



Assessing Educational Gains and Gaps for Advanced Practice Providers in Immuno-Oncology: 2017-2020

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BACKGROUND

As immuno-oncology (IO) continues to be more fully integrated into cancer practices across the country, oncology advanced practice providers (APPs) are taking on a growing role in IO patient care. This multidisciplinary group of providers, however, may be underrepresented in IO-specific education activities. As such, we examined the results of an online survey to assess how IO knowledge, behaviors, and challenges for oncology APPs have changed over time, and how this group can be engaged in future educational initiatives.

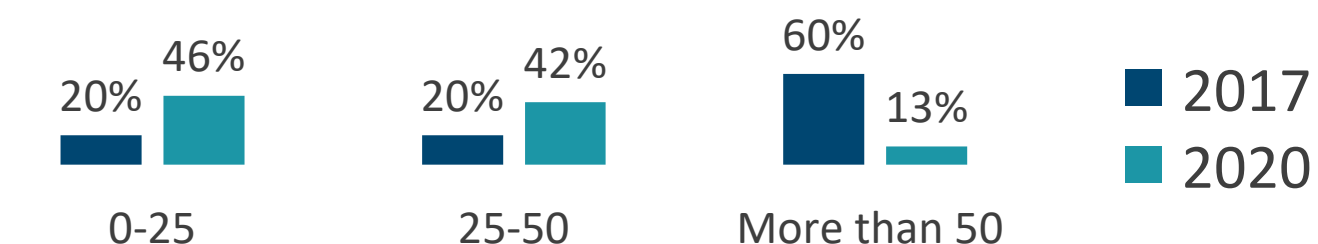
METHODS

In June-September 2020, the Association of Community Cancer Centers administered an online survey to evaluate real-world challenges in the delivery of IO therapies and assess the education and resource needs among its multidisciplinary membership. Survey questions addressed current knowledge and behaviors around the use of immunotherapies in cancer care as well as challenges in using these regimens. Several questions from a 2017 survey on this topic were included verbatim for comparative analysis. Results from 2020 survey respondents were analyzed and compared against the 2017 data to evaluate the changes that have occurred over time among oncology APPs (i.e., nurse practitioners, physician assistants, and pharmacists). APPs comprised 31.67% (n=19) of all 2020 survey respondents compared to 17.19% (n=11) of the 2017 survey respondents.

DEMOGRAPHICS

Comparison of demographic data among both sets of respondents showed similar cancer practice type representation (e.g., physician-owned practice). However, there were distinct differences in the number of patients treated with IO agents annually.

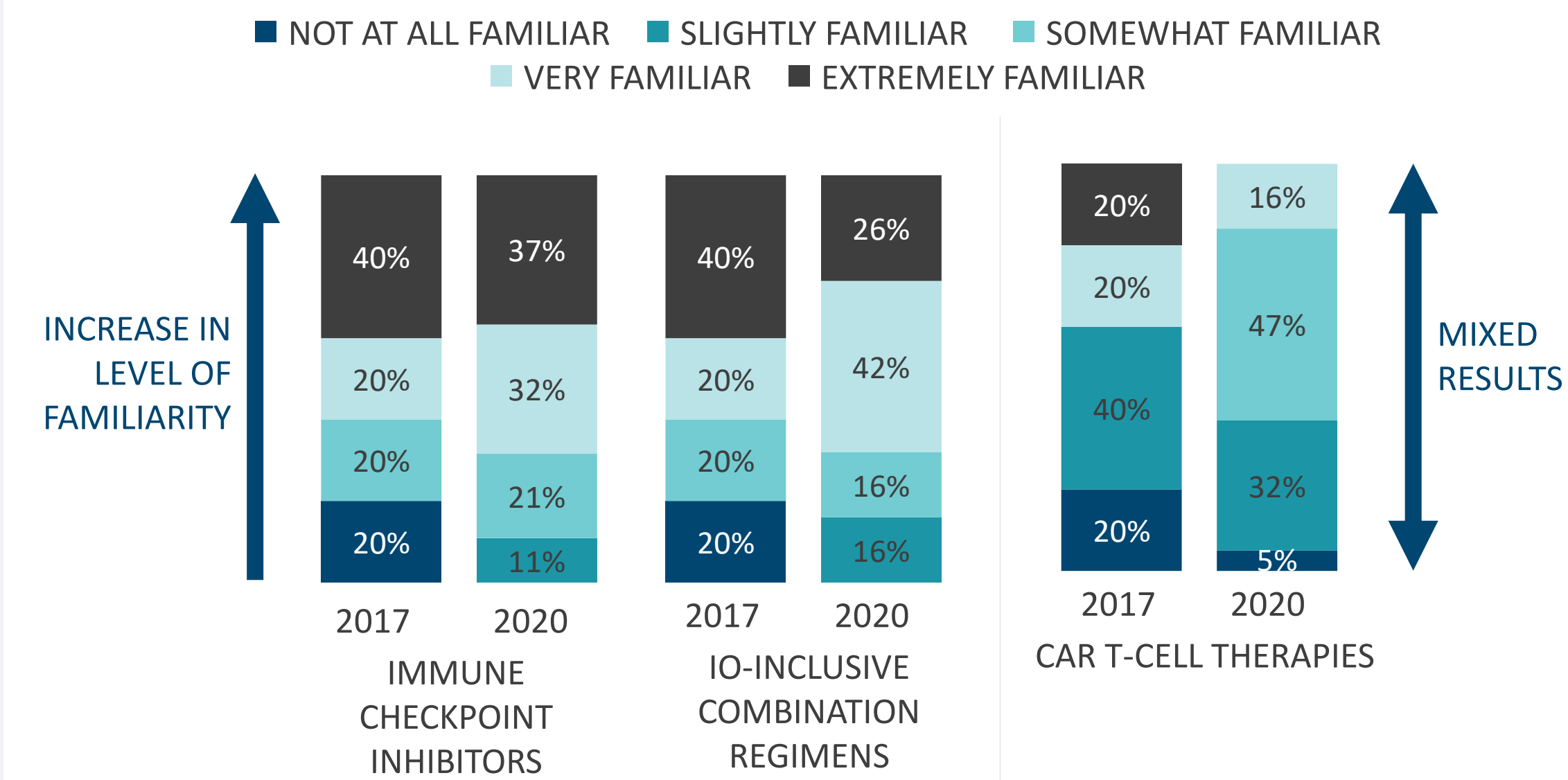
Patients Treated with IO Agents Per Year (Avg)



RESULTS

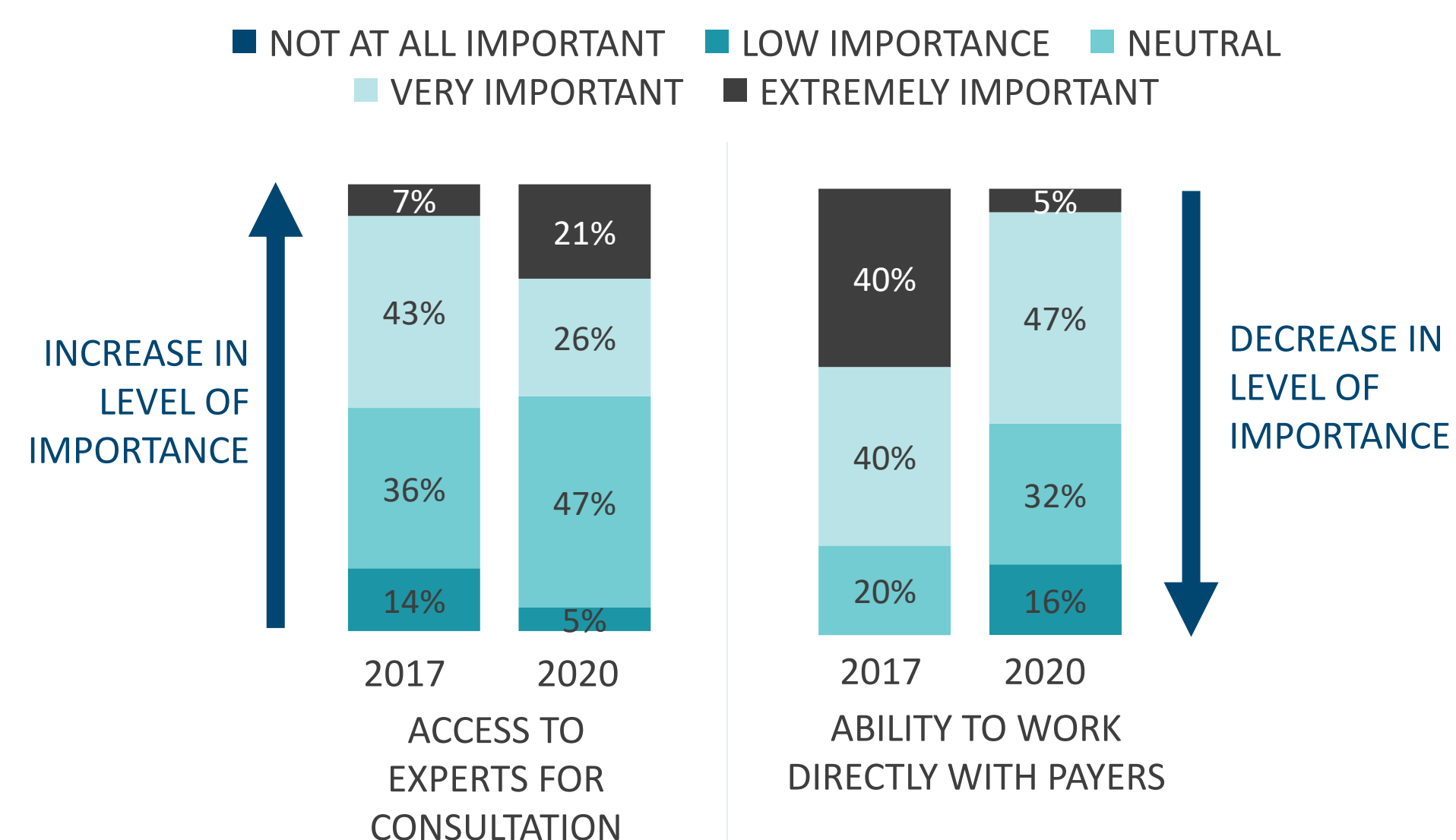
Over time, oncology APPs have become more familiar with immune checkpoint inhibitors as well as IO-inclusive combination treatment regimens. However, APPs have shown little to no increase in familiarity with chimeric antigen receptor (CAR) T-cell therapies since 2017.

Familiarity with Select IO Agents



IO-specific priorities have also changed for oncology APPs since 2017. Most notably, access to expert consultation and having the ability to work directly with payers to explain the unique aspects of IO.

IO-Specific Priorities for Cancer Programs

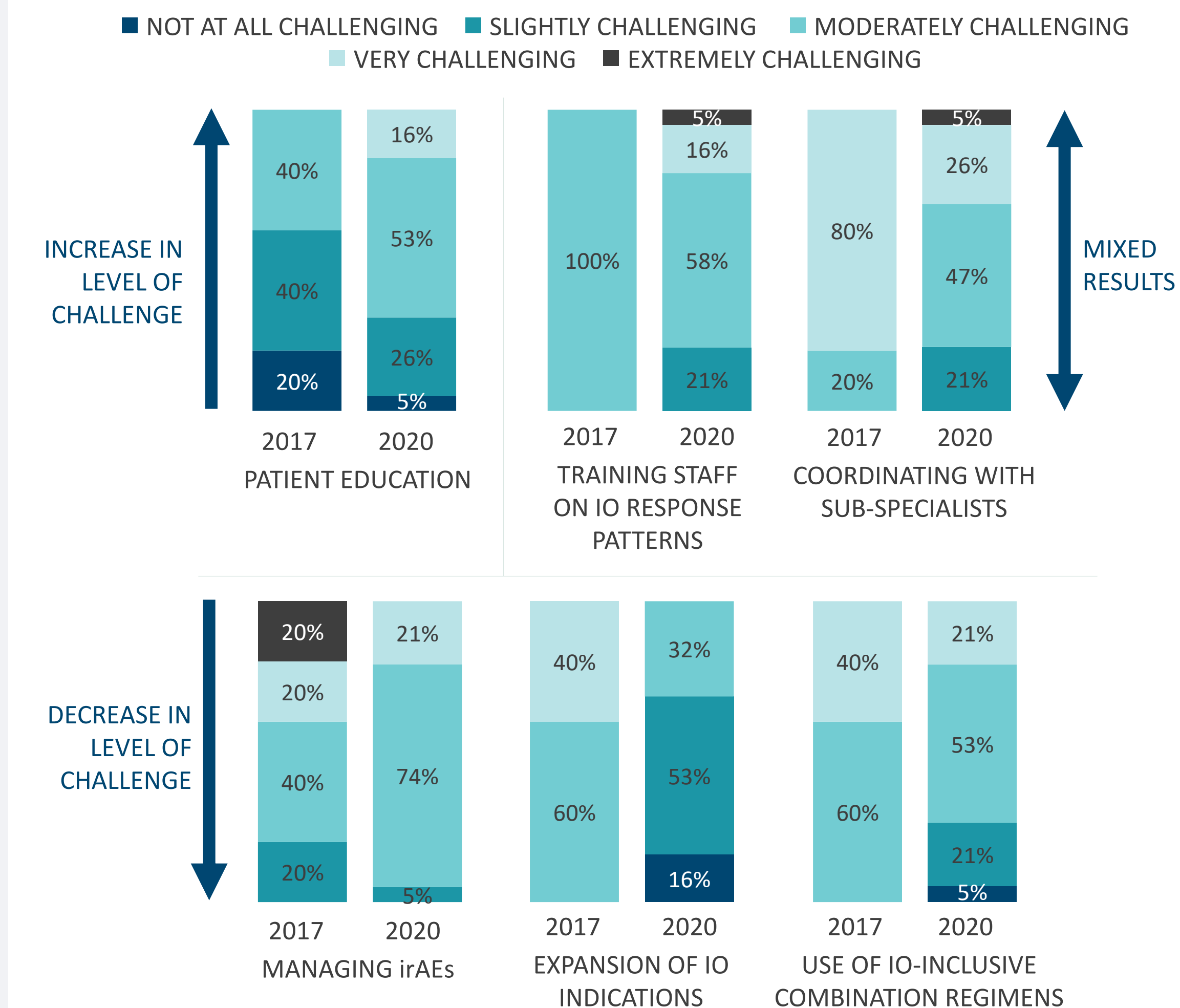


Additionally, there was a 27% increase among those who indicated that getting reimbursed for off-label use of IO agents was "very important" from 2017 to 2020.

RESULTS CONTINUED

Perceptions of IO-specific challenges have also changed for oncology APPs since 2017. The issue of patient education showed an increase in level of challenge; managing immune-related adverse events (irAEs), expansion of indications for IO agents, and using IO agents in combination with other drugs show decreases in level of challenge; and educating and training practice staff on response patterns of immunotherapies as well as coordinating with sub-specialists show mixed results.

IO-Specific Challenges for Cancer Programs



Other noteworthy shifts in perceived challenges include:

- There was a 29% increase among those who indicated that managing patient demand was "not at all challenging" from 2017 to 2020.
- There was a 21% increase among those who indicated that coverage and reimbursement issues were "slightly challenging" from 2017 to 2020.
- There was a 20% decrease among those who indicated that practice operation issues were "extremely challenging" from 2017 to 2020.

CONCLUSIONS

This analysis serves as an indicator of the changing IO knowledge base and areas of need for oncology APPs over the past three years. The data also suggests persistent knowledge gaps exist which have not been addressed by educational initiatives to-date.

Our analysis is limited by the sample sizes across both surveys. However, this also lends itself to our conclusions that future educational programming may need to be tailored to better reach this group of providers and their unique needs. What's more, our demographic data may indicate that IO is becoming more integrated in smaller practices and that these findings may be strong indicators for the needs of community cancer programs.

These findings should be taken into consideration in the development of future IO educational activities designed for oncology APPs. For example, additional education may be needed in the areas of CAR T-cell therapies, patient education, care coordination, and access to experts. Overall, additional evaluation and outcomes research across IO education for APPs will continue to provide insights into how to best provide impactful education to this group of providers.

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