

THE OFFICIAL PUBLICATION OF THE MONTANA ACADEMY OF FAMILY PHYSICIANS

MONTANA

Winter 2020 – MONTANAAFP.ORG

FAMILY PHYSICIAN

In This Issue:

MAFP Members Receive Honors as Rural Health Leaders

Another Successful Year for the Big Mountain Medical Conference

Diabetes and Hepatitis C Updates

Work hard. Play hard.

Physician Opportunities at Benefis Health System

- Addiction Medicine
- Dermatology / MOHS Surgery
- Emergency Medicine
- Endocrinology
- Family Practice
- Gastroenterology
- Geriatric Medicine
- Hematology / Oncology
- Internal Medicine
- Interventional Cardiology
- Neurology / Epileptology
- OB/GYN
- Pediatrics
- Psychiatrist – Adult/Geriatric or Child/Adolescent
- Rheumatology

Genuine Work-Life Balance – Modern Medicine

While relishing Big Sky Country, known for breathtaking landscapes and an adventurous outdoor lifestyle, you'll take pride in working for Benefis Health System, one of Montana's most progressive and modern healthcare facilities with 500+ beds and over 270 employed medical staff members representing more than 40 specialties. Our state-of-the-art facilities offer cutting-edge technologies, including the da Vinci Xi robot, da Vinci Si robot, O-arm Surgical Imaging System, and the Varian EDGE radiosurgery system.

Flexible Practice Models – Great Benefits

Enjoy flexible scheduling, engaged staff, and dedicated management to help you create a practice you desire centered around great patient care. All positions are employed with the hospital, offering nationally competitive compensation and generous bonus structures. Our comprehensive benefits include sign-on bonus, relocation assistance, retirement plan match, malpractice with tail, generous CME and PTO benefits, and more.

Becker's 150 Top Places to Work in Healthcare

(4 5 years in a row)

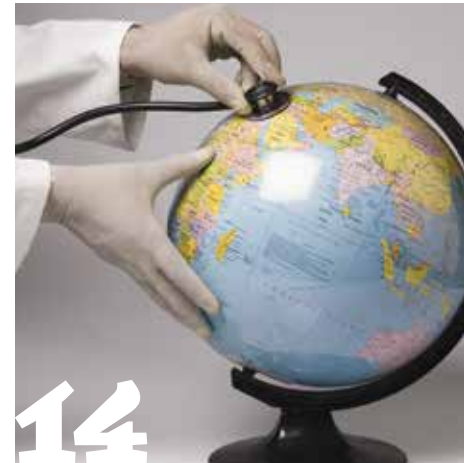


CONTENTS

EDITION 4

- 4 MAFP President's Welcome
- 6 Remembering One of Our Own
- 8 Board Member Profile: Marjorie Albers, MD
- 9 MAFP Members Receive Honors as Rural Health Leaders
- 11 Public Health Corner
- 12 Mark Your Calendars! Annual Meeting of MAFP at Chico Hot Springs in June
- 14 Health Impacts of Climate Change
- 16 Another Successful Year for the Big Mountain Medical Conference
- 17 Choosing the Best Diabetes Medications for Your Patients in 2020
- 20 Making the Case for Treating Hepatitis C in Primary Care
- 22 Partnering for Prevention

The Montana Family Physician is printed, addressed, and mailed to every family physician, resident, and medical student in Montana as well as all 50 other state chapters.



pcipublishing.com

Created by Publishing Concepts, Inc.
David Brown, President • 1-800-561-4686 ext. 103
dbrown@pcipublishing.com

For advertising info contact
Eva Bakalekos
ebakalekos@pcipublishing.com
1-800-561-4686, ext. 115

Edition 4

MAFP President's Welcome

Amy Matheny, MD, MPH, FAFP



Greetings Montana family physicians! Welcome to the first edition of our MAFP magazine for 2020. As usual, the year began with our annual Big Mountain Medical Conference in Whitefish in January, which was another great success. A highlight of the meeting is featured in this edition, along with articles authored by a few presenters highlighting presentations from the meeting about diabetes and hepatitis C care. The MAFP Board of Directors met on the Saturday after the CME meeting for our annual winter board meeting, along with a strategic planning session. Highlights include plans for further augmentation of our advocacy work, support of family medicine education and learners in Montana, and continued engagement with our members. Stay tuned for more updates about next steps in our strategic planning as a chapter!

Speaking of the strategic focus of the MAFP is a great opportunity to remind our members about the mission and vision of our chapter. Our mission is to promote family medicine and support our members in providing optimal health care for all Montanans. To build from this, the vision of the MAFP is to enhance the health and wellness of all people and communities in Montana. Hopefully our magazine is helping to highlight how the MAFP and its members are acting on this mission and vision. This edition is a great example!

We start by highlighting some of our colleagues and fellow MAFP members celebrated for their contributions to rural health care with the Dr. Frank Newman Rural Health Award. In light of the vision of promoting overall health and wellness for all Montanans, one of our board members, Dr. Ashley Quanbeck of Hardin, writes about the health impacts of climate change and why it should be important to us as family physicians. As noted above, we have multiple articles highlighting our CME meetings, both this past January in Whitefish and looking ahead to our meeting at Chico Hot Springs in June. Finally, our medical student board member, Cierra Dauenhauer, writes about a partnership between

the Montana WWAMI Health Equity Circle and Bozeman Deaconess's HealthCare Connections Mobile Health unit, where medical students are volunteering to assist with preventive health screenings for patients with difficulty accessing care.

This magazine always makes me proud to be a member of the Montana Academy of Family Physicians for all that the chapter represents through the everyday work of our amazing members. The Family Medicine community of Montana remains strong thanks to YOU. Thank you for helping bring the MAFP mission and vision to life every day in your exam rooms, hospital wards, communities, and beyond!



MAFP Board Members at the winter board meeting and strategic planning session in Whitefish.

Sports Injury Specialists



2360 Mullan Road, Missoula
(406) 721-4436

MissoulaBoneandJoint.com

Youth Sports Specialization

ACL Rupture, Tommy John Surgery, Shoulder dislocation, Osteoarthritis, Stress fracture. This is a fairly common problem list accompanying your favorite professional athlete. However, this list isn't exclusive to the pros, but a shocking list that is now being seen in our young athletes. This list isn't isolated to trauma, but also includes training error induced conditions like secondary amenorrhea, osteoporosis, "burnout", eating disorders, and even suicide. The presumed culprit? Youth early sports specialization and the professionalization of youth sports.

In 2008, Anders Erickson wrote, *Deliberate Practice and Acquisition of Expert Performance: A General Overview*. Malcom Gladwell made the underlying theme of "10,000 hours" of practice a famous and game changing topic in his book, *Outliers*. The concept: start practicing early and often, and you'll be an expert in 10,000 hours. Tiger Woods proved this perfectly, no?

Paradoxically, early specialization isn't proving to be advantageous. Neeru Jayanthi, a sports doctor focusing his research on sports specialization, was able to show a 2-fold increased risk of serious overuse injury in a specialized athlete compared to a multi-sport athlete even when exposure time was equal. The idea is that a specialized athlete does not fully gain the athleticism from a multi-activity background and this puts them at a higher risk of injury.

But it is not just medical issues that are problematic, specialized athletes aren't as successful within their sport. Of the less than 1% of youth athletes that actually become pro, athletes that specialize later and play multiple sports are more successful. This has been shown in evaluations of 2004 Olympians, the German national teams, and NCAA Athletes with the exception being gymnastics and figure skating.

So, of the 29 million kids playing sports, our role as primary care docs may be best positioned in education and endorsing "sport sampling." We should endorse clubs that are inclusive, allow unstructured play and focus on physical development and passion. In a world where "physical literacy" is declining rapidly, we don't want our so-called athletes to be the one's becoming the most illiterate.

Rob Amrine, MD, CAQSM

Primary Care Sports Medicine, Missoula Bone & Joint



Remembering One of Our Own

The Campaign to Honor Dr. Dennis Salisbury



The American Academy of Family Physicians Foundation has created a memorial fund to honor the late Dr. Dennis Salisbury, former MAFP President and beloved member of the Montana chapter. Dr. Salisbury, originally from Idaho, was a graduate of the University of Washington School of Medicine and practiced the entirety of his career in Butte. He served as a Family Medicine leader for years through the MAFP and AAFP, including serving as a Montana Delegate, member of the FamMedPAC Board of Directors, and member of the AAFP Commission Governmental Affairs and Commission on Continuing Professional Development.



To honor Dr. Salisbury's memory, the AAFP Foundation fund in his name will provide annual scholarships in perpetuity to offset the cost of attendance at the Family Medicine Advocacy Summit in Washington, DC, for medical students, residents or new physicians from the WWAMI region. The goal is to create a \$25,000 endowment to promote leadership development in Family Medicine advocacy.

Please consider contributing to this legacy fund honoring this dear member and friend of the Montana Academy of Family Physicians.

How You Can Help

**Text
AAFPFOUNDATION
To 243725
To Give**

Or visit aafpfoundation.org, select "Donate" and then choose "Dennis Salisbury Fund" from the designation drop down menu.

The Core Content Review of Family Medicine

Why Choose Core Content Review?

- CD and Online Versions available for under \$200!
- Cost Effective CME
- For Family Physicians by Family Physicians
- Print Subscription also available
- Discount for AAFP members
- Money back guarantee if you don't pass the Board exam
- Provides non-dues revenue for your State Chapter

*North America's most
widely-recognized program for:*

- Family Medicine CME
- ABFM Board Preparation
- Self-Evaluation

- Visit www.CoreContent.com
- Call 888-343-CORE (2673)
- Email mail@CoreContent.com



**The Core
Content Review
of Family Medicine**

Educating Family Physicians Since 1968

 Find us on
Facebook



Marjorie Albers, MD

Dr. Marjorie Albers is a board member of the Montana Academy of Family Physicians (MAFP). She is a resident in family medicine at the Western Montana Family Medicine Residency Rural Track in Kalispell, and currently one of two resident representatives for the MAFP.

Dr. Albers is a native Montanan hailing from East Glacier, Great Falls, and most recently Billings, MT. She was awarded her undergraduate degree at Reed College in Portland, OR in Psychology and Neuroscience. After graduation, she then spent time abroad on a Fulbright Scholarship in Sweden performing obesity research, and then 2 years as a Peace Corps Volunteer in Botswana working on HIV/AIDS projects. After these adventures, she returned to the Big Sky State and worked at Riverstone in Billings as a medical assistant, introducing her to the magic of an FQHC. Subsequently, she was thrilled to enroll and earn her medical degree at the University of Washington as a Montana WWAMI student. During her time in medical school she fell in love with full spectrum family practice through the TRUST (Targeted Rural Underserved Track) through her longitudinal rotations in

Hardin, MT. After following the same families through birth, well-child, intergenerational crises, and end of life care, she knew that a life in Family Medicine was for her.

Dr. Albers is currently a resident in Kalispell, MT. She has loved delivering babies, working in addiction medicine and chronic pain, and exploring palliative medicine at Kalispell Regional Medical Center, as well as at her continuity clinic at the Flathead Community Health Center. She has loved the residency's supportive learning atmosphere. She feels lucky to have her advisers in Kalispell - Dr. Sam Greenberg and Dr. Justin Buls - her mentors in residency, both on and off the wards. Dr. Albers and her husband Andrew welcomed their first child in November of 2019, delivered by her co-resident Dr. Chelsie Russig, supervised by Dr. Buls. Dr. Albers is happy to report that her baby girl, Avery Louise, is happy and healthy. Dr. Albers is also proud to report that, as the precocious child she is, Avery has already taught several newborn exams to medical students rotating through Kalispell.

Traditionally it hasn't always been encouraged for residents to have children during residency. Dr. Albers feels well-supported by her advisors in her choice to become a mother, and thinks that her

experience with her daughter has only made her better equipped to provide care to patients. She is grateful for the support from FMRWM, and their commitment in emphasizing the *family* in family medicine. Dr. Albers looks forward to continue serving on the MAFP board for the next year.



MAFP Members Receive Honors as Rural Health Leaders

Each year in honor of National Rural Health Day, the Montana Office of Rural Health/AHEC and the Montana Rural Health Association choose several recipients for the Dr. Frank Newman Rural Health Award.



Dr. Frank Newman

The following is an excerpt from the Montana Rural Health Initiative website about the namesake of this award:

“Dr. Newman represented the spirit of Montana in nearly 50 years of service to rural communities and healthcare in our state. He was instrumental in founding the Montana WWAMI Medical School Program, the Montana Office of Rural Health, the Montana AHEC, the Montana Family Medicine Residency Program, and many other programs. He served his country in the U.S. Marine Corps, and was the founder of the Wind Drinkers running club. Dr. Newman counseled hundreds of young people interested in a career in medicine and other health professions. He was actively teaching in the WWAMI Targeted Rural Underserved Track at Montana State University, and working at the Montana Office of Rural Health/AHEC until his death at age 80 on Veteran’s Day, 2011.

Nominations for the Award should reflect Dr. Newman’s commitment to rural health in Montana, his support for health professions, his belief in the young people of our state, and his optimistic view of the future. Dr. Newman traveled to every corner of Montana, worked with rural hospitals and healthcare providers, and believed that communities had the capacity to support high quality healthcare. He helped many people persevere in their goals and hopes, and inspired many young people to pursue their dreams.”¹

The 2019 award winners include a member of the MAFP Board of Directors, Jay Taylor, MD, (Pondera Medical Center, Conrad), who received the Rural Health Clinician Leadership

Award. Another MAFP member, Christina Marchion, MD, (Central Montana Medical Center, Lewistown) was recognized with the Rural Health Education Award.

Congratulations to this year’s award winners and thank you for your commitment to rural

health care in Montana! Excerpts from their nomination letters are included to learn more about these exceptional Family Physicians. To learn more about the Dr. Frank Newman Rural Health Award, please visit http://montanaruralhealthinitiative.info/?page_id=5339.



Jay Taylor, MD, Conrad

Dr. Jay Taylor is a living, breathing example of dedication to rural healthcare. He is our MD at Pondera Medical Center; but is

truly so much more to our facility and our community.

Dr. Taylor was born and raised in Conrad, graduating from CHS in 1992. After high school, he graduated from Carroll College in

continued on page 10 >

We can’t heal their trauma, but we can help heal their future.



SHODAIR CONNECT

A FREE telephone consultation service funded through Shodair Children’s Hospital now available to Montana’s primary care pediatric and psychiatric providers that strengthens and supports the individuals who care for children and families who experience mental health concerns.

For more information on enrollment, requirements, hours of operations, appointments, and information on frequently asked questions, please visit:

shodair.org

Shodair Outpatient Services

406-444-7521



To heal, help and inspire hope

continued from page 9>

1996 with a degree in Biology and minor in Chemistry before going onto the University of Colorado Health Sciences Center School of Medicine in Denver, graduating in 2002. He spent 1 year in Billings at the Montana Family Medicine Residency, and then went to Wray Colorado for 2 years for rural family medicine training.

Along with providing coverage for our Emergency Department, seeing clinic patients, performing endoscopy services, and serving as our Chief of Staff on the PMC Administration team, Dr. Taylor takes part in all of our public events, even with a very busy schedule. He and his family run in our annual fun run. He is present every year at our Health Fair. He is one of the lead organizers for our largest fundraiser, the annual Golf Tournament, and sponsors several teams every year. Our employees enjoy a beautiful café that he and his wife refurbished. The Taylor Family provides one employee every month with a café gift card, just out of kindness. Dr. Taylor graciously offered his home for a bbq to host a visiting physician. That's just a small example

of the generosity we are bestowed by the Taylors. We are so fortunate to have a Doctor of this caliber in our facility.

The Taylor Family truly has done so much for Pondera Medical Center; but it doesn't end there. Dr. Taylor and his wife Monica are the ideal community members. They are present at sporting events, fundraisers, community events. They have two children in our public schools and both children are very active in sports, school plays, and extra curriculars. Dr. Taylor is a volunteer golf coach and the most recent elected school board member. Dr. Taylor has made an active investment in our youth- hosting basketball skills camp, attending sporting events for injuries, and acting as a mentor to many in our facility and town. The entire family is active in their hometown, and our patients recognize and appreciate that tremendously.

If this award entails "integrity" as a trait, Dr. Taylor is absolutely the worthy recipient. He has all the integrity in the world and is truly invested in providing quality care to his hometown. Patients would be willing to wait months to see Dr. Taylor, because he has such a great reputation for quality and compassion.

The value of the services we provide will continue to rise from the innovation, hard work and proactive approaches from the PMC team, led by the efforts of Dr. Taylor.



Christina Marchion, MD, Lewistown

When you read about Dr. Newman's commitment to rural healthcare, I see so many similarities with Dr.

Christina Marchion. Dr.

Marchion is a Family Practice with Obstetrics physician at Central Montana Medical Center (CMMC) in Lewistown, MT. She was a former WWAMI TRUST student at CMMC and chose to come full circle back to her training site to practice medicine...a true example of how the WWAMI TRUST program is so beneficial.

Dr. Marchion is intentional about how she gives back the same exceptional learning experience she had. Her dedication to future clinicians is admirable and is filled with so much compassion. She is thoughtful in her teaching and feedback to students. She truly sets them up for success.

Her dedication to rural healthcare is vast. She travels to many cities in Montana and Idaho to share her knowledge of the medical field as well as her experience as a preceptor. She is not only one of the main preceptors for WWAMI medical students, but also is the main preceptor for the Family Medicine Residency of Western Montana. Mentoring future clinicians is just as important to her as fulfilling her role as a physician. The benefits of a good mentor are life-long. She has so much impact on these learners and are molding them each and every day. Not only does she mentor them professionally, but also mentors them through tough personal struggles such as work/life balance and time management.

As you can tell, she is extremely dedicated to the success of future clinicians as well as the love for practicing in rural healthcare. If you were to put a name next to Dr. Newman's as the epitome of rural healthcare, you would find Dr. Marchion's right next to his.

References

1. http://montanaruralhealthinitiative.info/?page_id=5339, accessed February 18, 2020.

CHOOSE CAR SEAT: BY AGE & SIZE

THE NUMBER OF PEOPLE WHO THINK THEY HAVE THEIR CHILD IN THE RIGHT SEAT.

THE ONES WHO ACTUALLY DO.

KNOW FOR SURE IF YOUR CHILD IS IN THE RIGHT CAR SEAT.

Ad Council

VISIT SAFERCAR.GOV/THERIGHTSEAT

NHTSA
www.nhtsa.gov

Child Car Safety

Public Health in the 406

What is Health in the 406?

Health in the 406 is a regular communication by the Department of Public Health and Human Services (DPHHS) on a variety of health topics designed to raise awareness of issues that impact the daily lives of Montanans.

Why is Health in the 406 important?

We want people to “See Public Health Differently”. Traditionally, public health brings to mind vaccinations, motor-vehicle safety, and control of infectious disease. We continue to do important work in these areas, however, public health is so much more than what traditionally comes to mind. It is a *partnership of individuals and organizations* that touches all of us from birth to death. It’s not just something that our state and local health departments ‘do’, we all have an important role in public health. Health in the 406 are simple, quick messages to help individuals know how to protect their health and the community around them.

Who is Health in the 406 intended for?

Health in the 406 is intended for everyone, all Montanans, their families, friends and those visiting our great state. This resource provides Montanans with health, wellness and prevention resources that are available in their community and surrounding area.

What topics will be covered?

Health in the 406 covers a variety of public health issues. Currently we have messages on sudden cardiac arrest, disability employment, the clean indoor air act, safe routes to school, and more. If there is a topic you’d like to hear about email us at healthinthe406@mt.gov.



Where can we find the Health in the 406 information?

Visit our website www.healthinthe406.mt.gov to view current or archived messages and to sign up for these eblasts to come right in your inbox. Also, you can follow us on Facebook or Twitter @Health406.

Here is an example of a recent Health in the 406 message:

Winter travel

- In 2017 about 9% of fatal crashes in Montana occurred during rainy or snowy conditions; being prepared for winter driving can help keep you safe.
- Keep your car maintained, follow safe driving practices (such as turning off your cruise control), and keep a winter weather kit in the car.
- Before heading out, prepare for your drive by checking Montana road conditions, and remember, don’t crowd the plow!



Odds of a child becoming a professional athlete: 1 in 16,000

Odds of a child being diagnosed with autism: 1 in 88

Some signs to look for:

No big smiles or other joyful expressions by 6 months.

No babbling by 12 months.

No words by 16 months.



To learn more of the signs of autism, visit autismspeaks.org



AUTISM SPEAKS™
It's time to listen.

© 2012 Autism Speaks Inc. "Autism Speaks" and "It's Time To Listen" & design are trademarks owned by Autism Speaks Inc. All rights reserved.



Mark Your Calendars! Annual Meeting of MAFP at Chico Hot Springs in June

The 70th Annual Meeting of the Montana Academy of Family Physicians will be taking place on Thursday, June 11 and Friday, June 12 at Chico Hot Springs. We are working hard to make sure this is an exciting conference for Montana's family physicians!

This year we are going to include some shorter topic presentations along with some one-hour talks, in order to help us cover a broader variety of topics during the

educational sessions. AAFP Board President Gary L. LeRoy, MD, FAAFP, will be joining us at Chico, and will be providing an update on AAFP advocacy efforts, as well as an update on primary care ophthalmology. We are also lining up speakers to cover the full breadth of family medicine, including women's health and maternity care, ambulatory and inpatient adult medicine, pediatric medicine and sports medicine.

As usual, we will have morning yoga

classes, late afternoons will be open to enjoy Chico's pools, and Thursday night will be our annual barbecue, featuring installation of our new MAFP officers, and the presentation of the Montana Family Physician of the Year.

We hope you can join us for this special time of fellowship, of learning, and of celebrating family medicine in Montana. Registration will be opening soon at <https://montanaafp.org/events/>.



**The 70th Annual Meeting of the
Montana Academy of Family Physicians**

**June 11-12, 2020
Chico Hot Springs, Pray, Montana**

PRIMARY CARE CONFERENCE

THURSDAY, JUNE 11

6:00 a.m. **Yoga with Rory Rogina**

7:00 a.m. **Registration & Continental Breakfast**

7:30 a.m. Update on COVID-19
Tsun Sheng N. Ku, M.D.

8:30 a.m. Hot Topics in Infectious Disease
Tsun Sheng N. Ku, M.D.

9:00 a.m. **Break**

9:15 a.m. Stroke Update
James Richards, M.D.

10:15 a.m. Approach to First Seizure
James Richards, M.D.

10:45 a.m. **Break**

11:00 a.m. Novel Oral Anticoagulant Selection & Reversal
Ryan Farris, M.D.

Noon Business Luncheon Meeting
(All registrants are invited to attend)

1:00 p.m. Induction of Labor
Juliana Papez, D.O.

2:00 p.m. Contraception vs PCOS vs Dysfunctional Uterine Bleeding
Juliana Papez, D.O.

2:30 p.m. Hospital Pain Management
Ryan Farris, M.D.

3:00 p.m. **Conference Adjourn**

6:00 p.m. **MAFP Barbecue**
Officer Installation & Montana Family Physician of the Year Presentation

FRIDAY, JUNE 12

6:00 a.m. **Yoga with Rory Rogina**

7:00 a.m. **Continental Breakfast**

7:30 a.m. Pediatric Sports Injuries
Kelsey Hoffman, D.O.

8:30 a.m. Update on Concussion
Kelsey Hoffman, D.O.

9:00 a.m. **Break**

9:15 a.m. AAFP Advocacy Update
Gary LeRoy, M.D.

9:45 a.m. Primary Care Ophthalmology
Gary LeRoy, M.D.

10:45 a.m. **Break**

11:00 a.m. Atypical Chest Pain
Brook Murphy, M.D.

Noon Lunch

1:00 p.m. Asthmonialitis in Children: Update on Bronchiolitis, Pneumonia, Asthma & Wheezing
David Higgins, M.D.

2:00 p.m. Treating Urgent Pediatric Issues in the Office
David Higgins, M.D.

3:00 p.m. **Conference Adjourn**

MAFP OFFICERS

President: Amy Matheny, M.D., Missoula
President-Elect: Jeremy Mitchell, D.O., Big Sky
1st Vice Pres: Michael Temporal, M.D., Billings
2nd Vice Pres: Heidi Duncan, M.D., Billings
Secretary-Treas: John B. Miller, M.D., Missoula

Delegates: Heidi M. Duncan, M.D., Billings
 Janice Gomersall, M.D., Missoula
Alt. Delegate : Jeffrey Zavala, M.D., Billings



Ashley Quanbeck, MD

Health Impacts of Climate Change: *Why advocacy for a healthy climate is essential to primary care*

There is little doubt that the climate of our world is changing. The evidence of this change is well documented. Since the 1970s, every decade has been warmer than the decade before.¹ Temperatures in Montana have risen between 2-3°F from 1950 to 2015. There is robust evidence and strong agreement between experts that, without drastic changes in carbon emissions, temperatures in Montana will increase by 4.5-6°F by mid-century and 5.6-9.8°F by the end of the century.² These are significantly greater elevations than those predicted nationally and globally. 97% of climatologists agree that these rapid changes are directly related to the increase in CO₂ in the atmosphere caused by human activity, primarily the burning of fossil fuels, and that the impacts of these changes will be negative and possibly catastrophic.³

Why is climate change important to us as family physicians? Why is it imperative that we speak out for policy change that promotes climate health? There is mounting evidence that we are already seeing health impacts from climate change and that these will only intensify as warming escalates. Studies have shown that health outcomes affected by climate change include a greater risk of infectious disease, worsening cardiovascular and pulmonary disease (primarily related to increasing air pollution and ozone levels), increased allergies and an elevated risk of heat related illness.³ There is also increasing evidence that climate change is contributing to higher rates of mental illness including anxiety, depression and

post-traumatic stress disorder related to extreme weather events.⁴

As family physicians we have been called to be advocates for the health of our patients, our communities and our world. But what can we do in light of this global problem? Can we make any difference in a threat that is so big and so complex that nations and governments can't find consensus? Yes we can, and, much like our medical practice, our role in climate health is multi-faceted; we must act as individuals, physicians and leaders.

We can start with ourselves by making small choices to further a healthier world. Maybe it is reusable grocery bags, walking or biking to work, installing solar panels on our roofs or investing in a hybrid or electric vehicle. While these changes may seem small, we should not forget that we are looked to as leaders in our communities; studies of human behavior have shown that peer

pressure is a powerful tool for change. For example, in a study of community organizers promoting solar panels, those who had solar panels on their own homes were 62% more successful in convincing others to adopt solar.⁵ Our personal choices have more power than we know!!

As physicians we can educate ourselves, our patients and our colleagues on the health impacts of climate change. We must keep up to date on the best science to recognize, treat and prevent climate related health conditions. We must advocate for adoption of climate healthy practices within our industry. We must work with administrators, CEOs, hospital associations and government programs to reduce waste from our clinics and hospitals. Some solutions could include using locally grown food in cafeterias whenever possible and decreasing travel for patients and physicians through the use of tele-health



for primary care, referral care and for CME/conferences. We can also look for creative ways to decrease energy use in our buildings such as sky lights, solar panels or rain catchment systems. Even small changes such as decreasing the number of gloves that are dropped on the floor can make a difference. “Practice Greenhealth” and “My Green Doctor” are two good sites to get ideas to make your practice more climate friendly.

Finally, whether we asked for it or not, when we became physicians, we also became leaders. Leaders in our clinics, our hospitals and our communities. It is time that we use this influence to advocate for the health of our world. To speak out for the impoverished and marginalized people who are both the most affected by climate change and the least able to mitigate its harms. This means joining with our medical societies to call for action from our governments. This means calling our senators and representatives to educate them as to

the risks of doing nothing. This means standing up and being counted. It is our moral duty and our calling as healers to lift up our voices so that future generations have the chance to live healthy lives in a world that can sustain everyone.

*** Please consider visiting Montana Health Professionals for a Healthy Climate: (<https://www.montanahphc.org/index.php>) for high quality resources regarding the science behind climate change and local efforts to improve climate health.***

1. Parker, Cindy. “Slowing Global Warming: Benefits for Patients and the Planet” Am Fam Physician. 2011 Aug 1;84(3):271-278.
2. Whitlock C, Cross W, Maxwell B, Silverman N, Wade AA. “2017 Montana Climate Assessment. Bozeman and Missoula MT: Montana State University and University of

Montana, Montana Institute on Ecosystems.”

3. Parker, Wellbery, Mueller. “Climate Change: Managing Health Impacts” Am Fam Physician. 2019 Nov 15;100(10):618-626.
4. Pollack, David. “Climate Change and Mental Health: Why you should care about Climate Change” Psychiatric News: American Psychiatric Association; Feb 28, 2019 <https://doi.org/10.1176/appi.pn.2019.3a1>
5. Ortiz, Diego. “10 Simple Ways to Act on Climate Change” BBC Future; November 4, 2018. <https://www.bbc.com/future/article/20181102-what-can-i-do-about-climate-change>
6. Practice Green Health: <https://practicegreenhealth.org/>
7. My Green Doctor: <https://www.mygreendoctor.o>

SALMONELLA PLATTER, ANYONE?

KILL HARMFUL BACTERIA: WASH KITCHEN SURFACES, UTENSILS AND HANDS WITH SOAPY WATER WHILE PREPARING FOOD.

CLEAN



SEPARATE



COOK



CHILL



KEEP YOUR FAMILY SAFER FROM FOOD POISONING
Check your steps at FoodSafety.gov



John Miller, MD, Program Chair

Another Successful Year for the Big Mountain Medical Conference



An educational session at the 2020 Big Mountain Medical Conference.

The 61st Big Mountain Medical Conference took place at the Whitefish Lake Lodge on January 29-31. With over 50 attendees, the numbers continue to increase gradually to add more energy and interactions with local and statewide colleagues.

The conference started on Wednesday evening with an evidence update by Tim Caramore, MD from the residency program in Missoula who outlined the results of ten recent studies with potentially practice changing results. We are hopeful that he will be willing to give us another evidence based update next year. Dr. Nicole Eull from Milwaukee then gave a well presented wellness workshop sponsored by the AAFP.

Thursday morning started with two hours of well researched evidence based nutrition talks by Dr. Jim Painter, a nationally recognized nutrition expert, and very engaging speaker. He effectively outlined the history and evidence comparing low fat diets with evolving evidence in support of low carb diets and time restricted eating. We are hopeful to have him back next year to reinforce some of these important points, and expand on some other ways in which nutrition affects health.

Thursday was a beautiful day for skiing and other activities in the Whitefish area as visibility was amazing with views of Glacier and Flathead Lake as well as the Swan and Mission mountains. The MAFP sponsored our annual “just for

fun” ski races off of Chair 2 with some new participants who were recognized at the reception for their participation.

Dr. Sophia Newcomer from the school of public health at the University of Montana gave the first evening talk on the history and workings of the CDC’s system for vaccine safety monitoring and research. She presented several strategies to help as we work with parents who may have hesitancy around vaccines and the current schedule. Amy Matheny, MD, continued the annual tradition of MAFP chapter presidents presenting to the group. Associate Program Director at the residency in Missoula, she gave a well researched and presented talk on treatment for Hepatitis C, an emerging health problem and increasingly treatable in the primary care setting. An article on the topic is featured in this edition of *Montana Family Physician*. The evening concluded with socializing at a reception for attendees and their family.

The conference concluded on Friday with a full day of offerings. The morning session included a thorough review of clinic based treatment for Alzheimers by Dr. Brian Unwin, a geriatric fellowship trained family doctor and national expert

from Virginia. Elizabeth Paddock, MD, a faculty member from Missoula effectively reviewed the new guidelines and treatments for type 2 diabetes, and an article on her presentation is also featured in this edition of the magazine.

There were two optional sessions during the day on Friday. Daniel Nauts, MD presented a four hour Medication Assisted Treatment training, part of the required information to apply for the X-waiver to subscribe to treat Substance Use Disorder. Dr. Elizabeth Paddock brought a team of residents and faculty from Missoula to conduct a Point of Care Ultrasound (POCUS) workshop. The plan is to continue to offer optional offerings on Friday next year for providers to gain skills and enhance the care they provide patients.

The full group came back together on Friday evening for the annual resident presentation as Amanda Hartman, MD, a third year resident in Missoula, presented a thorough and animated review of Scalp and Hair Disorders. Timothy Joyce, MD, an orthopedist from Kalispell, delivered a comprehensive review of the treatment of osteoarthritis.

The 62nd Big Mountain Medical

Conference is planned for January 27-29, 2021, to be held again at Whitefish Lake Lodge. The goal is to continue to build a supportive and collegial environment for family physicians and other primary care practitioners to gather, connect, learn and enjoy a beautiful setting together. Please look for an agenda for next year, hopefully in late summer, which will have a mix of relevant topics presented by local and national speakers from various specialties.



Ski racers of all ages celebrate their wins at the reception.

Choosing the Best Diabetes Medications for Your Patients in 2020:

An Evidence Based Review

By Elizabeth Paddock, MD

It can feel overwhelming to choose the right med for the right patient when there are so many options and new indications emerging all the time. In 2019 the ADA published updated guidelines in “Standards of Diabetes Care” that can help you in choosing medications based on patient characteristics. In this article I will review the evidence around preventing progression of pre-diabetes; emphasize a few key points from the ADA guidelines, review the majority of non-insulin diabetes medications on the market and then briefly review recommendations from other organizations around medication selection.

PREDIABETES. A diagnosis of pre-diabetes should be a time of enhanced counseling and motivational interviewing with a goal of preventing patients from going on to have diabetes. The good news is there are several interventions that have evidence supporting benefit. Below I will review a few of them.

- The Diabetes Prevention Program (DPP) is a study that was conducted by the National Institutes of Health (NIH) in the early 2000s. The program worked with participants to prevent or delay the onset of diabetes by achieving a 7% loss of body weight and increasing moderate intensity physical activity to greater than 150 minutes per week. Results of the DPP were that the incidence of progression to diabetes was reduced by 58% over 3 years. The follow up study has shown sustained

reduction in the rate of conversion from DM2 of 34% at 10 years and 27% at 15 years. If you can refer your patients to an intense behavioral intervention modeled on the DPP, or otherwise engage them to make these changes there is good evidence this is an effective intervention. (1)

- A very small study also sponsored by the NIH came out last year that suggested that eating highly processed foods leads to over eating and weight gain. Participants eating a highly processed diet ate 500 calories more per day, ate faster and had associated weight gain.(2) Now this was very small highly controlled study and not yet looked at in the general population. However, this is building on a lot of data already suggesting highly processed foods are contributory to the obesity epidemic and diabetes. This is a relatively easy thing to talk to patients about so I think it can be helpful to incorporate into your diabetes education. Tell your patients to look at the ingredient list. If it is really long with chemical or unfamiliar names it is probably ultra-processed.
- There is more and more information emerging on the benefit of time restricted eating. There is reasonable data to support this (3). The best data seems to be for eating your calories in an 8-10 hour time period, earlier in the day. The reason this may work is that by allowing our bodies to go into a prolonged fasted state our

insulin levels go down and allow fat cells to release stored sugars allowing for weight loss, increased insulin sensitivity and lower insulin levels. I think at this time it is reasonable to recommend time restricted eating in the context of other dietary changes to promote health: Avoid sugars and refined grains, recommend plant based whole foods. Avoid snacking between meals and move your body each day to build muscle tone. Try time restricted eating limiting eating to 8-10 hours in the day, with nothing several hours before bed.

- In certain subpopulations there is evidence for using metformin to prevent progression from pre-diabetes to DM2. This data also comes from the DPP study (1). Based on this the American Diabetes Association (ADA) recommends considering metformin for pre-diabetes if patients have a BMI greater than 35, in those younger than 60 and in women with a history of gestational diabetes (GDM). The strongest data is those with a history of GDM. In all other patients lifestyle change was superior to metformin in preventing progression.

DIABETES. Once a patient is diagnosed with type 2 diabetes (DM2) we are overwhelmed with medication options, below I will clarify the various class of medications

continued on page 18>

continued from page 17>

and when you might choose one over another.

First though, let's review AIC goals. Since 2016 the ADA does say that AIC goals are not one size fits all. ADA allows us to base the goal on a variety of factors. Essentially ADA recommendations are for more stringent control in younger patients, those with a more recent diagnosis, those with a longer life expectancy and limited co-morbidities. Within those parameters ADA supports a goal of 7% for most adults with DM2 and loosening that goal if the risk of adverse events is low.

In 2018 the American College of Physicians (ACP) published an evidence based guideline addressing AIC targets (4). This guideline is endorsed by the American Academy of Physicians (AAFP). **For most with DM2 the AIC goal should be between 7-8%.** If the AIC goes below 6.5% clinicians should consider scaling back pharmacotherapy; and for those with a life expectancy of less than 10 years clinicians should treat patients with DM2 to minimize symptoms related to hyperglycemia and avoid a specific AIC goal because the harms outweigh any benefit. We might anticipate a less than 10 year life expectancy in those who are older than 80, live in a nursing home, or have chronic conditions such as dementia, cancer, ESRD, severe COPD or CHF. Based on the current evidence ACP feels that an AIC target of less than 7% for most carries too much risk. The current data does NOT support that improved glycemic control results in substantial reductions in CV disease and in fact the 2007 ACCORD trial actually found an increased risk of death with an AIC target less than 6.5%.

ADA Standards of Diabetes Care

The 2020 ADA standards of diabetes care (5) guideline is a useful tool to help select meds based on patient comorbidities or concerns. I would encourage you to print a copy of or book mark this algorithm on your computer. It is relatively evidence based and easy to navigate and will be very helpful at the point of care in choosing the right medications for your patient. This guideline recommends metformin first line, and then if more medications are needed asks us if our patient has established atherosclerotic cardiovascular disease (ASCVD) or chronic kidney disease (CKD). If yes- then it asks if ASCVD predominate, or heart failure

or CKD predominate. For those whom ASCVD predominates then a Glucagon like Peptide-1 Receptor Agonist (GLP-1RA) or a Sodium Glucose Transport Protein 2 Inhibitor (SGLT2) are recommended. For those whom heart failure of CKD predominate the SGLT2s are recommended.

If ASCVD or CKD do not predominate- then the guideline asks if there is a compelling need to minimize hypoglycemia, or a compelling need to minimize weight gain or promote weight loss, or if cost is an issue. **For most the GLP-1RAs or the SGLT2s will still be recommended as the next medication.** These are recommended to start BEFORE basal insulin or other non-insulin medications. The reason these meds have moved up in the algorithm is that they have cardio and renal benefits. As a reminder 2/3 of diabetics die of cardiovascular disease so if we are going to improve morbidity and mortality in diabetics we need to be using meds that improve CVD outcomes.

Link to algorithm: https://care.diabetesjournals.org/content/diacare/42/Supplement_1/S90/F1.large.jpg

- **Metformin.** ADA and AAFP recommend metformin as the **first line medication** for the treatment of DM2. Metformin is safe, fairly well tolerated, has excellent longer term effectiveness on patient oriented outcomes like mortality, it is simple to take and inexpensive. In patients with sub-optimal control on metformin alone; don't stop metformin once you start adding new medications! Metformin can be used in patients with CKD. In 2016 the FDA changed the guidance around metformin; Use the GFR to guide you in dosing. If the GFR is between 45-60 monitor renal function more frequently but you don't need to change the dose. If the GFR is between 30-45 decrease to half dosing and monitor more frequently. Stop metformin for a GFR of less than 30.
- **Glucagon Like Peptide 1-Receptor Agonists (GLP1RA).** These medications work in all sorts of magical ways, among other things they decrease gastric emptying, increase insulin secretion and synthesis and are cardio, renal and neuro protective. The benefits to using this class of medication is a significant reduction in AIC, a 3-5kg weight loss, blood pressure benefits and decreased LDL and TGs as well as reduction in cardiovascular mortality. The cons include that they are costly, that they are injectable and a significant number of patients (20%) will experience GI side

effects, primarily nausea and vomiting. For most this will resolve after 7 days.

There is an oral formulation of semaglutide that was recently approved by the FDA. There is little data on this yet and it is not recommended by ADA or any other group at this time.

GLP1s are a good choice when patients are overweight/obese, have established cardiovascular disease (CVD) or are at high risk of CVD. GLP-1s also provide good prandial coverage for blood sugars so are a good alternative to bolus insulin. In general the GLP1RA are at low risk of causing hypoglycemia because they have little to no activity on insulin secretion unless the blood sugar is rising. However there is a risk of hypoglycemia when adding a GLP1RA to a sulfonylurea (SU). For patients on a SU whom you add a GLP1RA the recommendation is to either decrease the dose or stop the SU. When adding a GLP1 to insulin there is very limited evidence about the risk of hypoglycemia. Guidelines at this time recommend that you reduce both basal and prandial insulin by 10-20% when adding a GLP1.

- **Sodium Glucose Transport 2 Protein Inhibitors (SGLT2).** The SGLT class of medications blocks the protein that normally reabsorbs sugar from the renal tubule; this ultimately reduces the reabsorption of sugar back into the bloodstream and allows for increased loss of sugar into the urine. This glucosuria also leads to increased losses of calories and water which can aid in weight loss of up to 2-3kg, acts as a diuretic and will lower blood pressure. They also have data showing them to be cardio and renal protective. The risks of the SGLT2 are UTIs and GU fungal infections, dehydration and a possible increased risk of foot amputation.
- **Good candidates for the SGLT2 inhibitors are patients with high post prandial blood sugar values, those with a history of HTN, heart failure, or CKD** associated with microalbuminuria though the GFR has to be greater than 30 to use SGLT2; and patients with a history of ASCVD.
- **Dipeptidyl Peptidase 4 Inhibitors (DPP4).** The DPP-4s reduce the AIC by about 0.5%, they have a low risk of hypoglycemia, are weight neutral and are an oral medication. However there is no associated CVD benefit and these

medications in fact may increase the risk of being hospitalized for heart failure.

In summary **they minimally decrease the A1C and have no cardio or renal benefits.** They also remain more costly.

You might consider using the DPP-4s in frail older patients with hypoglycemic events, or have symptoms associated with hyperglycemia. At this point these meds should be used rarely.

- **Thiazolidinediones (TZD).** The TZDs are still around and there are situations where you can use them. They are very effective at lowering the A1C, they are inexpensive and they have a low risk of hypoglycemia. The TZDs are still ok to use, but are contraindicated in patients with heart failure or edema as they lead to fluid retention; they are also associated with an increased risk of fractures so should be avoided in patients with osteopenia or osteoporosis. They also do not have any cardio or renal benefit.
- **Sulfonylureas (SU).** The SUs are very inexpensive and effective at lowering the A1C. There is no evidence of cardiovascular or mortality benefits. They are associated with hypoglycemia and weight gain. Because they work by stimulating the pancreas to release more insulin they often stop working after 5-7 years as the pancreas burns out. Glipizide and glimepiride are safe in CKD and glyburide is well studied for use in pregnancy. Sulfonylureas are still a good choice. ACP endorses them as a second agent after metformin (6).
- **Alpha-Glucosidase Inhibitor (Acarbose).** Acarbose works by decreasing the digestion and absorption of carbohydrates. It is no surprise that the side effects include flatulence and diarrhea, and abdominal pain. There is a proven CVD benefit with reduced heart attacks, but no mortality benefit. For patients who struggle with constipation this medication can be a good choice. Acarbose is not included on the ADA chart, but is mentioned in a STEPS (safety, tolerability, effectiveness, price and simplicity) as a good choice for effectiveness and cost. (7)

Using the ADA guidelines, for most patients adding a GLP1-RA or SGLT2 should be your next medication after metformin if they are affordable to a patient and there are no contraindications. However, our older medications are still in the mix and there is a role for them in many patients.

Guidelines from other organizations.

The American Association of Clinical Endocrinologists and American College of Endocrinologists (AAACE/ACP) recommendation is very similar to ADA. They recommend metformin first, followed by a GLP1-RA or SGLT2 in most cases.

The ACP last put out a guideline on diabetes medications in 2017. This guideline only addressed oral medications so the GLP1-RAs are not included. In addition a lot of the evidence supporting the cardiovascular benefits of the GLP1-RAs and SGLT2s; and the lack of benefit for the DPP4s has come out since then. The ACP recommendation is metformin first line; then can add on a SU, TZD, SGLT2 or DPP4.

The AAFP does not have a diabetes guideline. In February 2019 "American Family Physician" published a STEPS (safety, tolerability, effectiveness, price and simplicity) review of diabetes medications (7). Using these criteria metformin is clearly first line. The authors also agree that the GLP1-RAs and the SGLT2 medications are a good choice for those with established CVD and likely less effective for those at lower risk of CVD. They agree the DPP4s have not demonstrated any longer term benefits in patient oriented outcomes and that the cost and lack of benefit make the use of these meds hard to justify. This article does discuss acarbose and is something to consider if patients can tolerate as there is patient oriented outcomes and it is low cost.

Summary

- 1- There are evidence based options for preventing the progression of pre-diabetes to diabetes. Intensive behavioral interventions modeled on the diabetes prevention program with goals of 7% weight loss and increasing moderate physical activity to greater than 150 minutes per week has the best evidence. Watch for more evidence to come on ultra-processed foods and time-restricted eating.
- 2- Metformin and lifestyle change remain first line treatment for diabetes. Don't stop metformin unless the patient is not tolerating it.
- 3- A1c goals are not one size fits all. For most patients a goal between 7-8% is

recommended by ACP and the AAFP. Higher or no goal are reasonable in cases of lower life expectancy or multiple co-morbidities.

- 4- The ADA does recommend that for most patients if the A1C is not at goal with metformin and lifestyle, next add a GLP1-RA or a SGLT2. Both have cardiovascular and renal benefits with low risk of hypoglycemia.
 - a. Think SGLT2 for heart failure and CKD
 - b. Think GLP1-RA for a history of or high risk of ASCVD.
- 5- Insulin has moved much further down the list of treatment options.

References:

- (1) Hall KD, et al. Ultra-processed diets cause excess calorie intake and weight gain: A one-month inpatient randomized controlled trial of ad libitum food intake. *Cell Metabolism*. May 16, 2019
- (2) Diabetes Prevention Program (DPP) Research Group. The Diabetes Prevention Program (DPP): description of lifestyle intervention. *NIH external link Diabetes Care* 2002;25(12):2165-2171.
- (3) Wilkinson M, et al. Ten-Hour Time-Restricted Eating Reduces Weight, Blood Pressure, and Atherogenic Lipids in Patients with Metabolic Syndrome. *Cell Metabolism*. December 5, 2019.
- (4) Qaseem A, et al. Hemoglobin A1C Targets for Glycemic Control for Pharmacologic Therapy for Nonpregnant Adults with Type 2 Diabetes Mellitus: A Guidance Statement Update from the American College of Physicians. *Ann Intern Med*. 2018;168(8):569-576.
- (5) American Diabetes Association. Standards of Medical care in Diabetes-2020. *Diabetes Care The Journal of Clinical and Applied Research and Education*. Vol 43. Supplement 1.
- (6) Qaseem A, et al. Oral Pharmacological Treatment of Type 2 Diabetes Mellitus: A Clinical Practice Guidelines Update from the American College of Physicians. *Ann Intern Med*. 2017;166(4):279-290.
- (7) Steinberg J, Carlson L. Type 2 Diabetes Therapies: A STEPS Approach. *Am Fam Physician*. 2019 Feb 15;99(4):237-243
Web address for ADA algorithm: https://care.diabetesjournals.org/content/diacare/42/Supplement_1/S90/F1.large.jpg

Making the Case for Treating Hepatitis C in Primary Care

By Amy Matheny, MD, MPH, FAAFP

Hepatitis C treatment has changed dramatically over the past decade, and especially even within the past couple of years. Many of you likely trained in an era where Hepatitis C was only treated by specialists, and often patients had to wait until their disease had progressed enough to make the poorly tolerated, and often ineffective, treatment regimens worthwhile. Patients with Hepatitis C suffered with chronic fatigue, complications of advanced liver disease, and flu-like symptoms and depression for months if they finally started treatment – along with the stigma that comes along with this diagnosis. I have met many patients whose experience with Hepatitis C fit this description, and on top of all of that, their prior attempt at treatment failed. I have had the joy of being able to cure every one of those patients I have met with the new treatments available to us today, and I have been able to do it myself.

I have not necessarily had a lifelong passion for Hepatitis C care, but instead the clinic where I took my position 5 years ago needed someone to assist with the Hepatitis C consult clinic they had been running for years in the primary care setting. I was apprehensive to take on something with which I had little to no training during residency. I was not familiar with the new medications, of which there were many, and was not sure about the framework with which I should approach assessment and treatment. Fortunately, my clinic was engaged with a telemedicine program called ECHO through the University of Utah for Hepatitis C care. ECHO has served as a mini-fellowship for me to develop a new skill set after training with just a lunch-hour per week commitment.

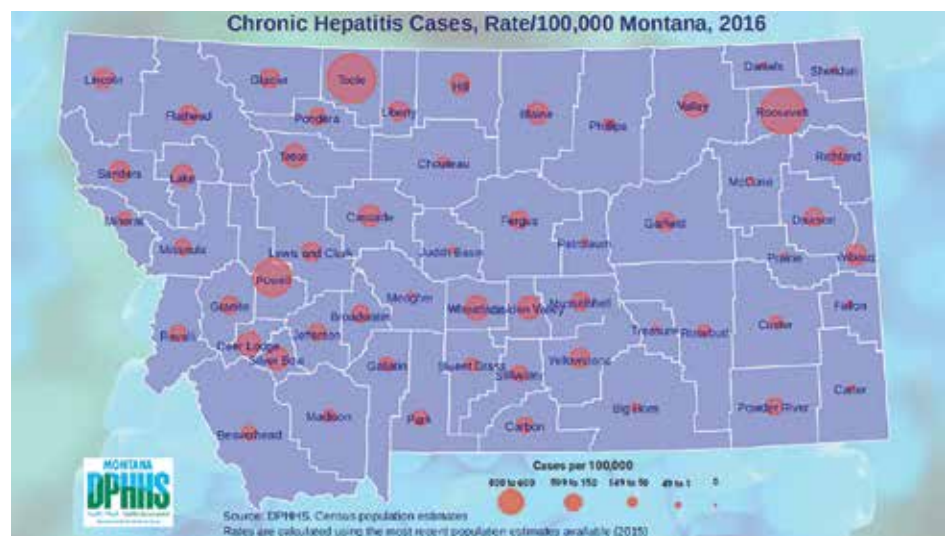
ECHO, which stands for Extension for Community Healthcare Outcomes, originated in 2003 through the University of New Mexico by a hepatologist, Dr. Sanjeev Arora, who wanted to expand the number of patients he could help with Hepatitis C across the state, particularly in rural areas. ECHO was born as a “telementoring” program to support local primary care physicians and other providers to treat their own patients with the guidance of a specialist. ECHO has

greatly expanded across the country and the world with programs supporting care of many different disease states. The tenets of ECHO include the following: 1) use of technology to augment scarce resources; 2) sharing guidelines and best practices to improve access to quality care, especially for more vulnerable populations; 3) case-based learning to facilitate comprehension and mastery; and 4) web based collection of patient data to evaluate outcomes.¹ As further validation of the effectiveness of this model, a 2011 article in the *New England Journal of Medicine* demonstrated that Hepatitis C care provided by primary care physicians utilizing an ECHO model was as successful as care provided by specialists, and may have reached more diverse and vulnerable populations.² Furthermore, patients are more likely to keep appointments and adhere to their regimens if cared for by physicians in their own community rather than having to travel to see a specialist.³ It is not a stretch to consider that this principle would likely apply in Montana as well, considering the distribution of Hepatitis C infections in our state (see Figure 1) and the various barriers to access for patients living in rural and frontier communities.

I would highly suggest anyone who is interested in embarking on adding Hepatitis C care to their practice to consider being

involved in an ECHO program. I continue to learn new things every time I present a case, and it is a great way to stay up to date on guideline changes. That being said, for treatment-naïve patients without cirrhosis or with compensated cirrhosis, the treatment algorithms have become greatly simplified. You can access the most up to date versions of these streamlined guidelines at <https://www.hcvguidelines.org/treatment-naive>. The joint guidelines are from the Infectious Disease Society of America (IDSA) and the American Association for the Study of Liver Diseases (AASLD). In addition, *Hepatitis C Online* is a fantastic, free website of the University of Washington with CME available and modules highlighting everything you need to know about Hepatitis C and its treatment in primary care. I use this website all the time, including drug information articles and clinical calculators I use to assess patients. More information can be found at <https://www.hepatitisc.uw.edu/>. I would caution that, per the guidelines, any patients with a history of decompensated cirrhosis at any time in their past, and/or with Child-Turcotte-Pugh Class B or C disease, should be referred to a liver specialist for treatment as they could decompensate further while on therapy. Furthermore, regimens for patients with prior treatment-failure follow different

Figure 1: Chronic Hepatitis C Cases in Montana, Rate/100,000, 2016.⁴



algorithms, although still can be appropriate for management in primary care, especially with ECHO support.

In terms of my approach to assessing patients for treatment, some key decision points in the evaluation include, as noted above, if they are treatment-naïve or treatment-experienced, and if they are non-cirrhotic or compensated cirrhotic. This will drop you into different treatment algorithms so is a key part of the process. Intake labs include a Hepatitis C viral load to confirm chronic infection, Hepatitis C genotype, complete blood count, comprehensive metabolic panel, INR, HIV testing, pregnancy testing, Hepatitis A antibody, and a full Hepatitis B panel including surface antibody, core antibody, and surface antigen. It is important to rule out occult Hepatitis B infection as this can flare and risk fulminant hepatitis in the setting of co-infection with Hepatitis C once treatment for the latter has started. Patients with isolated core Hepatitis B antibodies need to be monitored carefully during treatment in the rare event that they could have occult chronic Hepatitis B.

Staging liver disease, or assessing fibrosis level, involves more than just looking for abnormal synthetic function on liver function tests and a nodular liver on ultrasound. One of the things I was most surprised by as I came to understand Hepatitis C care is the identification of the compensated cirrhotic patient. By definition, this patient has not had ascites, bleeding varices, or other manifestations of decompensated cirrhosis. Thus, their cirrhosis is somewhat “invisible” other than with proper lab and imaging assessment. Thankfully, gone are the days when every patient being treated for Hepatitis C has to have a painful liver biopsy. Now, various clinical calculators or proprietary tests can be used to assess cirrhosis based on serum labs. The AST-to-Platelet Ratio Index (APRI) and the Fibrosis-4 Score (FIB-4) are helpful clinical calculators utilizing values found in a comprehensive metabolic panel and complete blood count. A fibrotest/actitest, with a proprietary name of *FibroSure*, can also be used to estimate a Metavir score for fibrosis and inflammation based on serum labs. I use all three of these in my practice to assess fibrosis and stage the patient’s liver disease. I often will use an ultrasound to correlate with lab values, and splenomegaly heightens my suspicion for cirrhosis as a marker of portal hypertension. Patients do not need nodularity of the liver to be considered cirrhotic. Finally,

ultrasound elastography, known as *FibroScan*, can be another helpful adjunct in staging liver disease, using the velocity of ultrasound waves to estimate liver stiffness. More information on clinical calculators and staging liver fibrosis can be found at the *Hepatitis C Online* website.⁵

Although a number of medications are currently available for Hepatitis C treatment, particularly for Genotype 1 patients, the new streamlined guidelines for treatment-naïve patients without cirrhosis or with compensated cirrhosis consist of two pan-genotypic treatment options. The choices include glecaprevir(300mg)/pibrentasvir(120mg) (*Mavyret*) for 8 weeks or sofosbuvir(400mg)/velpatasvir(100mg) (*Eplclusa*) for 12 weeks.⁶ It is critical to evaluate for potential drug interactions with the patient’s other medications, including over the counter drugs. There are some key interactions to know, including the adverse impact of acid suppressing agents on the effectiveness of *Eplclusa*. An incredibly user-friendly website to review drug interactions can be found at <https://hep-druginteractions.org/> from the University of Liverpool. I use this every time I treat my patients.

With the updated treatment guidelines, very little monitoring is needed while on therapy. Viral loads do not need to be monitored while on treatment, especially as the current regimens have cure rates in most circumstances of 98% or better. For compensated cirrhotic patients, a comprehensive metabolic panel can be considered if there are concerns for worsening liver disease. Please refer to the AASLD/IDSA guidelines, however, to know which circumstances would warrant more than the simplified treatment algorithms referenced above. The final proof of cure after treatment is an undetectable Hepatitis C viral load 12 weeks after completing treatment, known as the SVR12, or sustained viral response at 12 weeks.⁶

Another key factor in the overall assessment of your patient prior to starting treatment is to ensure readiness. Treatment regimens are decreasing in cost but are still many thousands of dollars. Thus, we must ensure that patients are in a place of readiness to adhere to treatment for the 8 to 12 week course. This does not mean that patients have to adhere to arbitrary alcohol and drug sobriety requirements for 6 or more months as has been the practice in the past. If a patient is able to reliably make appointments, take

medication as prescribed without a significant number of missed doses, and adhere to a follow-up plan, I am treating them. The newest Montana Medicaid prior authorization form for Hepatitis C care reflects this important shift in the philosophy of treating Hepatitis C.⁷ Furthermore, as of just this past February 2020, Montana Medicaid is now covering Hepatitis C treatment for patients regardless of their fibrosis level and under the treatment of a primary care provider. This is great news for our patients!

My hope is that this article has piqued your interest to consider adding Hepatitis C care to your repertoire as a family physician. This article is not an exhaustive review of everything you need to know but is an attempt to highlight some key aspects of approaching treatment. Consider engaging with a Hepatitis C ECHO, such as the excellent program of the University of Utah (see reference #3 for their website), to build your knowledge and experience in this realm, or take advantage of some free CME on the *Hepatitis C Online* website. As Family Physicians, we do not often have a chance to CURE chronic illnesses but instead are usually just managing them. Hepatitis C treatment is an opportunity to not only cure a disease with potential significant long term health impacts, but also to help eliminate a disease that comes with a fair amount of stigma and health disparities. Curing Hepatitis C has become one of my favorite aspects of practice as a family physician!

References:

1. <https://echo.unm.edu/>, accessed February 19, 2020.
2. Arora S, et al. Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers. *N Engl J Med* 2011; 364:2199-2207
3. <https://physicians.utah.edu/echo/clinical-support-areas/hepatitis-clinic.php>, accessed February 19, 2020.
4. <https://dphhs.mt.gov/Portals/85/publichealth/documents/CDEpi/Infographics/HepatitisC2017ADA.pdf>, accessed February 19, 2020.
5. <https://www.hepatitisc.uw.edu/>, accessed February 19, 2020.
6. <https://www.hcvguidelines.org/treatment-naive>, accessed February 19, 2020.
7. <https://medicaidprovider.t.gov/Portals/68/docs/forms/HepCPAForm01102020.pdf>, accessed February 20, 2020.

Partnering for Prevention

Cierra Dauenhauer

There is never a dull moment for the Montana WWAMI Medical Students, and with the new year came not only a new semester, but a new service opportunity to enhance preventative care in the Gallatin Valley. This January the Montana WWAMI Health Equity Circle began a partnership with Bozeman Deaconess's HealthCare Connection program. The program seeks to provide preventative services to community members that may not otherwise have access to care. Since its creation the mobile bus, pictured below, has served over 4,000 individuals, and provided over 20,000 free screenings. Current services include A1C, blood pressure, BMI, colorectal, lung, and breast cancer screening as well as numerous free immunizations and on-site consultation with a provider. Services are available each week at various locations throughout the Gallatin Valley on an established schedule

available online, and included below.

With growth of the program comes a need for greater participation in staffing the bus, which is where the medical students come in. Over 20 medical students attended a training to begin working on the bus, and are excited to help staff the blood pressure, BMI, and A1C stations. According to first year medical student Sidney Bryn, "I like having the opportunity to work with underserved communities and individuals without insurance. Those individuals deserve access to healthcare and free preventative screenings are an important part of helping them stay healthy." The students will continue to help staff the bus through the spring, summer, and fall.



The HealthCare Connection Mobile Health Bus provides free preventative screenings and immunizations.



First year medical student Jessica Gagen runs the A1C station at a recent HealthCare Connection event.

Mobile Health screenings & services schedule - January to June 2020

Date	Time	Location
February 1 (Sa)	9 a.m. - 1 p.m.	Bozeman Public Library
February 13 (Th)	11 a.m. - 2 p.m.	SCS Wraps, Four Corners
February 25 (T)	11 a.m. - 2 p.m.	Gallatin Valley YMCA
March 7 (Sa)	9 a.m. - noon	Gallatin Gateway Community Center
March 24 (T)	10 a.m. - 1 p.m.	Gardiner, Arch Park
March 24 (T)	3 - 6 p.m.	Chico Hot Springs, Pray
March 28 (Sa)	9 a.m. - noon	Manhattan, Main St.
April 9 (Th)	3 - 6 p.m.	Albertsons, Bozeman
April 28 (T)	Noon - 3 p.m.	Gallatin Valley Food Bank, Bozeman
May 7 (Th)	3 - 6 p.m.	Story Mill Community Center, Bozeman
May 14 (Th)	1 - 6 p.m.	West Yellowstone, Yellowstone Ave
May 15 (F)	10 a.m. - 2 p.m.	Big Sky, Town Center
May 27 (W)	4 - 7 p.m.	Belgrade Goodwill
June 4 (Th)	9 - 11 a.m.	Harrison, Main St.
June 4 (Th)	1 - 4 p.m.	Three Forks Community Library
June 16 (T)	4 - 7 p.m.	Rose Park, Bozeman
June 25 (Th)	10 a.m. - 1 p.m.	Livingstone Food Resource Center



CLOSE TO HOME WHEN IT MATTERS MOST

When a child is sick, parents will do anything to stay by their side, even when that means expensive and lengthy trips out of state. But our families deserve better. The experienced specialists at Montana Children's have made it their mission to provide innovative and comprehensive pediatric care for a wide range of medical conditions right here in Montana, where these children belong.

Child and Adolescent Psychiatry

Maternal-Fetal Medicine

Neonatology

Pediatric Anesthesiology

Pediatric Cardiology

Pediatric Critical Care

Pediatric Dentistry

Pediatric Endocrinology
and Diabetes

Pediatric Gastroenterology

Pediatric Hospitalists

Pediatric Neurology

Pediatric Neurosurgery

Pediatric Oncology
and Hematology

Pediatric Ophthalmology

Pediatric Radiology

Pediatric Sleep Medicine

Pediatric Surgery



Body language
can tell you all
sorts of things.
Like someone is
having a **stroke**.



F

FACE DROOPING



S

SPEECH DIFFICULTY



A

ARM WEAKNESS



T

TIME TO CALL 911



American
Heart
Association

American
Stroke
Association

Together to End Stroke™

Know the sudden signs.
Spot a stroke F.A.S.T.



strokeassociation.org