

Title Vaccine Hesitancy across Minnesota: Current Family Physician Perspectives and Approaches

Presenter Kelly S. McKinnon, MS2 & Stephen Palmquist, MS2, second year students at the University of Minnesota Medical School, Duluth Campus.

Abstract

Objective or Hypothesis - Vaccines are among the most important and impactful tools in medicine. Despite the high efficacy of vaccination to increase public health, a counter-culture of vaccine hesitancy persists. “Vaccine hesitancy refers to delays in acceptance or refusal of vaccination despite availability of vaccination service. Vaccine hesitancy is complex and context specific, varying across time, place, and vaccines.” Family physicians are often the first line in vaccination. They are responsible for discussing and educating patients about vaccines. This provides an opportunity to effect patients individually, and the health of the public in general. This pilot survey sought to understand how family physicians in rural and urban Minnesota approach vaccine hesitant patients and how that approach influences vaccination acceptance.

Population - MAFP provided contact information for 202, equally rural and urban (by RUCA codes), Minnesota family practice physicians.

Methods - A 19-question survey was designed to gauge the attitudes, practices, and trends that family physicians are experiencing regarding vaccine hesitancy. The survey, research summary, informed consent, and return postage were sent to all prospective participants. Data from 72 actively practicing (minimum 0.2 FTE) and de-identified respondents was compiled and statistically analyzed using SPSS.

Main Results - An assertive approach or customized encouragement for reconsideration of vaccination, as opposed to discontinuation of care, a balanced approach, or less direct methods, was significantly more likely to be associated with vaccine hesitant patients becoming vaccinated. Physicians believed their vaccine hesitant patients were typically more affluent, educated, and Caucasian, in accordance with previous studies. Rural physicians reported increased vaccine hesitancy over the last 5 years, while their urban counterparts reported no change. Yet, both conveyed an equal frequency of vaccine hesitant patient encounters. The majority of physicians served vaccine hesitant patients monthly or less. Vaccine hesitancy had a neutral impact on most patient-physician relationships and overall job satisfaction.

Physicians described witnessing various vaccine preventable diseases; such as pertussis, measles, mumps, influenza, HPV, chicken pox, VZV, pneumococcal infections, HiB, HBV and tetanus. The cited concerns of the vaccine hesitant included autism, side effects, ineffectiveness, causing the disease itself, immunosuppression, numerous vaccinations, chemicals/preservatives, and learning disabilities. Interestingly, two physicians noted beliefs that local chiropractors were contributing to vaccine hesitancy, one physician called for stricter requirements like California’s, and another cited a decrease in vaccine hesitancy after relocating to an “urban underserved clinic.”

Conclusions - Whether in rural or urban Minnesota, family physicians reported similar rates of vaccine hesitancy among patients. Because this survey showed higher reported conversion rates for physicians with assertive or customized approaches to vaccine hesitant patients, further inquiry is warranted. Future surveys may include other specialties and more participants. Poling other healthcare professionals may reveal differing beliefs or disprove underlying stereotypes. This study was limited by utilizing reported vaccination rates. Additional research would be strengthened by examining actual vaccination rates. Expanding this inquiry would aid in monitoring the trend of vaccine hesitancy in Minnesota and across the nation.

IRB Approval X HIPAA Compliance X

Mentor(s) - Emily Onello, MD, James Boulger, PhD, & Sarah Beehler, PhD

Funding Sources - Health Resources & Services Administration Grant for Training in Primary Care Medicine: Predoctoral Training