Background Immune checkpoint inhibitors (ICIs) are increasingly used to treat cancer but can lead to immune-related adverse events (irAEs) such as hepatitis, pneumonitis, or thyroiditis. While ICIs and irAEs are typically managed in an outpatient setting by oncologists, 11% of patients receiving ICIs require hospital admission for irAEs.1 While rheumatologists’ irAE management knowledge and skills have been assessed in prior studies,2 clinicians within oncology and hospital medicine have been understudied despite their relevance to the care of patients with irAEs.

Methods In June and July 2022, we administered a web-based survey to University of Chicago (UChicago)-affiliated oncology providers: oncology fellows and attendings, oncology nurse practitioners (NPs) and physician assistants (PAs). We also surveyed UChicago hospitalists and medicine residents and community oncologists practicing in Chicago. We assessed current knowledge, prior experience, provider confidence, and current educational resource utilization regarding irAE diagnosis and management. We also surveyed how receptive our participants would be to future educational resources dedicated to irAE evaluation and therapy. Linear regression and logistic regression were utilized to analyze relationships between different variables.

Results In total, we had a 37% response rate (171/467): highest for UChicago-affiliated oncology providers (55-59%) (table 1). Oncology attendings and fellows scored the highest on knowledge-based questions (67-68%). Higher levels of ICI and irAE experience over the past year were associated with higher levels of knowledge (OR 1.5, p<0.002). Confidence levels were also significantly associated with higher knowledge and more ICI and irAE experience (p<0.001). Almost all participants surveyed (93%) were receptive to using an online irAE resource with delineated guidelines, patient handouts, and frequently asked questions regarding irAEs. Oncology fellows and NPs/PAs were also more interested in online CME-accredited irAE sessions dedicated to irAEs than medicine residents and hospitalists (83% versus 65%).

Conclusions The knowledge gaps across various groups of providers caring for patients with irAEs reflect a significant need to develop an effective didactic program aimed at enhancing knowledge and confidence for irAE evaluation and treatment. Our results support the development of an online curriculum with interactive online modules to provide case-based and simulated experiential didactics that will lead to increased knowledge and confidence in caring for patients with irAEs.

REFERENCES