Immunocompromised adults are at increased risk for serious illness and death from pneumococcal disease (PD), but national vaccination coverage is at only 23.0%,1 far short of the Healthy People 2020 goal of 60%.2 Patients treated in the Rheumatology and Multiple Myeloma clinics at an academic medical center had even less protection at 21.6 to 23.4%.3

A multidisciplinary team embarked on a quality improvement (Qi) project to improve vaccination rates to protect vulnerable patients from PD. The team included physicians trained in quality improvement methodology and professionals in continuing education and health literacy.

Key activities included:
✓ Systems changes
✓ Patient education: plain language, theory-driven, English and Spanish
✓ Provider education: live and enduring

Immunization rates increased significantly in the 2 clinics where the intervention was tested. As efforts are spread across the academic health system, thousands more immunocompromised patients from these and additional clinics will be better positioned to protect themselves from severe pneumococcal infection.

Rates of vaccine protection nearly doubled in a 6-month period, going from 21.6% to 41% in the Rheumatology Clinic and from 23.4% to 46% in the Myeloma Clinic and continued to increase until disrupted by COVID-19.

Comprehensive efforts to protect patients through pneumococcal vaccines are warranted and can yield tremendous results, both for individual patients and for health systems who are increasingly focused on patient behaviors (like vaccine uptake) to improve health and experience while curbing costs. This project included systems changes, provider education, and patient education designed in accordance with health behavior theory and plain language best practices using expertise of Qi-trained clinicians, continuing education providers, and health literacy professionals.

Our team’s approach can be replicated by others who aim to advance uptake of pneumococcal vaccination. Approximately 10 million American adults are considered immunocompromised and would benefit from widespread launch of similar programming.4

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