
2021 - 2022

UNDERSERVED PATHWAY

ANNUAL REPORT



The UP Team:

Dr. Kim Kardonsky, MD
Director
kardok2@uw.edu

Dr. Mansi Shah, MD
Faculty Advisor
mansis2@uw.edu

Medical Student Education Section
Department of Family Medicine
University of Washington School of Medicine

Genya Shimkin, MPH
Associate Director
gshimkin@uw.edu

Alisse Cassell
Program Manager
upath@uw.edu

Health Sciences E-304
1959 NE Pacific Street
Seattle WA 98195

Introduction and Team Changes

The Underserved Pathway (UP) had a fantastic year seeing medical students learn, reflect, work hard, and inspire with their dedication to care of the underserved. We appreciate all of the support from mentors, faculty, and community members and we enjoyed getting to see some of you in person this year (finally)!

We hosted successful Zoom events for students, launched new web modules to add to our curriculum, saw many UP students win awards and publish important research, presented at two conferences, overhauled the UP website, and made other administrative process improvements.

The UP team had some changes this year. We welcomed Alisse Cassell as the Program Manager in December and Dr. Mansi Shah as our new Faculty Advisor in July. Dr. Lynn Oliver retired in June 2022, and she will be missed!

Overview: History and Aims

The Underserved Pathway started in 2006 at the University of Washington School of Medicine (UWSOM) and is based in the Department of Family Medicine. The UP is an elective longitudinal experience which includes preclinical and clinical experiences in underserved settings, health equity-related electives and web-based curriculum, healthcare-related service learning or advocacy, mentorship, and research related to underserved communities. The goals of the UP are to:

- Address physician shortages in underserved communities
- Support students interested in working with underserved populations
- Provide students with supplementary content not covered in the general medical school curriculum



We launched **two new web modules** and hosted **two Zoom panel discussions!**

74

74 students graduated from the Pathway in May, representing nearly 30% of the graduating class!



Students submitted **434** web module evaluations! The most popular modules were **Introduction to HIV, Trauma-Informed Care, and Ethics of Medical Volunteerism.**



In the 2022 residency match, **35%** of UP grads matched into Family Medicine! Overall, 64% of UP grads matched into primary care specialties.

ENROLLMENT

As of June 2022, 250 students were active with the Pathway, with participation from all six campuses and across all four years of medical school. Figure 1 shows this enrollment by Foundations campus. Although Seattle had the largest UP class size at 102 students, Montana had the highest percentage of its students enrolled in the Pathway (nearly one-third), as seen in Figure 2.

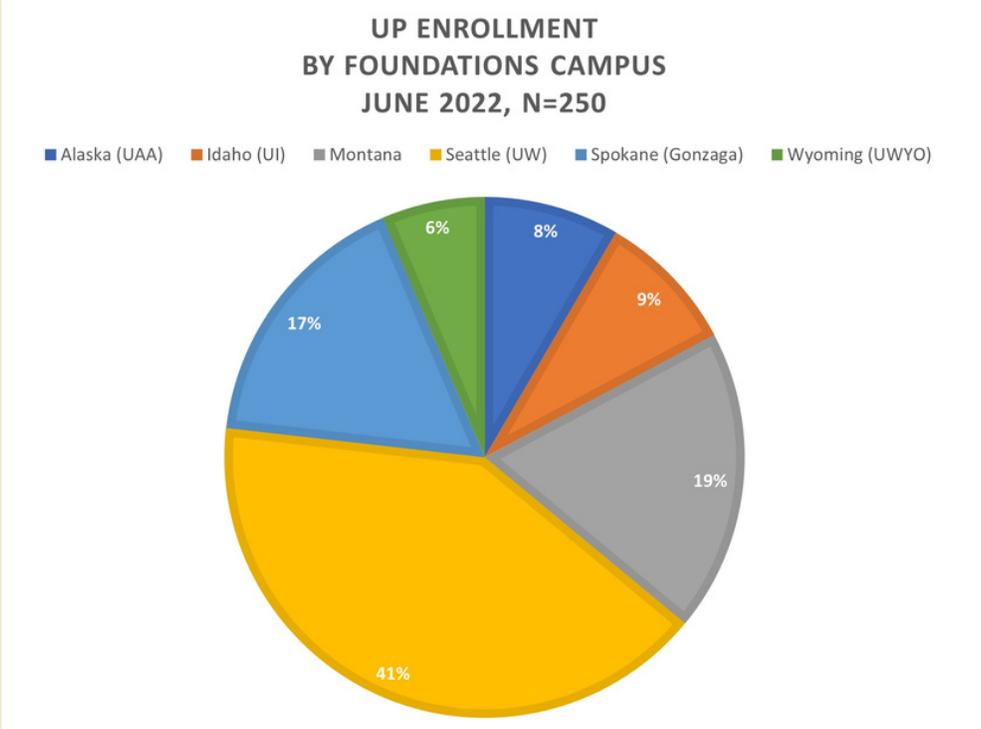


Figure 1

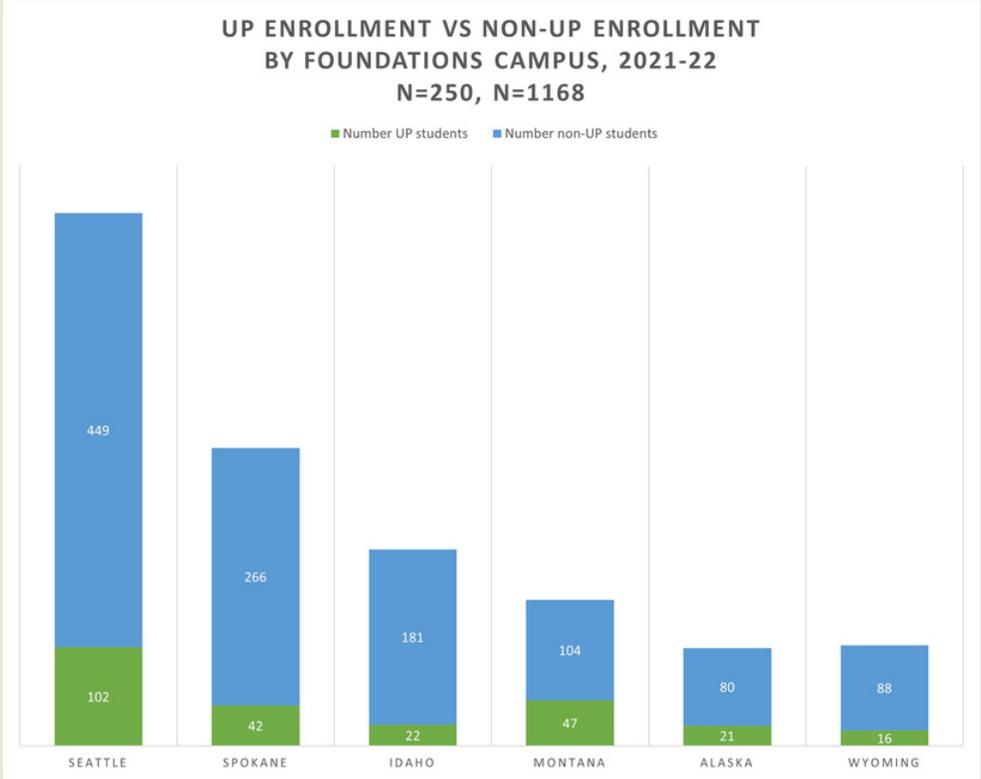


Figure 2

The UP is one of six pathways at UWSOM, alongside the Black Health Justice, Global Health, Indian Health, Latinx Health, and LGBTQI+ Health Pathways. 60% of UP scholars (149 students) participated in at least one additional pathway or special program, such as the Targeted Rural Underserved Track (TRUST) or the Community-focused Urban Scholars Program (CUSP).

2022 Graduation and Match Results

This year, **74** students graduated from the UP, representing **29%** of the UWSOM graduating class! Since the inception of the Pathway in 2006, 635 students have completed the program.

Students who participate in the Underserved Pathway match in primary care specialties (family medicine, internal medicine (general), pediatrics, and internal medicine/pediatrics) at higher rates than their non-UP peers. 64% of UP grads matched into primary care specialties compared to 46% of UWSOM graduates (see Figure 3 and Figure 4).

UP GRADUATES BY SPECIALTY MATCH
2022, N=74

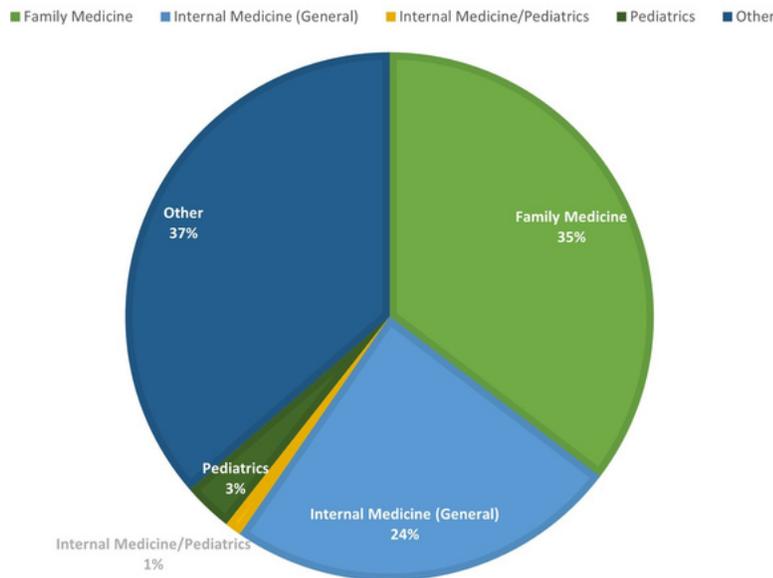


Figure 3

UWSOM GRADUATES BY SPECIALTY MATCH
2022, N=266

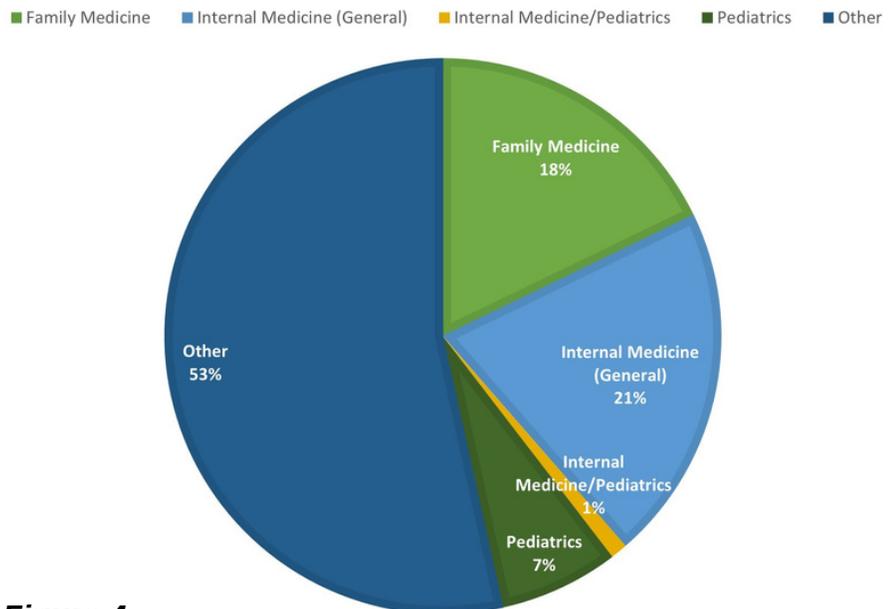


Figure 4

Over one-third (35%) of UP grads matched into FM compared with 18% of UWSOM graduates and 8.4% of MD graduates nationally.

Approximately 30% of our UP graduates will attend residency in the WWAMI region.

In-person All-Pathways Graduation Celebration

Thank you to the combined pathways (Global Health, Indian Health, Latinx Health and LGBTQI+ Health) graduation participants! The graduation event was on May 25, 2022. It was wonderful to gather in person and hear an inspirational talk by Dr. Patricia Egwuatu, a family medicine physician and prior president of the UW Network of Underrepresented Residents and Fellows, who has a passion for patient-centered care and promoting diversity in medicine.



Dr. Egwuatu giving the keynote talk



Graduates enjoying the cake!

MENTORSHIP

Thank you to all our mentors!

The UP had **129** active mentors during the 2021-2022 year. UP mentors across WWAMI represent a wide range of backgrounds, specialties, and patient populations. Mentors volunteer their time to share their experiences, expertise, and the joys plus challenges of underserved medicine with our scholars. Figure 5 shows UP mentors by state or region. Washington is divided into Eastern and Western Washington as they represent more rural and urban sites, respectively. As you can see, we have an abundance of mentors in Washington and especially need more mentors in Wyoming, Idaho, and Alaska!

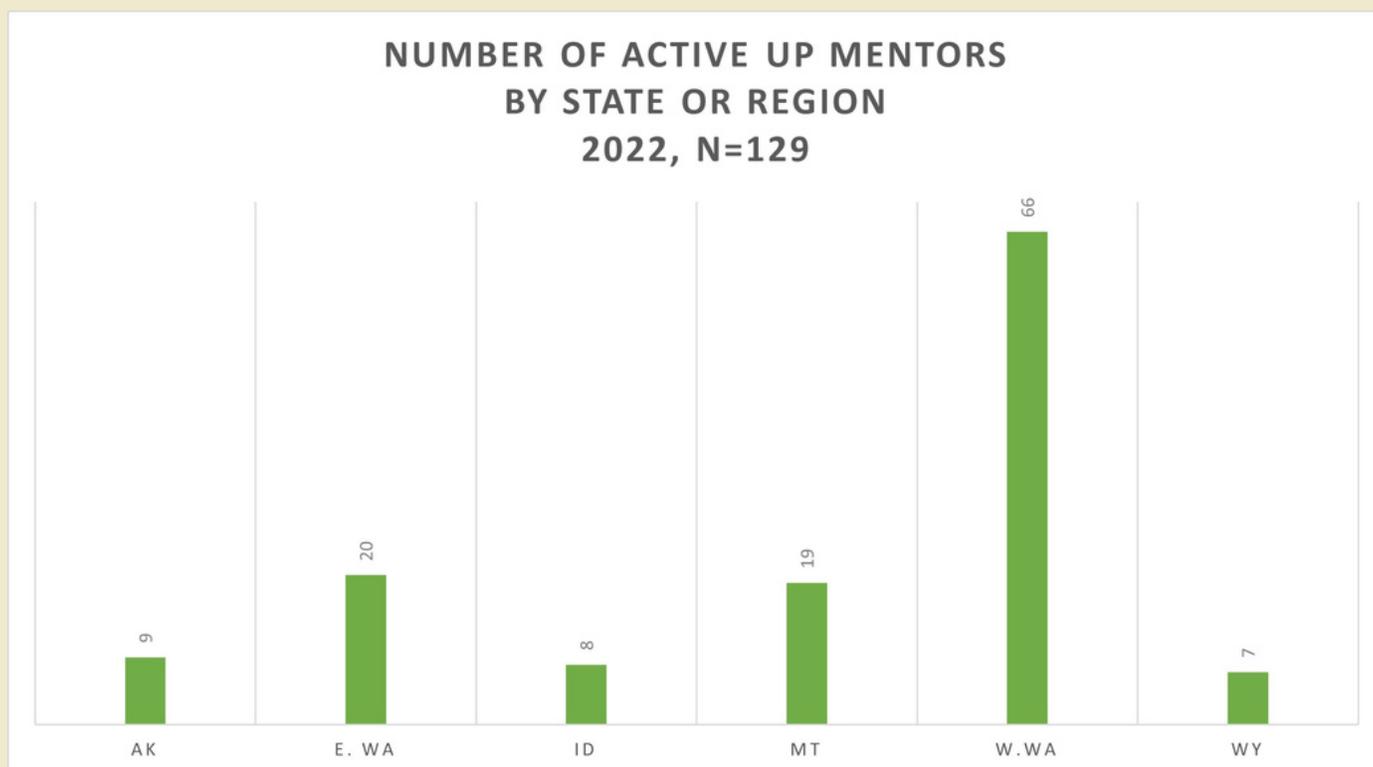


Figure 5

Mentors and mentees meet quarterly by phone, Zoom, email, or in-person. These relationships are important to help anchor UP scholars in their commitment to underserved care and keep them connected to the communities they hope to serve. UP mentors serve an important role for scholars: teachers, role models, confidantes, and friends. We know that our mentors have had an incredibly difficult last few years through the pandemic and we appreciate their dedication to the UP.

We are always looking for new mentors, especially in Wyoming, Idaho, and Alaska!

If you are a healthcare professional who works with underserved patients and you are interested in being a mentor with the UP, please email upath@uw.edu. Mentors are never under any obligation to accept new mentees.

HIGHLIGHTED MENTORS

Dr. Genevieve Pagalilauan – Seattle, WA

Dr. Pagalilauan served as a College Mentor at UWSOM for years before taking a new role as Associate Program Director for Primary Care in the UW Internal Medicine Residency. As longtime faculty in the School of Medicine, she is also the physician lead for Service Learning, and is widely known as a passionate advocate for health equity and care of the underserved. In 2020, Dr. Pagalilauan was one of two clinicians who received a UW Medical Center Chief of Medicine Service Award.



Dr. Laura Goodell – Bozeman, MT

In addition to having several mentees, Laura Goodell is a parent, physician and teacher. She gave the UW medical school graduation speech in 2021 from her home sitting at a table she inherited from her grandmother. She was a WWAMI Rural Integrated Training Education (WRITE) scholar in Hailey, ID, chief resident at Montana Family Medicine Residency and has been a rural family medicine clinical preceptor for TRUST, WRITE and RUOP in Dillon, MT. She was awarded the Faculty Award of the Year for Montana WWAMI in 2016 and 2017 and in 2019, became an AOA Honor Medical Society member. Her growth mindset and enthusiasm for patient care and medical student education is awe-inspiring.



Dr. Julie Lyons – Hailey, ID

Dr. Lyons is a family medicine physician with OB skills at St. Luke's Clinic in Hailey, ID. In addition to teaching, she is committed to efforts around access and health equity particularly in the underserved populations in the community. She is also passionate about women's health and women's rights to access healthcare and serves on many community groups around these issues. She is a past recipient of the WRITE Teaching in Excellence Award and has served as a TRUST site director.



Dr. Serena Brewer, DO – Butte, MT

Dr. Serena Brewer has been a medical provider at Southwest Montana Community Health center and a TRUST preceptor for years. She specializes in family, adolescent and women's health. Her passion is teaching the next generation of medical providers and she can often be found visiting patients with her students. She received the University of Washington School of Medicine's 2018 WRITE Excellence in Teaching Award for Montana. Outside of medicine, Dr. Brewer enjoys spending time at her cabin, cooking, travelling, rebuilding old trucks, skiing and fly fishing.



WEB MODULES

The UP curriculum consists of our 29 online modules, which are open to the public and can be viewed on [our Canvas page here](#). Students are required to complete a minimum of 10 modules to graduate, and each module is designed to take approximately 60-90 minutes to complete. Module topics range from skills-based content (for example, health literacy), to overviews of specific populations (LGBTQ health, immigrant and refugee health, rural health), to health systems (Medicare, Medicaid), to modules that focus on specific medical conditions (substance use disorders).

Between July 1, 2021 and June 24, 2022, students completed and evaluated a total of **434** modules, representing approximately 500 hours of student engagement with these topics!

“Who Are the Underserved?” is the only required module for all UP students. In addition, all TRUST scholars complete the module “Understanding Population Health Needs: Working with Data” as part of their first summer experience.

Aside from these modules, the most frequently completed modules were:

1. Introduction to HIV (33 evaluations received)

2. Trauma-Informed Care (33)

3. Ethics of Medical Volunteerism (31)

Overall, Pathway students found the modules effective, encouraging, and influential. Figure 6 shows across all module evaluations, over 80% of students (**81%**; N=432) said that they were “Extremely likely” or “Very likely” to incorporate the module’s content into their future practice.

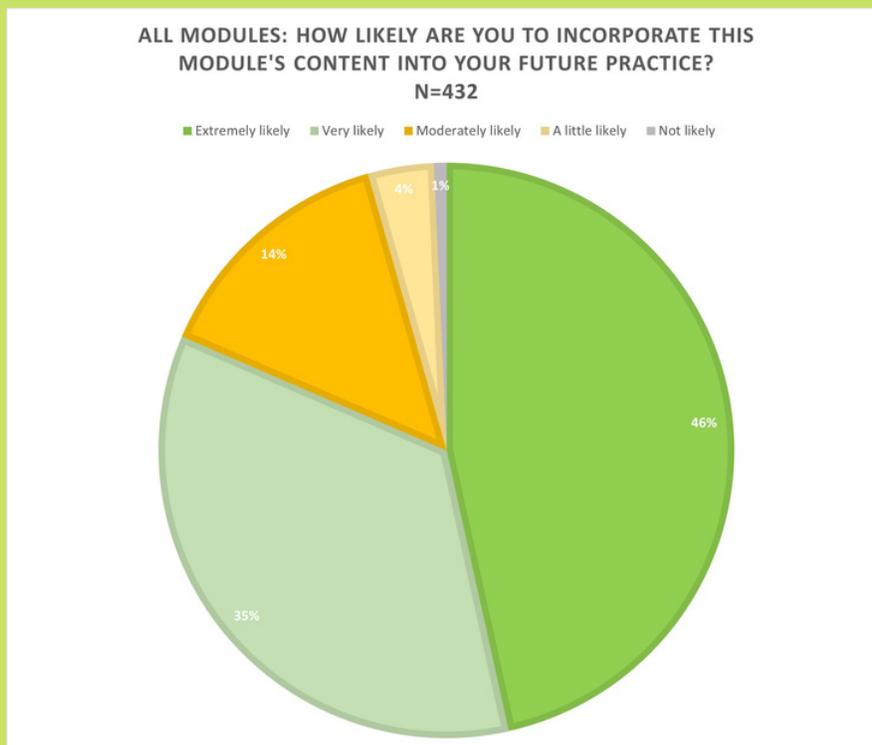


Figure 6

In addition, three in four evaluation respondents said that the module contributed “A great deal” or “A good deal” to their knowledge about the stated topic.

The Pathway’s Human Sex Trafficking module received especially outstanding evaluations in several measurements. Figure 7 shows the most influential modules among those that received 20 or more evaluations; in **92%** of Human Sex Trafficking module evaluations (N=26), students said they were “Extremely likely” or “Very likely” to incorporate the module’s content into their future practice.

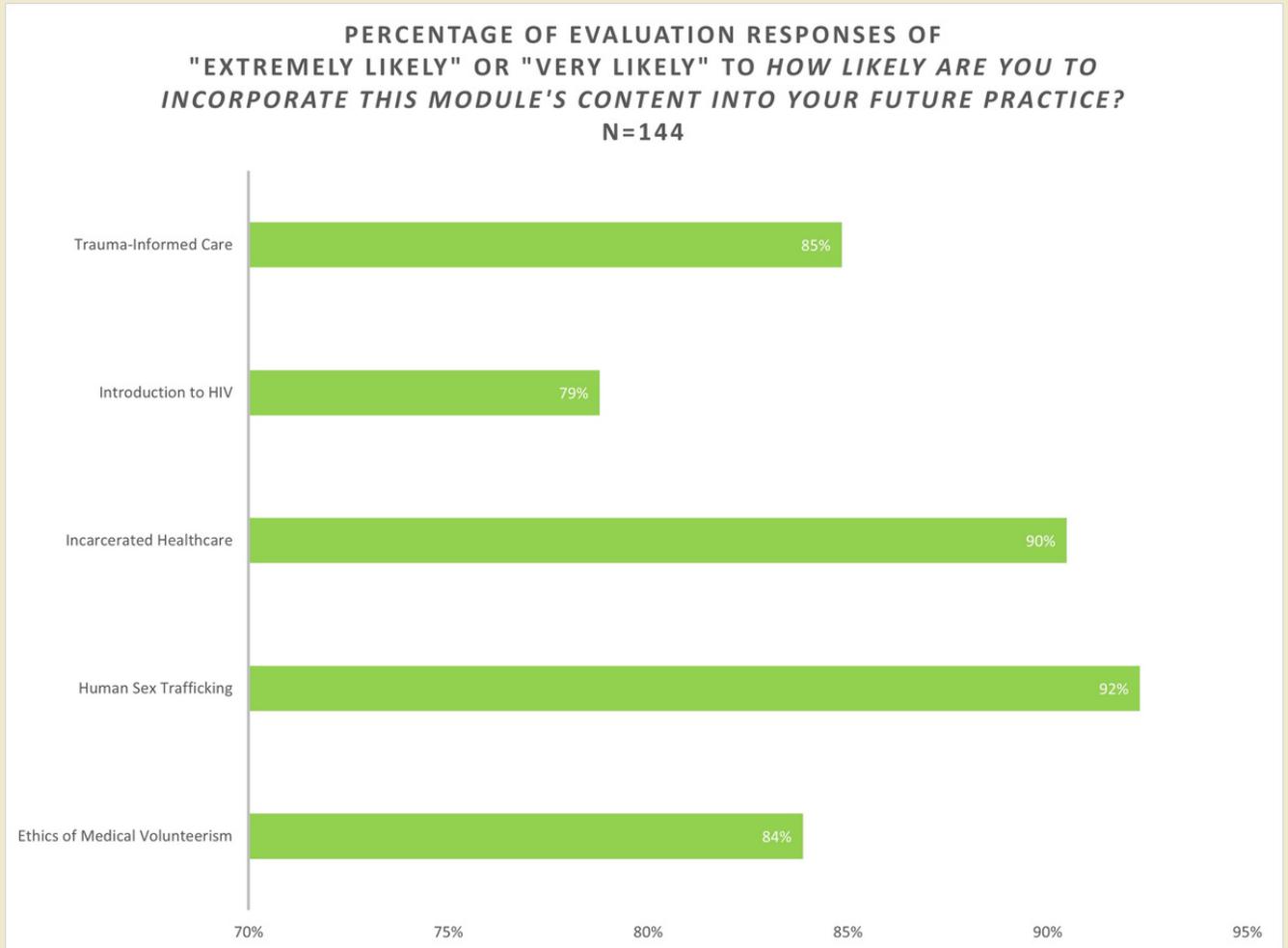


Figure 7

Finally, a whopping **96%** of evaluation respondents (25 of 26 total evaluations) said that the Human Sex Trafficking module was “Very encouraging” or “Somewhat encouraging” to their interest in working with underserved populations. This was the highest percentage across all modules with 20 or more evaluations.

Here are some highlights from the feedback that students gave regarding the modules (name of module in parentheses):



"Really enjoyed the advocacy portion of this module in a call to action to screen our high-risk patients for HIV."

(INTRODUCTION TO HIV)

"The exercise in using the readability tool (which was a tool I didn't know existed) helped inform my bias regarding health literacy. This is something I'll absolutely use for future rotations and practice."

(HEALTH LITERACY)

"It was an engaging assignment that required me to look up data and put it all together through reflection, somewhat similarly as if I was conducting research. I also liked being able to read about the different populations students researched and appreciated the different ways in which they conveyed their information. "

(UNDERSTANDING POPULATION HEALTH NEEDS)

We are currently honing in on the updates we'll make over the next year to our modules, and we appreciate the candid feedback students gave to help guide these changes, such as:

From Advocacy I: Physicians as Advocates module: *"It would be helpful to see a compiled list of the ways in which UW physicians serve as advocates so we could see the diverse opportunities available to us (ex. serving on community boards, volunteering for shelters, testifying in Olympia, etc.)"*

Introduction to HIV: *"I would like to see more conversation around the intersection of BIPOC and LGBTQ2+ identity and how stigmatization and structural and institutional racism affected spread in these communities, further stigmatization, poor health outcomes, and access to healthcare."*

Rural Health II: Service Structure and Access to Care in Rural Communities: *"I really appreciated the case study with a specific county and the needs and challenges it faces in WWAMI land. I would have appreciated a side-by-side comparison with another WWAMI rotation perhaps even in another state to see how resources, geography, and population health might differ."*

New Web Modules

In January, we launched our Native Health module, which was a great collaborative effort headed by Dr. Sara Phillips, MD 2022, MPH (Kanaka Maoli/Native Hawaiian) and Dr. Kim Kardonsky, Pathway Director and Jamestown S'Klallam tribal citizen. Many other colleagues contributed to the creation of the module, including:

- Joseph J. Nelson, MD, Confederated Tribes and Bands of the Yakama Nation
- Polly Olsen, Confederated Tribes and Bands of the Yakama Nation
- Lise Alexander, MD, Confederated Tribes of Grand Rhonde
- Millie Kennedy, JD, Tsimshian Nation
- Anna May, MD, Laguna Pueblo/Navajo

You can find the Native Health module here.

In April, we launched our Deaf Health module, another collaborative effort that began with E-17 Spokane TRUST student Luke Johnson, a Child of Deaf Adults whose first language was American Sign Language. After spending his childhood as a de-facto medical interpreter for his parents, Luke asked if the Pathway was interested in developing a module to help medical students prepare for working with Deaf patients. The resulting module introduces learners to Deaf health, including definitions, health disparities, and strategies for working with Deaf patients. **You can find the Deaf Health module here.**

Live Modules

Since the start of the pandemic, the UP team has pivoted to hosting events via Zoom, which we call live modules. Hosting these discussions online allows for more students and speakers to join in across WWAMI.

In December, the UP team hosted a panel discussion on COVID-19 vaccine misinformation, vaccine opposition, and clinician burnout which featured three guest speakers:

- Hannah Johanson, RN, MA is an Intensive Care Nurse and Medical Ethicist at UWMC-Northwest, where she works with clinicians to cope with feelings of burnout.
- Wendy Grace, MD, MA is a Family Physician and ethicist in rural Montana, where she uses her background in vaccine research to educate patients and community about COVID vaccination.
- Maj. Derrick Thiel, MD is a Family Physician at Madigan Army Medical Center and an MPH candidate who recently developed a curriculum for counseling vaccine-hesitant patients and families.

Though she was unable to attend the live event, we also read from the work of Dr. Kolina Koltai, a postdoctoral researcher at the UW Center for an Informed Public. Dr. Koltai studies how COVID-related misinformation spreads online and affects decision-making.



COVID-19 vaccine panel discussion (clockwise from top left: D. Thiel, H. Johanson, W. Grace, Moderator G. Shimkin)

We had 47 students attend the Zoom event to learn and ask questions. Results from the post-event feedback survey showed that students found the session effective: **88%** of respondents (N=17) said that the panel was “Very effective” or “Extremely effective” at conveying information. **76%** responded that the panel increased their confidence in working with vaccine-hesitant/vaccine-opposed patients by “A good deal” or “A great deal.” Finally, in response to the question, “What was the most valuable aspect of this session?” we received these two standout comments:



"I really appreciated the diversity of backgrounds, perspectives, and experiences the panelists brought to bear on the subject. I appreciated, too, the interdisciplinary makeup of the panel."

"Realizing that having personal relationships with patients may be the best tool to bridging different opinions on controversial topics like vaccines."

February: Healing the Warrior's Heart

In February, the UP team hosted a panel discussion titled "Healing the Warrior's Heart" to help launch the new Native Health module. We encouraged students to watch the PBS documentary *Healing the Warrior's Heart*, a documentary about incorporating Indigenous healing modalities into care for veterans, prior to the event. The goal of the panel was to start a conversation around Native health with a focus on Native providers' and Native veterans' perspectives. Discussion included personal stories, traditional practices, what patients may or may not disclose to a health care provider, and issues that may strongly impact Native patients.

The featured panelists for our *Healing the Warrior's Heart* panel discussion included:

- Nick Kardonsky (Jamestown S'Klallam), a graduate of the US Military Academy at West Point and a veteran.
- Trevor Warrior (Blackfoot-Cree-Nez Perce), also a veteran.
- Dr. Amy Chabitnoy (Unangan/Aleut/enrolled member of the Tangirnaq Native Village), residency site director at the Seattle Indian Health Board (part of the Swedish Cherry Family Medicine Residency) and a full-spectrum family physician.
- Dr. Lance Whitehair, MD, a Diné (Navajo) family medicine doctor who practices at the Northern Navajo Health Center in Shiprock, NM.
- Dr. Alisa Alexander (Vuntut Gwitchin), Senior Medical Officer for Tanana Chiefs Conference which is a Tribal Health Organization based out of Fairbanks, Alaska that serves tribal members in Fairbanks and 26 other villages in Interior Alaska. She is a family medicine physician who practices primary and urgent care.

Special thanks to Dr. Joseph Nelson (Confederated Tribes and Bands of the Yakama Nation) who also took part and was one of the Native Health module authors. He is currently the Family Medicine Chief Resident at UW.

We were thrilled that 60 students attended this event, and the event received glowing feedback. When asked about the most valuable aspects of the session, students responded in the post-event feedback survey (N=39):



***"I appreciated hearing from both patients and clinicians!
Valuable to have various perspectives."***

***"Specific insights about how non-native providers can
work to establish trust when working with native patients-
- specifically the bit about listening and allowing for
silence instead of jumping in."***

95% responded "Very effective" or "Extremely effective" to the question "How effective was the panel at conveying information?" and **77%** responded "Very likely" or "Extremely likely" when asked about the likelihood of the panel impacting their future work.

One suggestion for improvement that we are hoping to creatively integrate into future live modules was *"Maybe a breakout room or two to 'force' interaction. I am shy and sometimes afraid to ask questions in a larger forum."*

SERVICE & ADVOCACY

Congratulations to **Tilden Keller**, UP 2022 graduate and Family Medicine PGY-1 at Scripps Chula Vista Family Medicine Residency! At UW, Tilden was a leader in Family Medicine Interest Group and SHIFA (Student Health Initiative for Access), in addition to being lead author of “Gender Differences in Authorship of Family Medicine Publications, 2002-2017,” for which she won the AO Berg Research Award. In May of 2022, Tilden received BOTH the Nola Mae Moore Award for King County Community Service from the King County Academy of Family Physicians AND the United States Public Health Service (USPHS) Excellence in Public Health Award for medical students.



UP graduate Tilden Keller receives the USPHS Excellence in Public Health Award for medical students from Captain Arthur Wendel, MD, MPH at the May 25 All-Pathways graduation celebration.

We are also so proud of UP scholars **Sophia Deklotz, Georgia Sleeth, Ariana Gross, and Emma Linde**, along with their WWAMI colleagues, for their work in creating the Pacific Abortion Project (previously called the WWAMI Abortion Project). Sophia and classmate Bella Stokes (E-19) were awarded Best Visual Presentation at the Department Fair & Scholarship Forum for the Department of Family Medicine for their presentation on this work. **[You can read more about their project here.](#)**

This may be a record: FIVE of the 100 students receiving the Husky 100 award this year were in the Underserved Pathway! Congratulations, **Brian Cedeño, Kevin Glover, L'Oreal Kennedy, Melanie Langa, and Sara Phillips!**

Last but not least, a study completed by four Pathway students along with their colleagues and UP mentor Dr. Genevieve Pagalilauan was published in April in the *Annals of Internal Medicine*. **[The article, “Race/Ethnicity Trends Among U.S. Internal Medicine Residency Applicants and Matriculants: A Cross-Sectional Study” can be found here \(requires free account\).](#)** Congratulations, Joanna Liao, Thamanna Nishath, Sangeetha Thevuthasan, and Edwin Nieblas-Bedolla!

Conference Participation

Pathway Associate Director Genya Shimkin, MPH, and Program Manager Alisse Cassell attended the 2022 National Rural Health Association's Rural Medical Education Conference in Albuquerque, NM in May and gave a presentation titled *Using Online Curriculum and Virtual Panel Discussions to Increase Medical Student Interest in Advocacy*. It was a great feeling of in-person solidarity with other folks in medical education working to train, attract, and retain doctors in rural communities. Seeing our friends from WWAMI and making some new connections was a lot of fun!

Did you see our tweet about (longtime dedicated UP mentor) Dr. Jay Erickson's presentation?



We hope you'll follow us at @UWSOM_UP



In April, the Western Group on Educational Affairs (WGEA), part of the Association of American Medical Colleges (AAMC), hosted its regional meeting in Portland, OR. Pathway Director Dr. Kim Kardonsky, Associate Pathway Director Genya Shimkin, MPH, and Dr. Amanda Kost presented an abstract for the research the team has been doing over the last several years on Pathway graduate outcomes. The team was recognized by the 2022 WGEA Medical Education Scholarship, Research, & Evaluation Section for the Best Oral Presentation in the Category of Research for *Career Outcomes of Underserved Pathway Graduates Using Propensity Matched Controls: Who Goes on to Practice Primary Care at Rural and Underserved Sites?*

LOOKING FORWARD



The Coming Year for the UP

The UP team continues working on a research project looking at specialties and practice locations of our UP graduates.

We look forward to having more live modules and plan to have one focused on Deaf culture and best clinical practices in the fall.

Associate Pathway Director Genya Shimkin, MPH and Program Manager Alisse Cassell are excited to travel out into WWAMI for some of the III upcoming student poster sessions and to meet current and prospective UP students.

We know the UP community is full of expertise on underserved and health equity topics. Do you have a topic you are passionate about? Maybe you've already created content to teach or lead medical students? We welcome you to reach out to us and join us in creating new modules while we also update and improve our existing ones.

Finally, we are happy to share that we will be giving a presentation called "Leveraging Virtual Platforms to Increase Student Engagement in Family Medicine in Underserved Settings" at the 2023 Society of Teachers of Family Medicine (STFM) Conference on Medical Student Education in New Orleans, LA, in January 2023.

Final Thoughts

Thank You

Thank you to the students, mentors, staff, and faculty who have continued to work diligently to make the UP a meaningful experience!

As one 2022 UP graduate put it: "I would love if every student in UWSOM completed this pathway."