

# Blood Urea Testing – Six Month Update

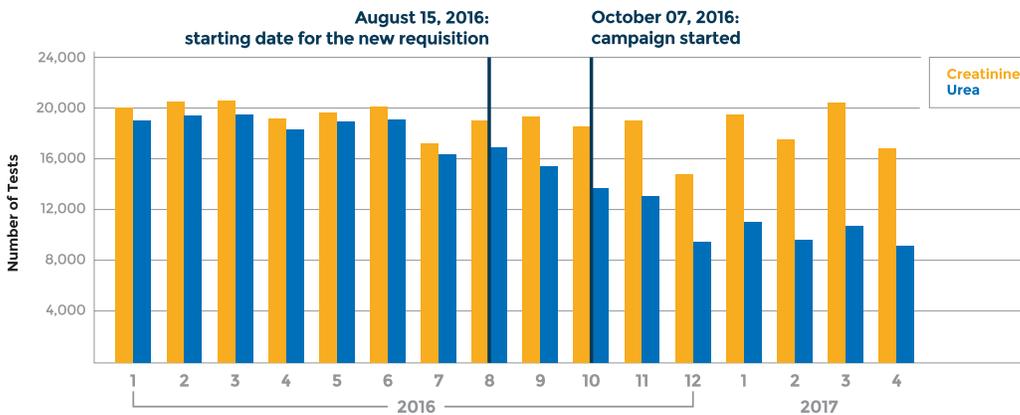
## Practice Points

1. Although blood urea provides a measure of kidney function, it is not necessary to evaluate stable kidney function.
2. Serum creatinine and estimated GFR (eGFR) is sufficient to evaluate stable kidney function; if you order a serum creatinine for this purpose, a blood urea test is not necessary.
3. In acute kidney injury, a blood urea test may be useful to assess the cause. Urea that is disproportionately high compared to the rise in creatinine may be seen in conditions where there is volume depletion, hypercatabolism or bleeding into the upper gastrointestinal tract.

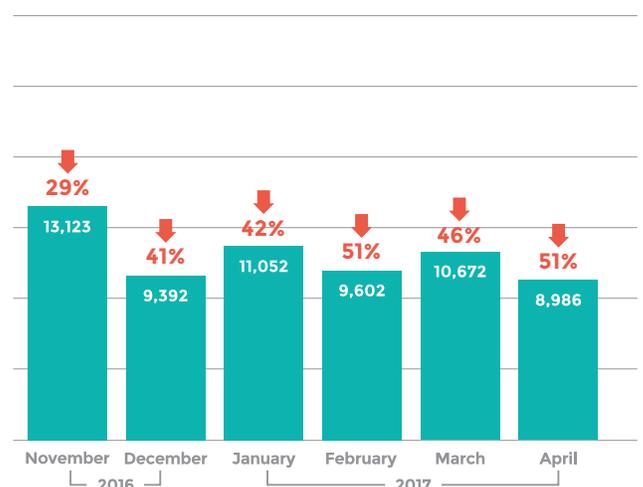
## Methods

1. Quality of Care NL, using a peer comparison program and academic detailing, attempted to uncouple the ordering of blood urea from serum creatinine.
2. During the Quality of Care NL Campaign, the ordering of blood urea was changed: physicians are now required to provide a written order for blood urea.
3. Personal ordering of blood urea compared to their peers was provided to family doctors.

Number of kidney function tests by month by family doctors, 1 January, 2016 to 30 April, 2017



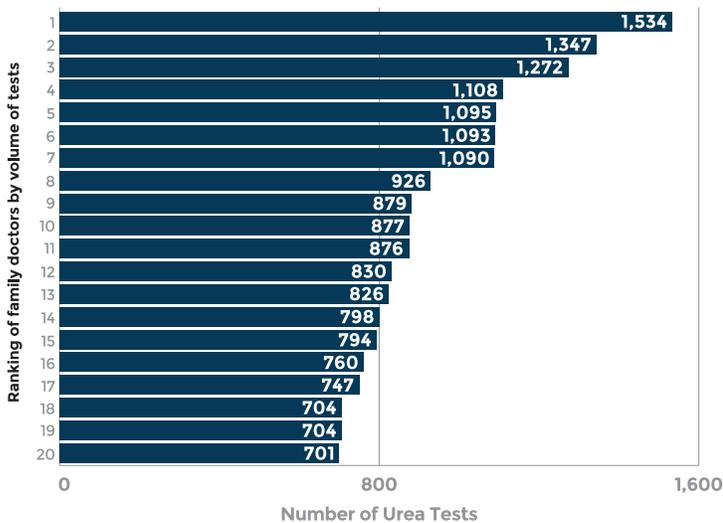
Blood urea tests ordered by family doctors



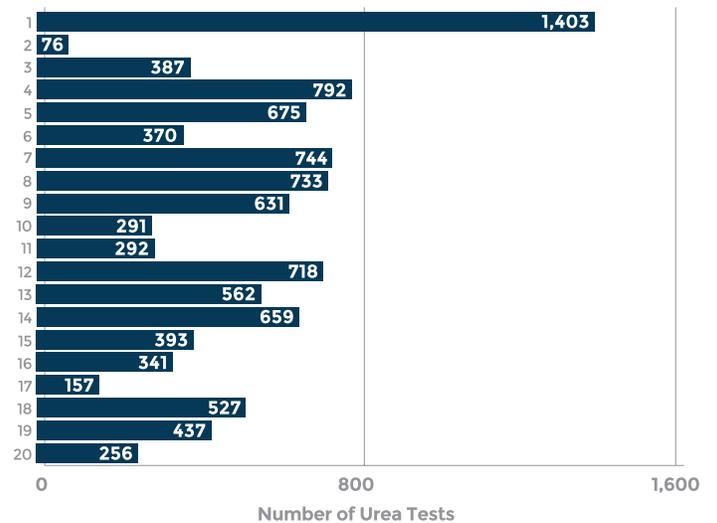
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Comparison of top 20 family doctors by volume of blood urea tests Nov 2015 – April 2016 and Nov 2016 – April 2017, 12 of whom substantially diminished volume of ordering

November 01, 2015 – April 30, 2016

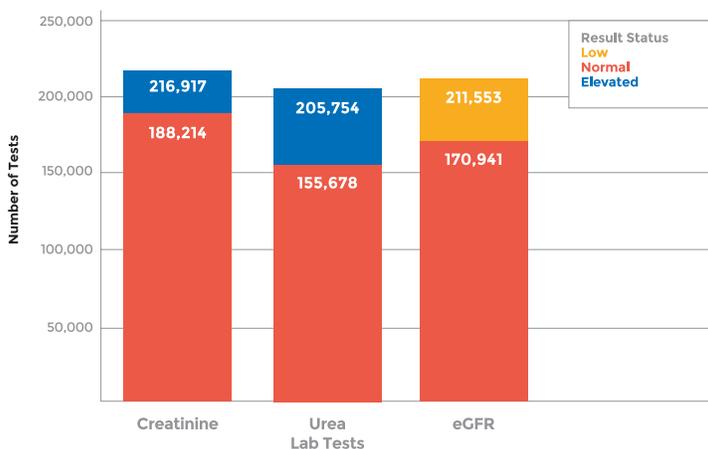


November 01, 2016 – April 30, 2017

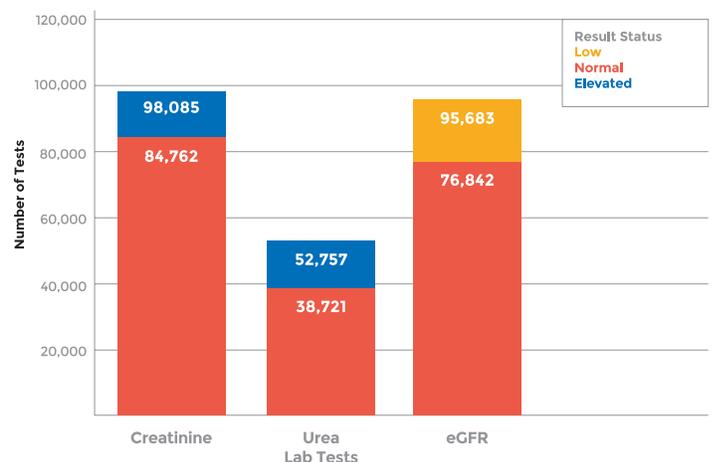


## Kidney function tests ordered by family doctors

April 01, 2015 – March 30, 2016 (One year)



November 01, 2016 – April 30, 2017 (6 months)



Similar number of serum creatinine and blood urea tests

46% fewer blood urea tests than serum creatinine

## Conclusions

- From Nov 1 2016 – Apr 30 2017 there was a significant drop in urea ordering. There were about 8000 fewer tests/month compared to the same period of time 2015-2016, a 46% drop compared to serum creatinine rates.