

Impact of 2002 Varicella Vaccine Shortage

A shortage of varicella vaccine necessitated temporary changes in the ACIP's recommendations for varicella immunization, from age 12-18 months to age 18-24 months. The impact of the shortage is unknown: Will children who were due during the shortage be vaccinated at all? How long will it take to conduct "catch-up"? Will the shortage change physician beliefs about vaccination, for the better or for the worse?

Using 2 samples of clinicians, we plan to determine their current beliefs about varicella disease and vaccine, their knowledge of the change in ACIP recommendations, how they handled the shortage, and how they handled catch-up. One sample is a cohort from our previous study of pediatricians and family physicians in Pennsylvania and Minnesota about varicella vaccine and VFC, allowing a direct comparison of the beliefs of the same physicians before and after the varicella vaccine shortage. The other sample is from Olmsted County, Minnesota, and will be used for an in-depth investigation of the shortage in one locale.

The Rochester Epidemiology Project is a unique database with over 98% enrollment of the Olmsted County population and access to essentially all of their medical records. We plan to assess the impact of varicella vaccine shortage on the up-to-date varicella immunization rates at age 24 months in children eligible for the vaccine during the period of shortage and compare to up-to-date varicella immunization rates at age 24 months in children in earlier and later birth cohorts. We also plan to assess the impact of an immunization registry on immunization rates by comparing two practices within the same community, one practice with a functional immunization registry and one without such a registry.

Finally, in response to a CDC request, we will determine, using the physician survey, awareness of VFC, use of VFC, and reported likelihood of outreferral of uninsured and Medicaid-insured children.

This team has experience in conducting a longitudinal physician survey and in conducting true population-based studies as well as in publishing results. The varicella vaccine shortage allows a series of natural experiments, namely the examination of the impact of a vaccine shortages and physician response to changes in vaccine recommendations, that address key public health issues.