Report 1: 4th quarter of 2016

Quality of Care NL

The right intervention for the right patient at the right time.

In this issue
- Blood Urea Testing
- Stroke Prevention
- Enhanced Recovery After Surgery (ERAS)

Choosing Wisely NL

Helping clinicians and patients engage in conversations about unnecessary tests, treatments and procedures.

In this issue
- Antibiotics Overuse

Quality of Care NL | Choosing Wisely NL | Choosing Wisely Canada

Questions? Email robert.wilson@med.mun.ca
Visit us online at **www.qualityofcarenl.ca**

Quality of Care NL | Choosing Wisely NL | Choosing Wisely Canada | Memorial University | Newfoundland and Labrador Medical Association | Memorial University Office of Professional Development, Faculty of Medicine | Newfoundland and Labrador SUPPORT

Quality of Care NL

Quality of Care NL is focused on the appropriate use of health care resources in our province, so that the right intervention is provided to the right patient at the right time.

Quality of Care NL is a Faculty of Medicine Program in partnership with the **Newfoundland Labrador Medical Association (NLMA)**. The Office of Professional Development in the Faculty of Medicine will provide Continuing Medical Education credits and we will provide you with access to online, accredited continuing professional development activities.

Priorities have been driven by feedback from NLMA, strategy days with RHAs and by public engagement.

Over the next number of months, you will receive communications from Quality of Care NL via the NLMA. All of the information being distributed to doctors has been de-identified. Our procedures allow you to compare your own utilization patterns to other doctors in a secure, private format. We have the benefit of access to provincial health care utilization data from various provincial programs, agencies and our **Regional Health Authorities**. Our presentations will focus on:

1. **Practice points concerning the intervention**
2. **Choosing Wisely Canada guidelines or best practices**
3. **Our current utilization of the intervention**
4. **Advice on how best to use the intervention**

Research indicates that physicians are very concerned about unsustainable spending and stewarding resources in health care. We've listened to physicians in this province who are looking for ways to solve these issues and through the creation of Choosing Wisely NL, we want to work with you. This program is focused on reducing the use of unnecessary interventions where the harms outweigh the benefits.

Choosing Wisely is a bottom-up clinician led approach to building awareness around testing.

It focuses on common clinical conditions for which testing or treatment has little supporting evidence & may cause risk or harm.

Choosing Wisely Canada has produced over 200 recommendations for reducing unnecessary testing and other interventions.

Projects are identified on whether they are NL specific projects undertaken by **Quality of Care NL** or **Choosing Wisely NL** projects in collaboration with **Choosing Wisely Canada**.

Our future projects include

Testing for peripheral vascular disease

Testing for peripheral vascular disease should be undertaken in patients with symptoms (rest pain, ulceration or gangrene) potentially responsive to revascularization. Utilization of PVD tests performed at St Clare's Hospital by indication, result and doctor for the past 8 years will be provided. Personal utilization will be anonymous identified only by the personal NLMA number.

Ordering of serum ferritin

Serum ferritin is an important test to perform in anemic patients but has little clinical utility in patients with normal hemoglobin levels. The utilization of ferritin testing by Hemoglobin level and by doctor will be provided for tests undertaken in Eastern Health.

Antibiotic utilization (phase 2)

Antibiotic use is high in Newfoundland and Labrador. The provincial drug program provides coverage for a proportion of the population. The utilization of antibiotics by region and by doctor (volume and rate per 1000 prescriptions) will be provided.

Colonoscopy use

Colonoscopy is recommended for family members of patients who have had colorectal cancer, but the age at which this should start and the frequency at which colonoscopy should be performed varies by the degree of family risk. A decision tree based on family history will be provided. For doctors in Eastern Health who perform colonoscopy the proportion adherent to best practice guidelines will be provided to them.

Imaging in low back pain

Imaging for low back pain has been identified as a priority project for both Choosing Wisely Canada and Choosing Wisely NL. Less than 5% of patients with low back pain have a serious underlying spinal condition. Over-use of radiographic testing may cause harm to patients due to unnecessary radiation exposure, patient stress, incidental findings, poor recovery, longer wait times, etc. Using an evidence-based, multi-faceted approach, we propose to design and implement a new pathway of low back pain care specifically tailored to the health context of Newfoundland and Labrador.

Choosing Wisely NL | Choosing Wisely Canada

November 2016

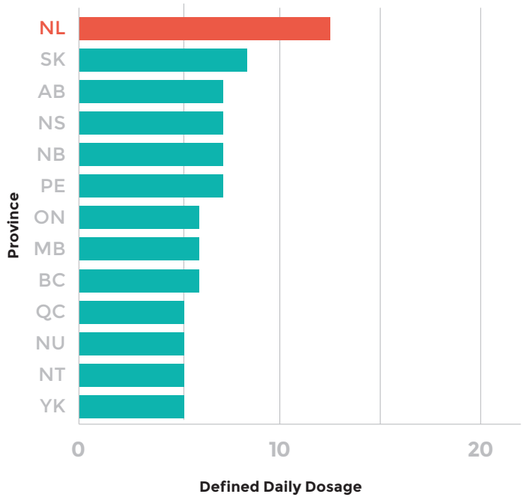
Antibiotic overuse

THE PROVINCIAL PICTURE

Overuse in NL

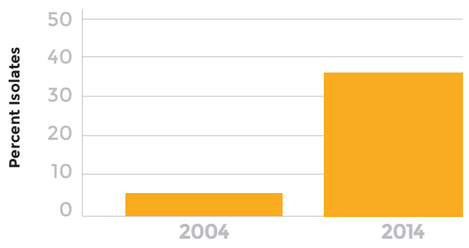
In 2014, doctors in Newfoundland and Labrador prescribed more antibiotics than doctors in any other province in Canada – a third more often than the province with the second highest use rate. It is critical that we reduce our antibiotic consumption.

NL Antibiotic Use in 2014 Data Source: National (CARSS)



ANTIBIOTIC RESITANCE IS INCREASING IN THE COMMUNITY

STI Patients Resistant to Ciprofloxacin



What can we do?

Choosing Wisely Canada: Don't use antibiotics for upper respiratory infections that are likely viral in origin, such as colds, influenza-like illnesses or self-limiting sinus infections of less than 7 days duration

Don't use antibiotics to treat bacteria in the bladder in older adults unless specific urinary tract symptoms are present

Choosing Wisely NL can provide doctors with resources

- Viral prescription pads
- Information sheets for parents and seniors
- Posters for clinics

CWNL Antibiotic video

WWW.YOUTUBE.COM/WATCH?V=L51W13SJSXI

Quality of Care NL

October 2016

Blood urea test in general practice

Practice Points:

Although blood urea provides a measure of kidney function, it is not necessary to evaluate stable kidney function.

Serum creatinine and estimated GFR (eGFR) is sufficient to evaluate stable kidney function.

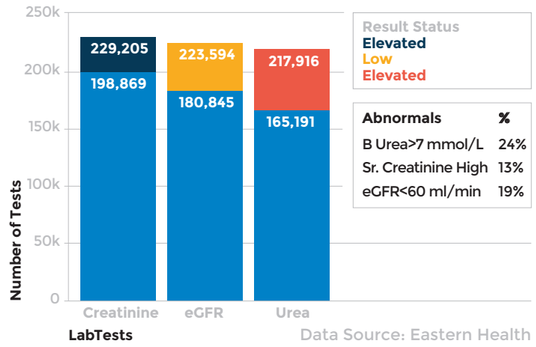
In acute kidney injury blood urea may be useful to assess the cause. Urea that is disproportionately high compared to the rise in creatinine may be seen in conditions where there is volume depletion, hypercatabolism or bleeding into the upper GI tract.

Test results for out-patients

1 April 2015 – 31 March 2016

In general practice, blood urea is usually ordered with serum creatinine, and is unnecessary in stable patients.

Creatinine, eGFR, and Urea Test Results, Separately

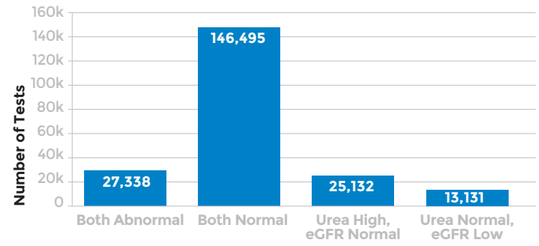


Data Source: Eastern Health

eGFR vs Urea for out-patients

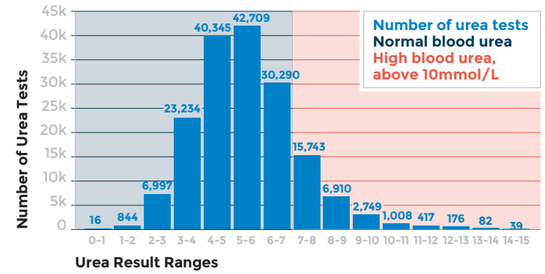
1 April 2015 – 31 March 2016

High blood urea with normal eGFR in stable patients creates unnecessary diagnostic confusion.



Blood Urea in out-patients with normal eGFR

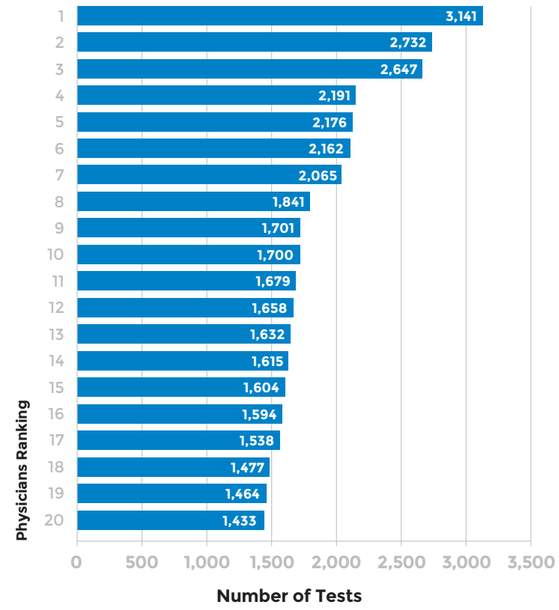
1 April 2015 – 31 March 2016



15.8% of people with normal eGFR have elevation in blood urea, but rarely above 10 mmol/L

Top 20 general practitioners by volume of blood urea test

1 April 2015 – 31 March 2016



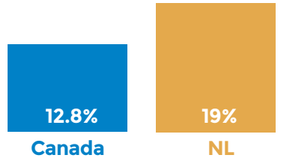
Quality of Care NL

December 2016

Stroke prevention

The problem:

Secondary Stroke rate in NL as % of total strokes



Secondary stroke occurs after a warning event such as TIA or very mild stroke

Most secondary strokes:
Are disabling or fatal and occur within 48 hrs-2 weeks
Are **PREVENTABLE** with rapid management
Are often the result of high grade carotid artery disease

Carotid Territory TIA is a medical emergency!

Rapid onset symptoms include:
Unilateral weakness of face/arm/leg
Speech disturbance (aphasia and/or dysarthria)
Monocular visual loss (Amaurosis Fugax), or loss of one visual field (Homonymous Hemianopia)

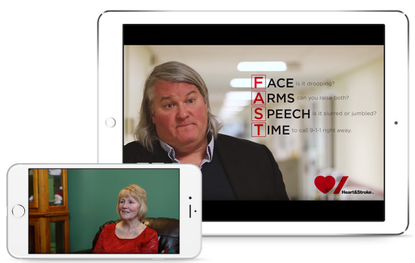
Immediate work-up required
CT head & Carotid studies

What you can do!

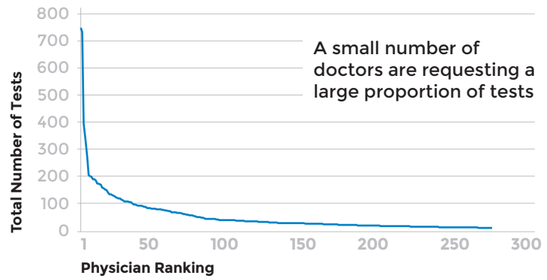
Arrange urgent carotid imaging for patients with rapid onset of carotid territory symptoms. When referring, provide type and timing of symptoms, ensure referrals are legible and transmit urgently.

Stroke Prevention videos

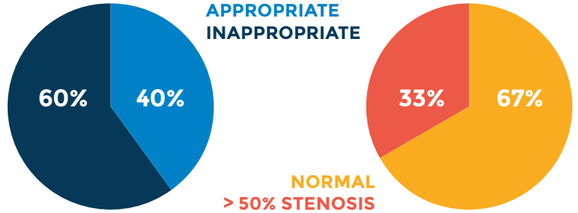
WWW.YOUTUBE.COM/WATCH?V=57DSIPA0POA
WWW.YOUTUBE.COM/WATCH?V=EVHIJRWE5SI



Ranking of Doctors by Total Number of Referrals for Carotid Artery Testing (2007-15)



Carotid Artery Testing at St. Clare's (2007-15) N=17 600



Don't order a procedure that will not change the patient's clinical course

Carotid Studies are not indicated for:

Syncope
Headache
Dizziness
Tinnitus
Carotid bruit
Pain
Generalized weakness

Quality of Care NL

December 2016

Enhanced recovery after surgery (ERAS)

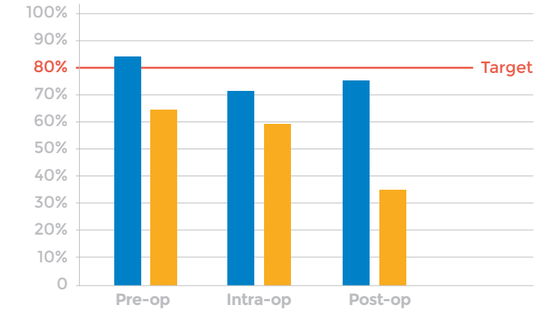
Practice Points:

Multiple guidelines exist for pre-op, intra-op and post-op management of patients after major surgery. Compliance is variable.

The ERAS guidelines were implemented at St. Clare's Hospital for elective colorectal cancer surgery March 1 – April 30, 2016 with the objectives of reducing complications and length of stay.

Compliance to guidelines and outcomes were obtained and compared to baseline for colorectal cancer surgeries in 2014.

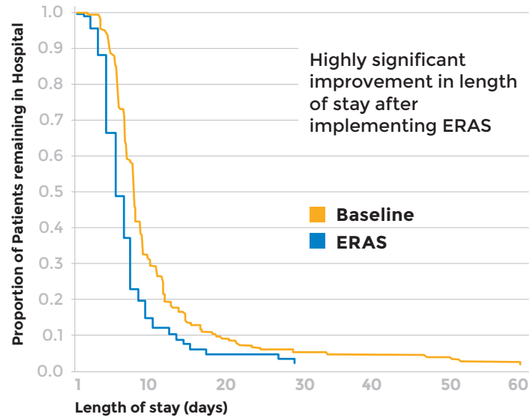
Compliance to ERAS guidelines improved with implementation of the ERAS program



	Pre-op	Intra-op	Post-op
2016 Pilot	84%	71%	76%
2014 Baseline	64%	59%	34%

Overall Compliance
2016 Pilot:77% **2014 Baseline: 49%**

Time to Discharge: ERAS vs Baseline



Primary Outcomes: ERAS vs. Baseline

Outcome	ERAS	Baseline	Significance
Median LOS (days)	5.44	7.24	P=0.000
Complication Rate	41%	45%	Not Significant
30-day Readmission Rate	10%	12%	Not Significant
30-day Mortality	1.1%	1.86%	Not Significant

A statistically significant reduction in median length of stay of 1.8 days was observed in ERAS group