

Pre-Operative Testing Prior to Low Risk Surgery in NL

Choosing Wisely Canada Recommendation

Don't perform standard baseline laboratory studies, electrocardiogram or chest X-ray for asymptomatic pre-operative patients undergoing low risk, non-cardiac surgery.

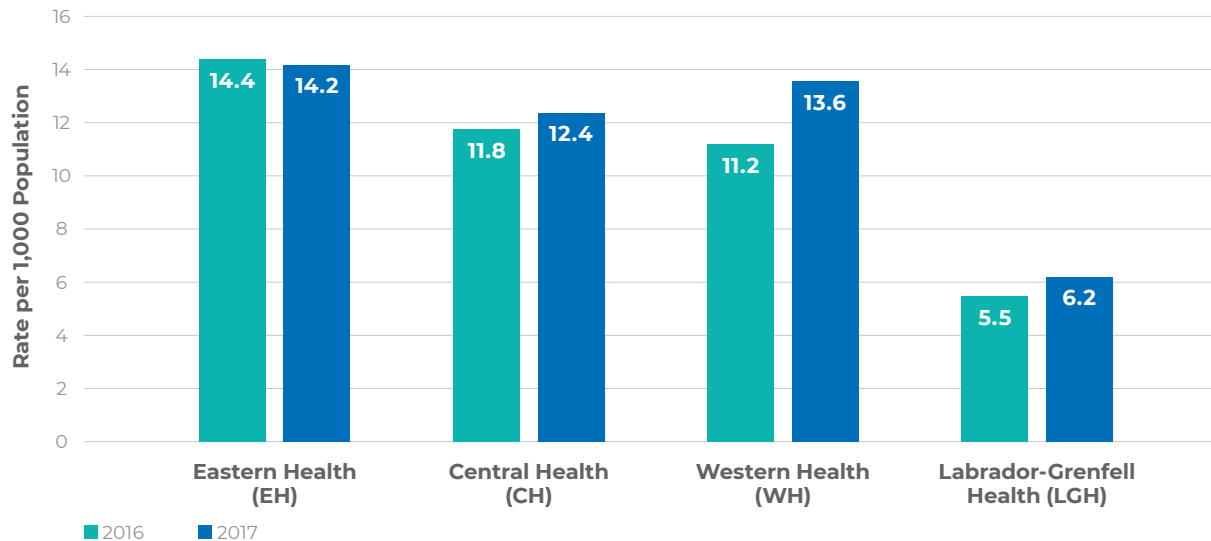
Methods

1. In 2016, Choosing Wisely NL identified pre-op testing for low risk surgeries as an area of low-value care and adopted the “Drop the Pre-op” campaign.
2. In January 2017, a medical directive was rolled out in two Eastern Health (EH) hospitals, St. Clare’s and the Health Sciences Centre.
3. The rate of chest X-rays and ECGs for healthy patients (ASA 1–2) undergoing low risk surgery reduced by more than half (23% to 10% and 69% to 31%, respectively) in 2017 compared to 2016. The rates of blood tests—Serum Creatinine, INR and Hemoglobin—saw smaller reductions (15%, 40% and 7%, respectively).
4. Data was collected for all four Regional Health Authorities from 1 Jan 2016 – 31 Mar 2018. ECG data was not available for the entire province. All patients undergoing low risk surgery were included in the province-wide data (not limited to ASA 1s and 2s).

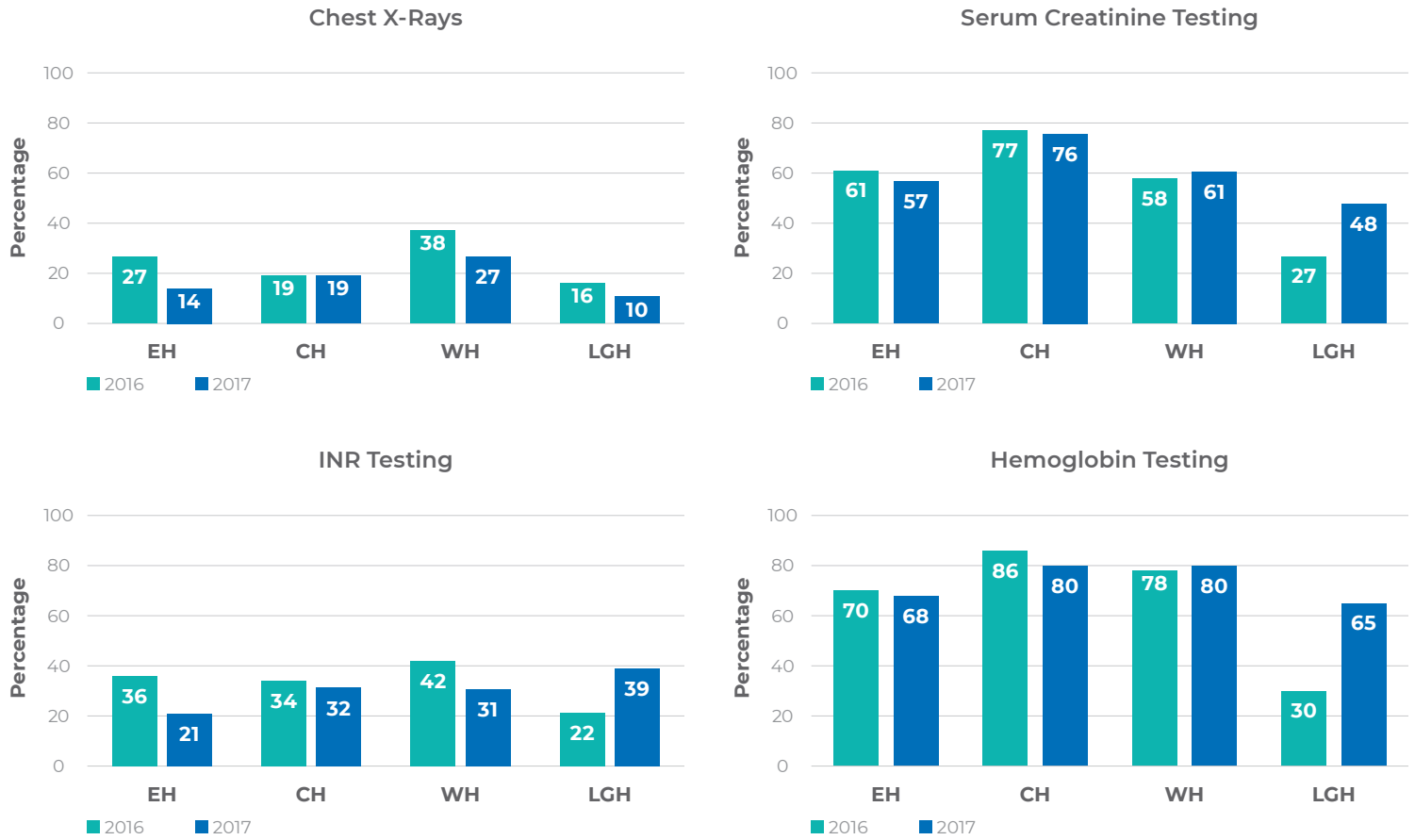
Regional Health Authority	2016	2017	2018 1 st Quarter	Total
Eastern Health	4,613 (68%)	4,538 (65%)	1,306 (70%)	10,455 (67%)
Central Health	1,116 (16%)	1,152 (17%)	258 (14%)	2,524 (16%)
Western Health	883 (13%)	1,062 (15%)	244 (13%)	2,187 (14%)
Labrador-Grenfell Health	205 (3%)	231 (3%)	72 (4%)	506 (3%)
Total	6,814	6,980	1,877	15,669

Results

Rate of Low Risk Procedures per 1,000 Population by Regional Health Authority (RHA)



Percentage of Procedures That Had at Least One Test Analyzed by RHA



Conclusions

1. Implementing a medical directive in two EH hospitals resulted in significant reductions in pre-operative testing for low risk surgical procedures, although rates of biochemical and hemoglobin testing continued to be high.
2. In 2017 in Central, Western and Labrador-Grenfell Health, the rate of biochemical and hemoglobin testing continued at a high rate for low risk surgery compared to 2016.
3. The implementation of these guidelines requires a multi-faceted approach and a barriers assessment study is currently underway. The aim of this interview-based study is to inform a province-wide intervention over the next 2–4 years.