

Kaiser Los Angeles Medical Center Family Medicine Residency**AROUND AND THROUGH THE MARGINS OF HEALTHCARE: VACCINATIONS SAVE LIVES**

Every Wednesday night, a white transport van pulls up to a street corner in West Hollywood and parks. Within minutes, it's been transformed into a makeshift health clinic for the homeless by an energetic team of UCLA medical students. For many in the area's homeless and transient population, the clinic has become their only point of care.

Alejandro was already a regular at the West Hollywood mobile clinic when Natalie Rose Mourra began her medical training at UCLA, including occasional stints at the mobile site. "You couldn't miss Alejandro – he was effusive, loud and hilarious – his energy pulled you in whether you wanted to engage with him or not," recalls Mourra. He wasn't exactly homeless at the time, but couldn't find regular work and didn't have health insurance. So although preventive services offered at the Mobile Clinic were quite limited, they were accessible, and they were free.

Beneath Alejandro's boisterous façade beats a kind heart. Mourra recounts a particularly late and exhausting night at the clinic, during finals time, when he pulled her aside and said, "Sweetheart, you look awful. I mean, let's be real – you need more help than I do!" They both cracked a smile. "He forced me to reflect on how many things I had to be grateful for in my life. For one thing, I was healthy." She didn't discover until later that Alejandro was not.

Flash forward seven years and the now Natalie Rose Mourra, MD is in her third year of residency in Family Medicine at Kaiser Los Angeles Medical Center. Still keenly interested in preventive care, she'd jumped when offered the chance to serve on Kaiser LA's Immunization Task Force. "I've always been passionate about vaccinations – they are among the most effective preventive care measures available to us."

The Task Force's focus on internal vaccination compliance and quality measures within the region's Kaiser locations prompted Dr. Mourra to more closely examine Kaiser LA's inpatient vaccination rates. When she did, the numbers were disappointing. "Our resident physicians were actually doing a pretty good job with ordering the vaccines, but that's only one component. We still had to consistently offer the vaccine for the patient to accept or decline, and for those that did accept, follow through with administering it." She was also able to identify areas within the hospital that had lower vaccination rates.

Thanks to an American Academy of Family Physicians (AAFP) Foundation 2014-15 Senior Immunization Grant Award, Dr. Mourra and her newly-formed project team at Kaiser LA would get the chance to implement quality improvement strategies aimed at increasing vaccination rates for patients 65 and older.

Project goals were established for Kaiser LA's inpatient Family Medicine and inpatient Internal Medicine services populations, and separately for the largely uninsured "at risk" population in the surrounding community.

Since resident physicians are often the ordering providers of vaccinations, their education and cooperation was considered essential to increasing administration rates. Brightly-colored laminated pocket cards were created and distributed to Family Medicine and Internal Medicine residents at the beginning of each new rotation reminding them to order vaccinations for all unimmunized and at-risk hospitalized elderly. Weekly reminders were made at morning report and noon conference sessions, and the immunization project team also gave lectures on the subject to General Surgeons and Neurosurgeon groups at Kaiser LA Medical Center encouraging them to order vaccines during hospitalization for surgeries. "We found that bringing low vaccination rates to the attention of the surgeons and addressing their concerns directly made a difference. Surgical patients are just as vulnerable to flu and pneumonia as any other patient and that vaccination does not increase the risk factors for complications."

Turning her attention to improving patient education, Dr. Mourra uncovered a video that had recently been produced by the Kaiser Health Education and Media Department and approved for use in the inpatient setting. "It was a fairly straightforward process to upload the video into the hospital's internal system and begin showing it to patients prior to discharge." Unfortunately, a Spanish language version of the video was not available; this was felt to be a shortcoming of the project. In addition, all first and third year residents had the opportunity to

spend a six-week community service elective at the mobile clinic sites educating patients who are overwhelmingly homeless or living in poverty, have multiple medical problems and often suffer from alcohol and drug abuse.

The immunization project's biggest disappointment, however, came with the price tag. Despite dedicating nearly the entire \$10,000 grant budget towards purchase of PPSV23 (pneumonia) vaccines for the underserved elderly, Dr. Mourra experienced a bad case of sticker-shock when she saw the cost. She'd started the process of acquiring the vaccine in June 2014 and "tried everything" to further reduce the already-discounted price of \$65/dose obtained through UCLA. "Based on information from the CDC website, I expected to pay \$7.00/dose," she said. "It was kind of unbelievable." Consequently, she was forced to drastically lower her homeless or underserved senior immunization goals for the PPSV23 vaccine from 500 to 150.

Partial salvation, however, arrived in the form of a new partnership with the LA Department of Public Health. The collaboration led to acquisition of 300 influenza vaccines free of charge which were distributed to the UCLA mobile clinic project sites in West Hollywood and Santa Monica (the mobile clinics had previously not offered flu vaccines). In addition to word of mouth, Dr. Mourra developed flyers that were distributed in the target areas to advertise availability of free flu vaccines to the homeless, at-risk and elderly.

In total, 72 individuals accepted and received the influenza vaccine by the end of March 2015 and an additional 86 seniors age 65 or older received the PPSV23 during the same time period. One of the people to benefit was Alejandro.

“I hadn’t seen Alejandro for three years, but ran into him again during my Community Medicine rotation in residency,” said Dr. Mourra. “He was thinner, but still carried the same energy (and still told some of the same jokes).” He also now had AIDS and was not doing very well. “He’d been trying to get set up with the AIDS Healthcare Foundation but didn’t really know how to get care, or how to travel for care.” So, he kept returning to the mobile clinic – the only place where he felt safe. “Operating out of the mobile clinic, I wasn’t sure how much we could actually help him; his health issues required more care and management than a mobile van could provide,” continued Dr. Mourra. “But this year, we had vaccines.”

She found it easy to convince Alejandro to get both the influenza and PPSV23 vaccines (although first she had to show him how small the needles were); the mobile clinic staff also provided bus tokens so he could establish care at the AIDS Healthcare Foundation. “He told me that during all of his prior hospitalizations, no one had mentioned how vaccines could help him, or offered them to him.” Even before he developed AIDS, he had never received a flu shot, and never knew that it was important.

The impact of Dr. Mourra and her project team’s work will continue through lasting changes in hospital practices and surgical culture that improve preventive care. She has already recruited two residents to carry on the important work of the Immunization Task Force. Dr. Mourra and her project colleague, Dr. Neil Chawla, will oversee the ongoing implementation of various strategies from their new posts as primary care providers and hospitalists at Kaiser LA Medical Center. And through the new partnership with the LA Department of Public Health, Alejandro and others like him will be able to get flu vaccines at the UCLA mobile clinic for years to come.

“I know that, in the long run, Alejandro is not going to do well,” Dr. Mourra admits. “I know he may miss some appointments, be unable to refill his medication, may not even take them consistently. But I also know that he is a little more protected against potentially life-threatening illnesses like influenza and pneumonia. And for this reason, I am proud of the work we’ve done and grateful to the AAFP Foundation and Anthem Foundation for the opportunity we’ve had to change this man’s life, undoubtedly for the better.”