

Reduction in Uric Acid Testing by Family Physicians in NL

Choosing Wisely Canada Recommendation

Don't request uric acid as part of the routine evaluation of cardiovascular risk, obesity, or diabetes.

Practice Points

- Uric acid should not be measured routinely but it's measurement may be considered in the following situations:
 - Investigation of acute joint pain; follow-up of hypouricemic treatment,
 - Follow-up of patients with kidney disease and kidney stone disease,
 - Preclampsia; tumor lysis syndrome.
- Nearly 90,000 uric acid tests were ordered by Family Physicians (FPs) in NL in 2015/16, a population rate of over 1 in 6 people.
- Neither audit, feedback nor academic detailing was undertaken. Data on uric acid testing was reported in Practice Points (delivered to all FPs in NL) AFTER Apr 2018.

Methods

- Testing for uric acid was obtained from the NL Centre for Health Information for 1 Apr 2015–30 Mar 2018 (3 years), and analysed by region and by FP. For Eastern Health (EH) and Western Health (WH) 2015/16 served as baseline, but data from 2016/17 was used as baseline in Central Health (CH).

Results

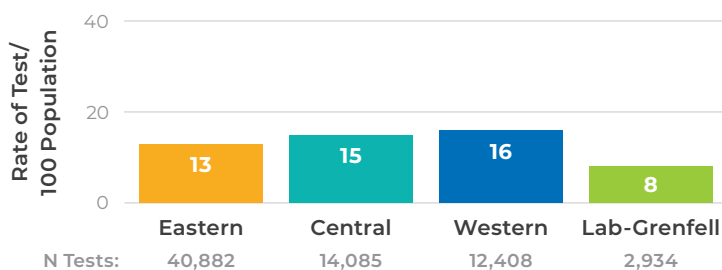


Fig. 1. Rate/100 Population of Uric Acid Testing by Region for 2017/18

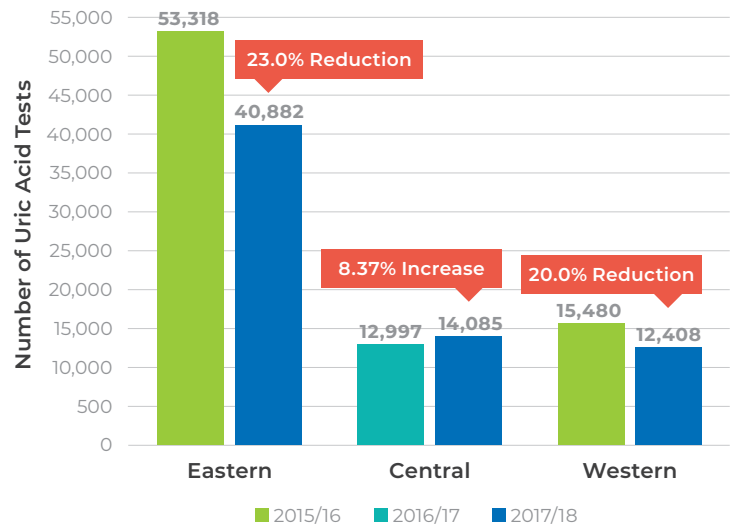


Fig. 2. Change in Uric Acid Testing by FPs Comparing Volume in 2017/18 to Baseline in Each Health Region

- Compared to baseline, uric acid testing decreased by 23% in EH and by 20% in WH, but increased by 8% in CH.

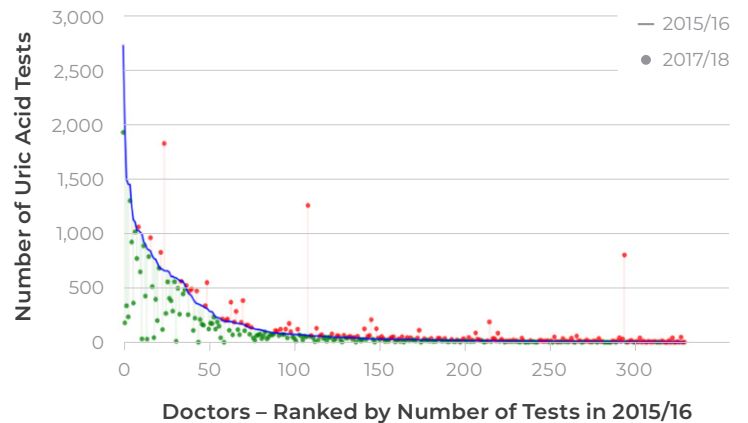


Fig. 3. Change in the Number of Uric Acid Tests at EH by Individual FPs Comparing 2017/18 to 2015/16

Note: On the x-axis doctors are ranked by volume of tests in 2015/16 (solid line) and each individual FP's 2017/18 volume is provided as a dot (linked by a vertical line to their 2015/16 data), with a reduction in testing revealed by the dot being below the line, and an increase by the dot being above the line.

- Most of the high users had a reduction in testing.
- Six FPs ordered >1,000 uric acid tests in 2017/18.

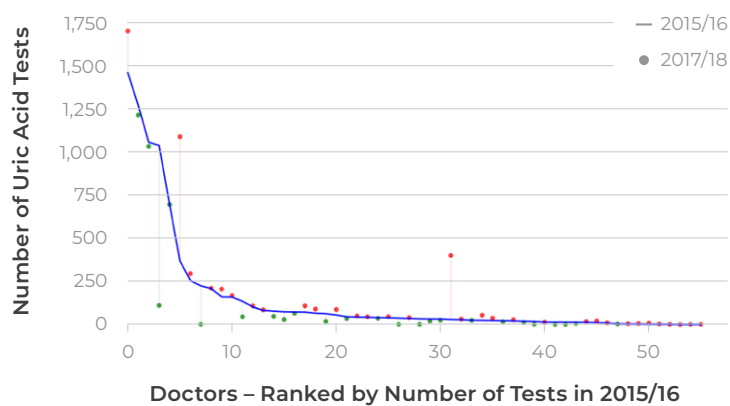


Fig. 4. Change in the Number of Uric Acid Tests at CH by Individual FPs Comparing 2017/18 to 2016/17

See note of Fig. 3 for interpretation.

- Four FPs in CH ordered >1,000 uric acid tests in 2017/18.

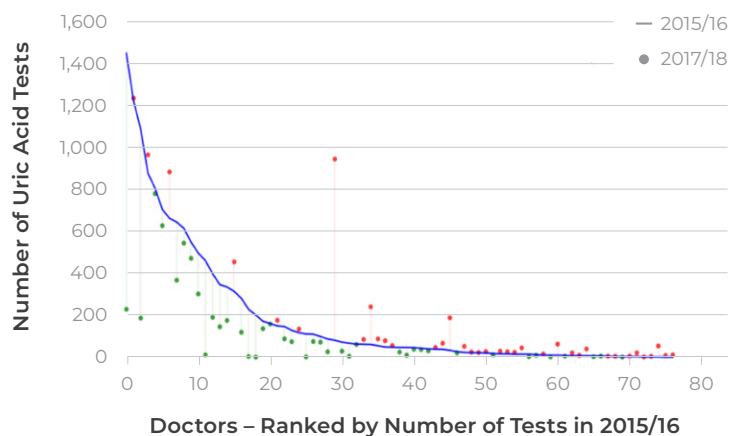


Fig. 5. Change in the Number of Uric Acid Tests at WH by Individual FPs Comparing 2017/18 to 2015/16

See note of Fig. 3 for interpretation.

- Two FPs ordered >1,000 uric acid tests in 2017/18.

Conclusions

1. The reduction in uric acid testing in EH and WH may have been the result of an increased awareness of potentially unnecessary testing induced by the Quality of Care NL campaign.
2. A small number of high users exist in each health region, but the ten FPs who ordered >1,000 tests each accounted for nearly a quarter of all tests.