

Continued Reduction in Serum IgE Testing Following Choosing Wisely NL Campaign

Choosing Wisely Recommendation

Do not perform screening panels of IgE tests for allergy without previous consideration of pertinent medical history.

Practice Points

1. Ordering more than three serum IgE tests at a time may be inappropriate, even in patients with allergic reactions. The tests should be matched with the allergens identified on history.
2. A Choosing Wisely NL campaign to reduce inappropriate IgE testing was developed in 2017 and rolled out in 2018. It was associated with a 50% reduction comparing 2015 to 1 Jan – 31 Aug 2019, but the proportion of bundles ordered containing more than three tests remained quite high.

Data

Data were obtained from the Meditech Laboratory system at Eastern Health. Results from 1 Sep 2019 – 31 Dec 2020 were compared to previous results from 1 Jan 2015 – 31 Aug 2020.

The COVID-19 pandemic was present from 16 Mar 2020.

Results

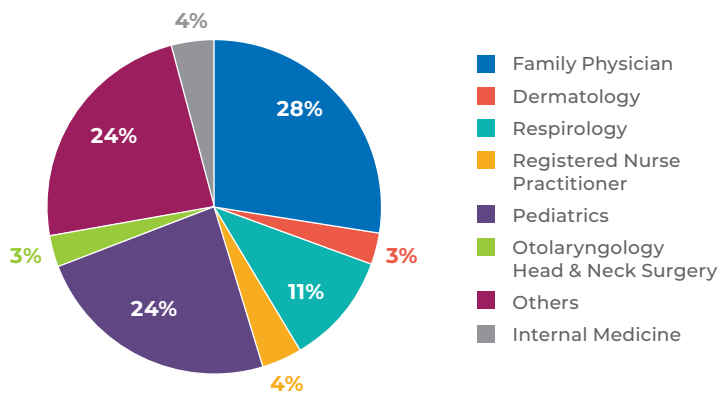


Figure 1. The Per Cent of Tests Ordered by Speciality (1 Sep 2019 – 31 Dec 2020)

- A diverse group of clinicians ordered IgE tests.
- Of 3,509 tests ordered, 28% were by Family Physicians (FPs) and 24% by Pediatricians.

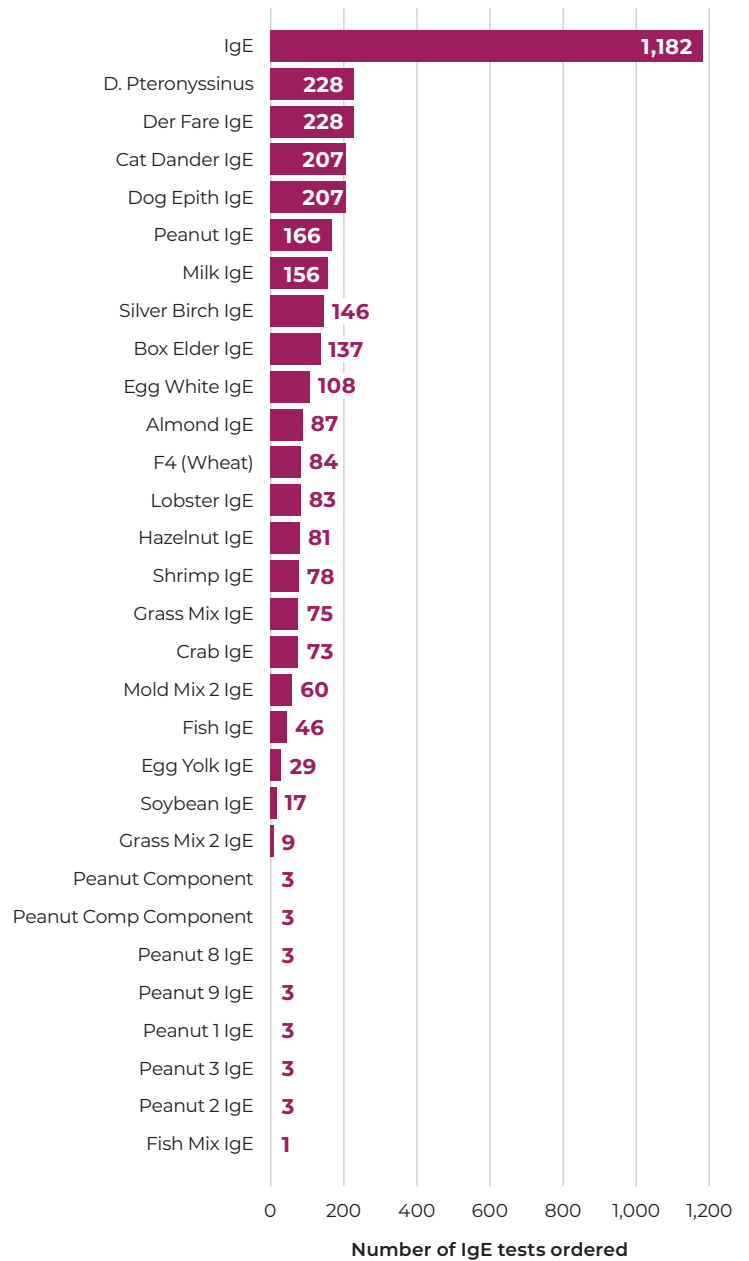


Figure 2. The Number Ordered for Each Individual IgE Test (1 Sep 2019 – 31 Dec 2020)

- A third of IgE tests were for serum IgE and the remaining two thirds were for more specific tests.

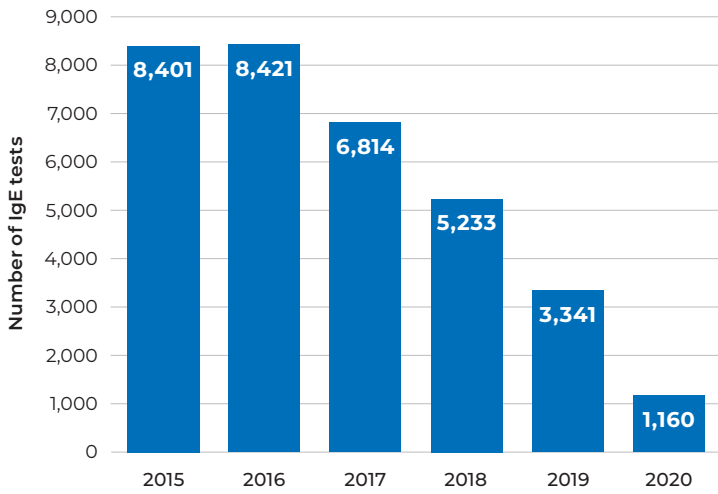


Figure 3. The Total Number of IgE Tests Ordered (1 Jan 2015 – 31 Dec 2020)

- Reduction in number of IgE tests in 2019 compared to 2015 was 60%, and in 2020 it was 86%.

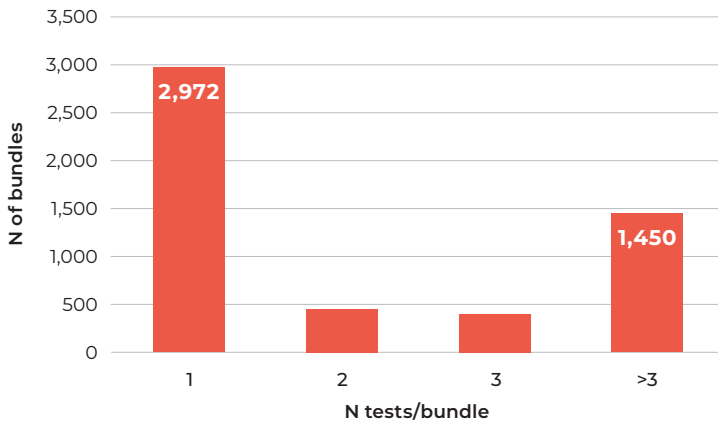


Figure 4A. The Number of Bundles by Number of Tests Per Bundle (1 Jan 2017 – 31 Aug 2019)

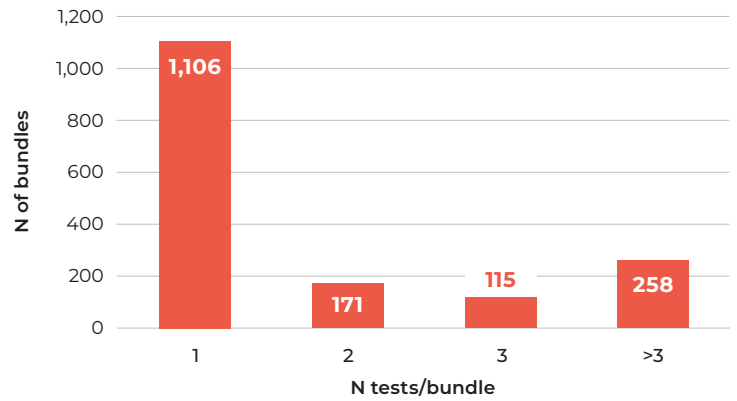


Figure 4B. The Number of Bundles by Number of Tests Per Bundle (1 Sep 2019 – 31 Dec 2020)

- Of 5,268 bundles of tests ordered in 2017–2019, 27.5% were for more than three tests, whereas in 2019–2020, 15.6% of 1,650 bundles were for more than three tests.
- The total number of bundles for more than three tests was reduced from 45 bundles per month in 2017–2019 to 16 per month (2019–2020), a reduction of 64%.

Conclusions

- Compared to the period prior to the Choosing Wisely NL campaign, continued substantial reduction in the number of IgE tests undertaken was observed in 2019 pre-COVID-19 and during 2020 (likely influenced by the 42 weeks of the pandemic).
- The number of bundles for more than three individual IgE tests was reduced by 64%, and the proportion of bundles that were for more than three tests was reduced to 15.6% of bundles.
- These reductions were associated with the Choosing Wisely NL campaign to reduce both the number of potentially inappropriate IgE tests and the inappropriate ordering of more than three tests in an IgE bundle.