Perspective/Opinion

Medical Students as Vaccinators – A COVID-19 Success Story



by the MCW COVID-19 Vaccination Training Team: Marty Muntz, MD; Kate Stark, M2; Kerrie L. Quirk, MEd; Cindy Mand, MBA, LLSB, CQIA; Jenny Bultman, PMP; and Bruce Campbell, MD

Our MCW community has benefitted greatly from the MCW Vaccination Clinic located on the first floor of the Hub, run collaboratively by the Office of Research and the School of Pharmacy. Over 10,000 vaccines have been given to MCW faculty, staff, students, and to eligible Milwaukee-area community members. When it became clear that our medical students had both the desire and opportunity to volunteer in this clinic — and eventually in community partner clinics —members of our Academic Affairs and Kern Institute teams convened with student leaders to develop an innovative approach to skills development and embed trained medical students in the MCW-Hub vaccine clinic team.

Knowing the medical student base would be willing to and capable of providing this service, student leaders utilized all forms of engagement to recruit peers, including social media (general outreach and targeted tagging of individuals), email, texts, and phone calls. When last-minute training opportunities arose, students consistently stepped up. We regularly and specifically recognized student volunteers for their contributions; this was essential to the effectiveness of the recruitment and should not be overlooked in communities looking to replicate this approach.

Within three weeks of our initial conversations, the first group of medical students had completed all three phases of the required training. The logistical details — from developing training materials, securing preceptors to assist with classroom and clinic observation, to student recruitment —required an all-hands-on-deck approach from our collaborative team. Without this coordinated across multiple departments and work units and MCW leadership, we would never have been successful.

Phases 1 and 2: Online modules and hands-on experiences

Student volunteers started training with an online module, learning COVID-19 vaccine-specific information and potential side effects, intramuscular injection technique, and key vaccination-related communication concepts. Once the students had successfully completed phase 1 of the training, we offered hands-on time, preparing them to perform their first injections. We confirmed that students have had a variety of medical backgrounds; for example, some had extensive prior experience with injections, having worked as paramedics or hospital caregivers, while others had never previously handled a syringe.

This phase 2 training sessions included a review of the screening documents patients complete and then the opportunity to learn and practice sterile technique, drawing up saline into a syringe and then injecting it into an orange. They discussed management of sharps and the finer points of vaccine administration along the way.

Thanks to the generosity of several trained individuals who volunteered to evaluate and sign-off on the students' injection skills – we ran seventeen training sessions for between five and twenty-five students in February and March 2021. Completion of the hands-on session allowed students to then sign up to observe the COVID-19 vaccine clinic (phase 3).

Phase 3: An opportunity to work with a preceptor and provide vaccinations

After successful completion of phases 1 and 2, students were eligible to sign up for two-hour shifts in the MCW COVID-19 clinic. Two students were assigned to one MCW faculty member preceptor. Students observed the process to learn how patients were screened, educated, and prepared for vaccination. They talked to the pharmacy

staff that was preparing syringes. They learned about the recordkeeping that enters each dose and vaccinated person into the state of Wisconsin database. Then, after observing the routine, they provided vaccinations to patients under the direct supervision of the preceptor.

Of the 259 medical students who responded to the initial call for volunteers, 191 completed at least the first phase of the training program. The second, in-person phase was completed by 178 volunteers. As of March 16, 2021, 119 medical students have completed all three phases of training and are now eligible to volunteer in community clinics. We continue to work with MCW-Hub clinic leadership to ensure that each student who wishes to participate in vaccination efforts can complete their phase 3 training.

One student's first-person experience in the vaccination clinic

In stark contrast to the patient to my right who grinned from ear to ear, the patient in front of me shuffled with unease. "How are you feeling?" I remarked.

"Eh," she replied, "I just want to get it over with…I don't know about this."

"We are both fully vaccinated," my preceptor chimed in.

"Oh yeah?" she said curiously.

Eyes locked to her, "it is a very safe vaccine," I replied. "The data is excellent, and it offers great protection."

With a smile, she rolled her sleeves back and leaned in: "I appreciate you saying that, and I am very happy to hear that. Let's do it."

With the stressors of medicine, and the urgency of wanting to turn the pandemic around, it is easy to neglect the humanity of medicine. Every patient you encounter is more than just a patient or their ailment. They are a mother, a father, a grandparent… all with their valid fears and vulnerabilities. What an experience of a lifetime to

experience and witness my colleagues in this moment of history immediately see the power of humanism at play.

What comes next

As the vaccine supply increases, the need for vaccinators across our community is increasing. MCW is in a unique position to provide hundreds of volunteers (both licensed practitioners and medical and pharmacy students) to be community vaccinators to meet the demand.

Our MCW family is committed to serving the community, and MCW continues to be a leader in finding our way through this pandemic. The only way to build a healthier world is to build it together, and thus we are committed to keeping people healthy in Wisconsin.

If you have a community volunteer opportunity or would like to personally volunteer, check out the COVID-19 Volunteer Page on InfoScope.

Marty Muntz, MD, is a Professor of Medicine (General Internal Medicine) at MCW. He is Director of the Curriculum Pillar of the Robert D. and Patricia E. Kern Institute for the Transformation of Medical Education.

Kate Stark is a second-year medical student at MCW-Milwaukee.

Kerrie Quirk, MEd, is a Program Manager in MCW's Office of Educational Improvement.

Cindy Mand, MBA, LLSB, CQIA, is an Administrator in the Department of Academic Affairs at MCW.

Jenny Bultman, PMP, is Chief of Staff, Office of the President at MCW.

Bruce H. Campbell, MD, FACS, is a Professor in the Department of Otolaryngology and Communication Sciences and in the Institute for Health and Equity (Bioethics and Medical Humanities) at MCW. He is on the Faculty Pillar and is Editor-in-Chief of the Transformational Times *newsletter for the Robert D. and Patricia E. Kern Institute for the Transformation of Medical Education.*