for Minnesota! MM

Paula M. Termuhlen, MD, is regional campus dean, University of Minnesota Medical School, Duluth Campus. She can be reached at ptermuhl@d.umn.edu.







3 networking events Join us for several!

DULUTH

Wednesday, September 18

Tuesday, October 1

Thursday, October 24

VISIT WWW.MNMED.ORG/SOCIALS for more details.



Celebrate the performing arts and *Minnesota Medicine* at

Hippocrates Cafe

Thursday, September 19 7-9pm

Kitchi Gammi Club 831 E. Superior St.





REGISTER AT WWW.MNMED.ORG/AC19



Protect young adults from meningococcal disease

BY JENNIFER HEATH, DNP, MPH, RN

hen talking about a disease that can become extremely serious and even deadly in a matter of hours, early identification and prompt treatment are key. But, what if we can prevent the disease altogether? With meningococcal disease, we can—through vaccination. The problem is we are falling far behind on protecting those at highest risk.

Meningococcal disease, caused by the *Neisseria meningitides* bacteria, can quickly cause severe illness, such as meningitis and sepsis, in otherwise healthy individuals. Meningococcal disease can affect people of any age, but adolescents and young adults ages 16 to 21 have one of the highest incidences of meningococcal disease. Serogroups B, C and Y cause the majority of disease in the United States.

We have witnessed nearly a 10-fold decline in the incidence of meningococcal disease in the last two decades, but the cases that still occur are severe and often strike young healthy individuals. One of every 10 (or 10-15 percent) of those who contract meningococcal disease will die, even if they seek treatment. One of every five (or 20 percent) of those who survive the disease will have permanent neurologic damage or limb loss. It is nearly impossible to tell who me-

ningococcal disease will impact as most cases in the United States are sporadic or part of small outbreaks.

Children enter a higher-risk period for meningococcal disease in early adolescence, but remain at high risk until they are about 23 years old. However, protection after a single dose of MenACWY vaccine wanes after five years. Adolescents who only receive a single dose between the ages of 11 and 12 are not

adequately protected when they are most at risk for disease. That's why the Advisory Committee on Immunization Practices (ACIP) recommends that all adolescents get a dose of quadrivalent meningococcal conjugate vaccine (MenACWY) at 11-12 years old, and then a booster at age 16.

Meningococcal B vaccine (MenB) is an additional meningitis vaccine that covers the B serogroups of meningococcal disease. The serogroups contained in the quadrivalent conjugate vaccine have declined over time and serogroup B now causes the majority of disease in adolescents and young adults. The ACIP recommendations for MenB are different from other routinely recommended vaccines. ACIP recommends that MenB be given to people age 16 to 23 years, based on the clinician's judgment. This means clinicians should have a conversation with their patients in this age range about receiving the vaccine and their risk for meningococcal B disease. Then, they can recommend MenB based on clinical judgment and agreement from the patient. Consider having this conversation with any 16-year-old getting MenACWY. These vaccines can be given at the same time to help protect young adults from meningococcal disease.

We have the tools to prevent meningo-coccal disease, but we are not using them as well as we could. While vaccination rates for the first dose of MenACWY vaccine are relatively high, the rates for the MenACWY booster dose are troublingly low. Data from the Minnesota Immunization Information Connection (MIIC), the state's immunization information system, show that 70.8 percent of Minnesota 13-year-olds had received at least one dose of MenACWY in 2018; the data also show that only 47.3 percent of 19-year-olds had received a booster dose in 2018.

We know that just getting adolescents and young adults into the clinic is part of the struggle. However, several strategies can help clinicians raise vaccination rates.

Reminder/recall. Send notices to individuals due (reminder) or overdue (recall) for vaccinations. Your organization may have reminder/recall features available in your software or phone system. You can also use MIIC's Client Follow-Up feature to identify adolescents who are due for the booster dose to conduct remind/recall activities.

Recommend the MenACWY booster dose as the standard of care for 16-year-old patients. Make sure you are giving the same attention to the booster dose as you are other vaccines. Let parents know at the age 11-12 visit that another dose is needed at age 16 for their child to be protected. Continue to communicate that a booster dose is needed. Provide catch-up vaccination through age 18 for all young adults.

Don't miss an opportunity to vaccinate. Appointments for minor illnesses, injuries or sports physicals are an ideal time to talk to patients about the vaccines that they need, including meningococcal vaccine.

Minnesota school requirements

Along with protecting adolescents from this potentially severe disease, increasing vaccination rates for the meningococcal booster dose has implications for school requirements in Minnesota. Every year, schools are required to report the immunization or exemption status of students in kindergarten through 12th grade to the Minnesota Department of Health (MDH) for the Annual Immunization Status Report (AISR).

Schools have been reporting on the first dose of MenACWY for seventh graders since September 2014. This fall, MDH will ask schools to begin collecting information in the AISR on the booster dose of MenACWY for students in 12th grade. This update to required reporting is being rolled out in a phased approach, giving schools the next two years to implement it.

Partnerships between schools, clinics and public health will be needed to achieve high coverage for school entry. As you see students in your clinic that are age 16 years or older and/or entering 12th grade, make sure they are ready for school with their MenACWY booster dose.

Meningococcal vaccination rates



CME credit

You can earn CME credit for reading the information in this article, then responding to a series of questions online.

To receive CME credit, complete and submit the online evaluation form http://mnmed. org/magCME. Upon successful completion, you will be emailed a certificate of completion within two weeks. You may contact the MMA with questions at cme@ mnmed.org. Participants must complete all necessary activity components to be eligible to claim CME credit.

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the Minnesota Medical Association. The Minnesota Medical Association (MMA) is accredited by the ACCME to provide continuing medical education for physicians.

The Minnesota Medical Association designates this activity for a maximum of .25 AMA PRA Category 1 Credit(s)". Physicians should claim only the credit commensurate with the extent of their participation in the activity.

In the summer of 2019, MDH sent postcards to parents and guardians of 16-yearolds across the state who are due for their MenACWY booster dose. The postcard reminds parents/adolescents to ask their provider about the booster dose. It also included messages about catch-up vaccines and MenB vaccine. This was the first of many campaigns to help raise awareness about the importance of the booster and get more adolescents immunized.

Together, we can increase meningococcal vaccination rates across Minnesota. For more information on meningococcal disease, vaccination guidance and disease reporting, go to Meningococcal Disease Information for Health Professionals (www.health.state.mn.us/diseases/meningococcal/hcp.html). MM

Jennifer Heath, DNP, MPH, RN, is a nurse specialist in the Infectious Disease Epidemiology, Prevention and Control Division of the Minnesota Department of Health.





Get a jump on everything you'll need for birth and beyond, from the best products to the best advice. Baby, toddler, and child – this is the only show that covers every stage.

VIP Tickets **\$45** • Adult Tickets **\$15** • Tickets at Cub Foods **\$10** Children 12 & under **FREE** • **FREE** Parking



Can physicians ethically participate in a strike?

Frustrated by a non-functional EHR, drastic pay reductions and serious patient safety concerns, the organized medical staff at an integrated health system are contemplating how to effectuate change. Ongoing negotiations with system management have failed and the medical staff views itself as without options. The medical staff is exploring whether to organize a strike to force concessions from system management. Physicians would be available for emergency treatment, would write refills for existing prescriptions and would be available to consult with nursing staff as needed. Physicians would not be required to participate in the strike, but participating physicians would decline to provide all other non-emergent and elective care. Assuming the strike is legal and wouldn't violate any contractual terms and the medical staff's concerns are substantiated, exceptional and dire, is it ethical for physicians to participate in the strike?



NO

Our responsibility is to our patients

JULIE K. ANDERSON, MD

s medical professionals, we must question whether or not a strike undermines our Hippocratic oath. Even if physicians can *legally* strike, we must first fulfill our ethical responsibilities to our patients. We have a unique relationship with our patients that transcends our own personal needs. Although the striking physicians would not intend harm, their inaction would certainly result in harm and upset the public, due to an inevitable delay in critical care. A striking physician group would need to gauge the potential negative response of the general public, who likely would find it unacceptable.

The proposal assumes that every other alternative to a strike has been exhausted, which is a false assumption predicated on the condition of continued employment by a health system. It is a false narrative, even in the current climate of medicine, that physicians are unable to make a living in private practice. There are other ways to garner attention—quit, start your own practice. Or

YES

It may even result in better health care for patients

EMILY ONELLO, MD

ome physicians assert that, as professionals, doctors simply cannot go on strike. That is: the tactic of striking is not available to doctors by virtue of their extensive education and prestigious position in society. This view is founded in the misconception that strikes are for laborers and other tradespeople, but not professionals.

However, the existence of labor unions that include airline pilots, nurses, university professors, engineers and pharmacists quickly refutes the notion that professionals cannot form labor unions that, depending on the individual contract language, may strike. Many physicians are surprised to learn that physician unions already exist in our country, such as the Union of American Physicians and Dentists. (Interestingly, physician strikes are relatively rare in the United States but occur more often in many other countries as a tactic to collectively promote health care improvements for both patients and health care workers.)

NO (continued)

seek out a leadership role in your organization or join a physician organization that has strength in numbers to effect change. These organizations may not align with the desires of all the participating physicians, but it would also be challenging to argue that a strike would result in the effect desired by all those striking. Not everyone wants the same thing, and physicians are notorious for acting like a herd of cats.

Physicians who choose not to strike could provide care to patients while participating in a form of nonviolent protest, such as purposely documenting in a way that is not billable for the full extent of their services. Nothing seems to catch the attention of an administrator more than a missed billing opportunity.

Julie K. Anderson, MD, FAAFP, is a family physician and owner of Simplicity Health, St. Cloud.

YES (continued)

Under the U.S. National Labor Relations Act, employees—including employed physicians—may collectively bargain over issues of wages, benefits and working conditions. As more physicians are hired as employees of larger hospital or health systems,

rather than practicing within traditional independent solo or partnered medical groups, the numbers of physicians eligible for union membership and collective bargaining will continue to

Some contend that physicians who strike violate ethical principles central to the practice of medicine—beneficence and nonmaleficence—because patients benefit from physician care and are harmed when physicians withdraw that care during a strike.

This overlooks the complex and nuanced medical practice setting in our country today, in which physicians are often employed by larger health care entities and no longer enjoy many of the traditional avenues to advocate for patients and care system improvements. In this emerging health care environment, a strike action by a collective physician group may represent a coordinated and committed effort to address workplace problems that may be "substantiated, exceptional and dire" as described in the scenario. The strike action itself has the potential to result in improved patient care and safety, thereby reducing harm (non-maleficence) and enhancing health (beneficence). In such a scenario, the motivation to strike is altruistic, seeking not only better work conditions for the physicians but also improved care for their patients. MM

Emily Onello, MD, is assistant professor in the Department of Family Medicine and Biobehavioral Health at the University of Minnesota Medical School, Duluth campus.



Gather with your fellow book-lovers for the new MMA Book Club: Author Rounds. Each event will include time to network, an introduction to the author and their book, and questions and answers from attendees.

In October 2019, we will host a virtual event celebrating the art of medicine.

Event runs from 7:30 to 8:30 pm.

Friday, October 11

- **BOOK:** "What Patients Say, What Doctors Hear"
- **AUTHOR:** Danielle Ofri, MD
- LOCATION: Online
- **DESCRIPTION:** This book reveals how better communication can lead to better health for everyone.







MMA 2019 Annual Conference



SEPTEMBER 20-21



Duluth Entertainment Convention Center

MNMED.ORG/AC19 #MNMED19



PREMIUM SPONSOR



Annual Conference Schedule

Thursday, September 19

7-9pm Hippocrates Cafe Kitchi Gammi Club, Duluth

Friday, September 20

7:30-8:30am Breakfast

8:30-11:30am Opening Session

- Keynote: Courtney Jordan Baechler, MD, MS
- Primer on Minnesota's Access Problems and Vulnerabilities
- How Health Care Organizations are Responding to Access Challenges

11:30am-1pm Lunch

■ MMA Awards, MMA Business Meeting, Inauguration

1-2pm Breakout Sessions (select one)

- Obstetric Care Access
- Strengthening Minnesota's Physician Workforce

2-2:30pm Break

2:30-3:30pm Breakout Sessions (select one)

- Distrust—A Barrier to Health Care for Our Native Patients
- Suicide Prevention Training (QPR Model)

3:30-4pm Break

4-5:30pm General Session

- *Medicare for All—or None?*
- Day 1 Wrap-up

5:30-6:45pm

■ MEDPAC Reception and Poster Symposium

7-8:30pm

■ *Dinners Around the Town (optional)*

Saturday, September 21

7:30-8:15am Breakfast

8:15-9:45am Open Issues Forum

9:45 am-Noon Closing Session

- The Dynamic Pharmaceutical Market
- Making Prescription Drugs Accessible and Affordable
- It's a Wrap!

Noon Adjourn

This activity has been approved for AMA PRA Category 1 Credit™









Sessions

The Challenge of Accessing Care in Minnesota



Keynote Speaker: Courtney Jordan Baechler, MD, MS, assistant commissioner, Health Improvement, Minnesota Department of Health

Baechler will kick off the conference by providing an overview of the state of health in Minnesota as it relates to access to care challenges, where the opportunities for improvement lie, and how physicians can partner with the Minnesota Department of Health to preserve access to care for all Minnesotans.

A Primer on Minnesota's Access Problems and Vulnerabilities

Analyze health insurance coverage in Minnesota as well as inequities in access to insurance by place, age, income, race and ethnicity. Discuss the challenges patients encounter in accessing health care services, affordability of health insurance and health care.

Speaker: **Kathleen Call, PhD**, professor, Division of Health Policy and Management, and SHADAC, University of Minnesota School of Public Health

PANEL DISCUSSION:

How Health Care Systems and Community Health Centers are Responding to Access to Care Challenges in Minnesota

Access to health care is impacted by many variables (e.g. transportation, language, housing insecurity, technology, etc.), which requires a multifaceted approach. Discover what various Minnesota health care organizations are doing to address barriers to health care access and how they are partnering with community-based organizations to overcome these challenges.

Speakers: John S. Misa, MD, (Allina Health); Dayle Patterson (Lake Superior Community Health Center); and Jon Pryor, MD, (Essentia Health).

Obstetric Care Access

Ensuring access to obstetric care is critical to ensuring good maternal and child health outcomes. The shortage of physicians in rural areas has led to fewer physicians providing obstetric care—leading to worse outcomes for mom and baby. In addition, black women in Minnesota, and across the United States, experience poor maternal health outcomes, including disproportionately high rates of death related to pregnancy or childbirth. In this session, panelists focus on the obstetric care challenges in Minnesota and explore what is needed to improve obstetric care for women in our state.

Speakers: Carla Goerish, MD, OB/GYN, Mankato Clinic; Carrie Henning-Smith, PhD, University of Minnesota Rural Health Research Center; Scott Johnson, MD, OB/GYN, Grand Itasca Clinic & Hospital; and Verna Thornton, MD, OB/GYN, Community Memorial Hospital.

Strengthening Minnesota's Physician Workforce Pipeline

Physician shortages will affect access to care, including longer waits for appointments and the need to travel longer distances. To ensure access to care, we must have a physician workforce that can meet the needs of Minnesota's rapidly changing demographics, and a workforce that can address the underrepresentation of certain racial and ethnic groups in medicine. With the invited speakers, analyze the challenges facing Minnesota's physician workforce and explore ways to strengthen our workforce pipeline.

Speakers: Raymond Christensen, MD, associate director, RPAP, University of Minnesota Medical School, Duluth; **John Wood, MD**, director, University of Minnesota Duluth Family Medicine Residency

Distrust—A Barrier to Health Care for Native Patients

Distrust is a primary barrier to health care for Native patients. To illustrate the nature of distrust as a barrier, attendees will be sent one to two short readings to be discussed during the session. Discover resources to address distrust and other barriers to health care for Native patients.

Speaker: Mary J. Owen, MD, Tlingit Endowed Professorship, American Indian Health Director, Center of American Indian and Minority Health, assistant professor, Department of Family Medicine and Biobehavioral Health, University of Minnesota Medical School

Suicide Prevention Training— Question, Persuade and Refer (QPR) Method

Minnesota's suicide rate continues to rise and more needs to be done to equip physicians with practical tools to implement in practice to address this public health crisis. Join us for a one-hour training session that will highlight the QPR method (QPR Institute's three simple steps that anyone can learn to help save a life from suicide).

Speakers: Joshua Stein, MD, child and adolescent psychiatrist, PrairieCare; Alexandria Kristensen-Cabrera, second-year MD-PhD student, University of Minnesota

Medicare for All—or None?

Medicare for all, in some version, will be an important part of political discourse for the foreseeable future. Hopefully, one important consequence of that discourse will be a thoughtful assessment and restructuring of the existing Medicare program before any major expansion is attempted. Can needed changes be accomplished in the present political environment? These changes will occur only if stakeholders can be convinced to focus on their long-term interests in building a fair and stable Medicare program, as opposed to protecting themselves from short-term losses. The early returns are not positive in this regard.

Speaker: **Jon Christianson, PhD**, professor and James A. Hamilton Chair in Health Management, Division of Health Policy and Management, School of Public Health, University of Minnesota, and former vice chairman, Medicare Payment Advisory Commission (MedPAC)



The Dynamic Pharmaceutical Market: Future Drug Policy and Drug Prices

While sitting in the physician's waiting room, the patient often will think about "Will the doctor prescribe a medication and how much will it cost me?" The cost of prescription drugs is at the top of the public policy agenda and may affect the long-term viability of Medicare and Medicaid. Commercial health plans sponsored by employers and other private payers are concerned about the impact of drug prices on their total health care spending. At the same time, the news is full of stories that appear to be examples of price gouging on prescription drugs such as EpiPen, insulin and others. Where are federal and state policy makers headed with drug pricing policy? What can you do for your patients with respect to getting needed medications at a reasonable cost?

Speaker: Stephen W. Schondelmeyer, PharmD, PhD. **FAPhA**, director, PRIME Institute, University of Minnesota

Making Prescription Drugs Accessible and Affordable— A Panel Discussion

The cost of prescription drugs is a priority for commercial health plans and health care systems, but also significantly impacts patients. Hear about the challenges high prescription drug costs have brought to patients and families in Minnesota and engage in a discussion of what policy changes are needed to ensure prescription drugs are both accessible and affordable.

Speaker: Sue Abderholden, MPH, executive director, NAMI Minnesota; Stephen W. Schondelmeyer, PharmD, PhD. **FAPhA**, director, PRIME Institute, University of Minnesota; Nicole Smith-Holt, patient advocate

It's a Wrap!

Facilitated by MMA's president, this session will review what we've heard throughout the conference from where Minnesota's greatest access problems and vulnerabilities lie, to what we need to do to ensure that we have a physician workforce that meets the needs of Minnesota. Share your takeaways, hear how others plan to implement changes and discuss what we all can do differently to ensure access to care

Facilitator: Douglas Wood, MD, MMA president