Practice Points

– Volume 2, Jan – June 2017

Quality of Care NL

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

Choosing Wisely NL™

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

In this issue:

NEWFOUNDLAND AND LABRADOR MEDICAL ASSOCIATION

MEMORIAL UNIVERSITY
OFFICE OF PROFESSIONAL DEVELOPMENT
Faculty of Medicine

NEWFOUNDLAND AND LABRADOR SUPPORT
Support for People and Patient Oriented Research and Trials

Quality of Care NL

Quality of Care NL/**Choosing Wisely NL** is a Faculty of Medicine program in partnership with the Newfoundland and Labrador Medical Association (NLMA), focused on the appropriate use of healthcare resources in our province.

We know there is concern about unsustainable spending and stewarding resources in health care; we've listened to physicians, patients and partners who are worried about these issues, and we are working with them to find solutions.

Quality of Care NL priorities are driven by feedback from the NLMA, Regional Health Authorities, and public engagement with people throughout the province. **Quality of Care NL** projects focus on areas of appropriate healthcare within Newfoundland and Labrador to ensure the **right interventions** get to the **right patients** at the **right time**.

We have also partnered with **Choosing Wisely Canada**, a program focused on reducing the use of unnecessary tests where harms outweigh benefits. We collaborate with **Choosing Wisely Canada** to implement their recommendations in Newfoundland and Labrador in **Choosing Wisely NL** projects.

Practice Points Volume 2 includes a compilation of latest research findings from a selection of **Quality of Care NL**/**Choosing Wisely NL** projects.

In addition to **Practice Points**, physicians will receive email communications highlighting the results of **Quality of Care NL**/**Choosing Wisely NL** projects, some of which will include personalized rates of prescribing. With the benefit of access to provincial health care utilization data from various provincial programs, agencies, and our Regional Health Authorities, we de-identify information so that physicians can compare personal utilization patterns with their peers in a secure, private format.

Our project communications focus on:

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

Quality of Care NL/**Choosing Wisely NL** is also partnering with The Office of Professional Development in the Faculty of Medicine. By completing **Quality of Care NL**-branded online, accredited modules, physicians can obtain Continuing Medical Education credits towards their required professional development compliment.

Together, we can achieve a more sustainable health care system that better serves the collective needs of people right here at home. For more information on **Quality of Care NL**/**Choosing Wisely NL** projects, please visit, **qualityofcarenl.ca**

Contents

Institutional Care

Community Care

Public Engagement

The results identified in this volume were provided by researchers in the Faculty of Medicine and the School of Pharmacy, Memorial University. Quality of Care NL would like to thank all research teams and our partners for their contributions.

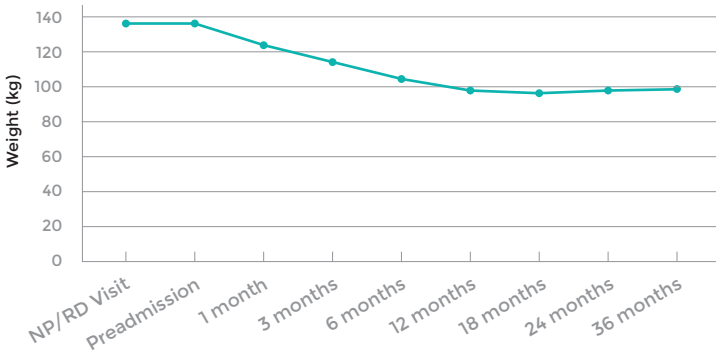
Bariatric Surgery

Quality of Care NL

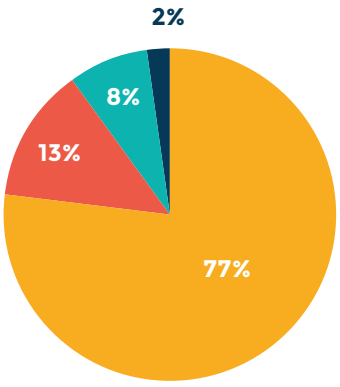
Practice Points

1. NL has the highest rate of adult obesity (33%) in Canada.
2. 8% have severe obesity (BMI > 35 kg/m2).
3. Bariatric surgery is an effective treatment and recommended in those with BMI > 40 or > 35 kg/m2 and at least one co-morbidity.
4. Initial procedures funded = 100/year at Health Sciences Centre (HSC). Now 150/year.
5. Bariatric surgery in NL: 82% female, mean age of 44.

At 36 months, patients have lost 37% weight



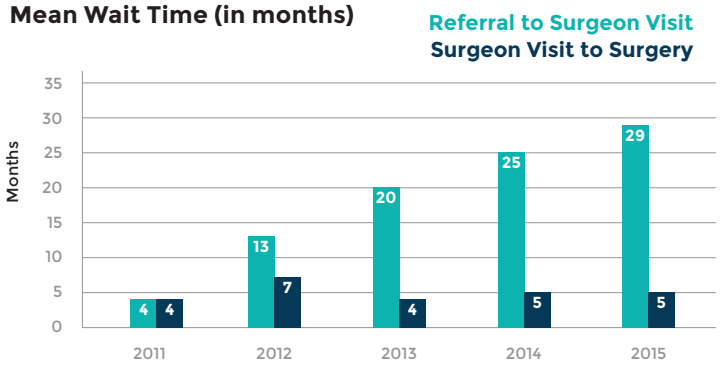
Total Bariatric Surgeries



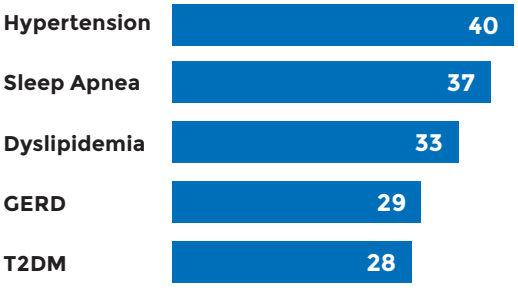
Region of patients

Eastern Health
Central Health
Western Health
Labrador Grenfell Health

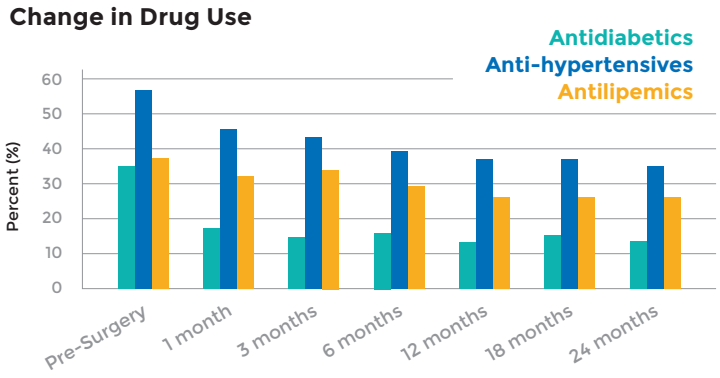
Mean Wait Time (in months)



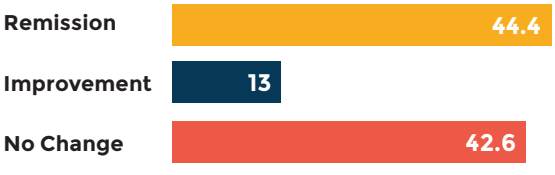
Co-morbid Conditions at Time of Surgery (%)



Change in Drug Use



Improvements in Co-morbidities – Type 2 Diabetes (%)



Conclusions

1. Bariatric surgery is associated with 37% sustained reduction in weight and decrease in co-morbidity and drug use.
2. Demand exceeds capacity and access for surgery is poor.

Regional Rates of Coronary Catheterization and Revascularization

Quality of Care NL

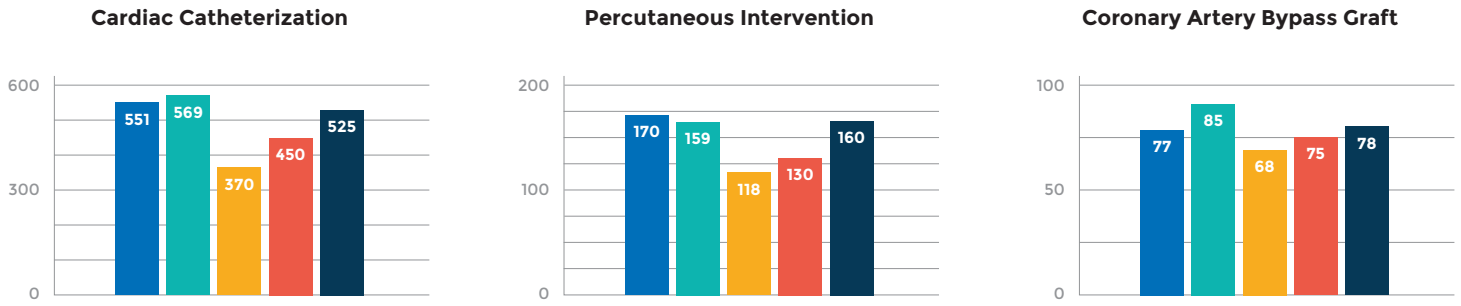
Practice Points

1. In NL cardiac catheterization is performed only in St. John's.
2. Critical coronary artery disease is treated by percutaneous intervention (angioplasty with stent), coronary artery bypass surgery or, drugs only.
3. With the advent of drug eluting stents the use of PCI has increased and the use of CABG has decreased.
4. Since 2006, clinical data on cardiac procedures has been collected using APPROACH-NL.

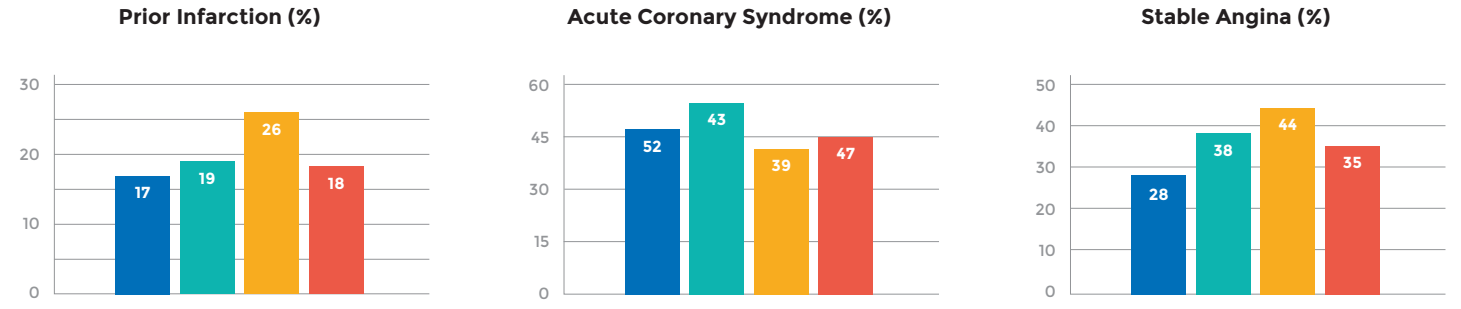
Conclusions

1. The rates of cardiac catheterization, PCI and CABG are lowest in Western Health and are associated with different referral practices for patients with acute coronary syndrome and stable angina.

Age and sex-adjusted procedure rates/100,000 population ≥ 20 years by Regional Health Authority



Clinical characteristics of patients undergoing cardiac catheterization by Regional Health Authority



Eastern Health | Central Health | Western Health | Labrador Grenfell Health

January 2017: Approach Database, Eastern Health 2007-2013

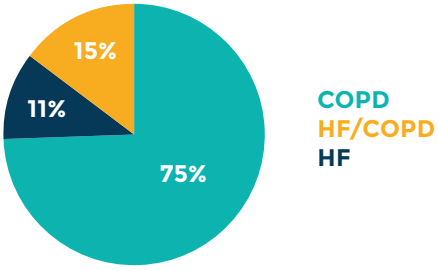
Remote Monitoring in Patients with COPD and/or Heart Failure

Quality of Care NL

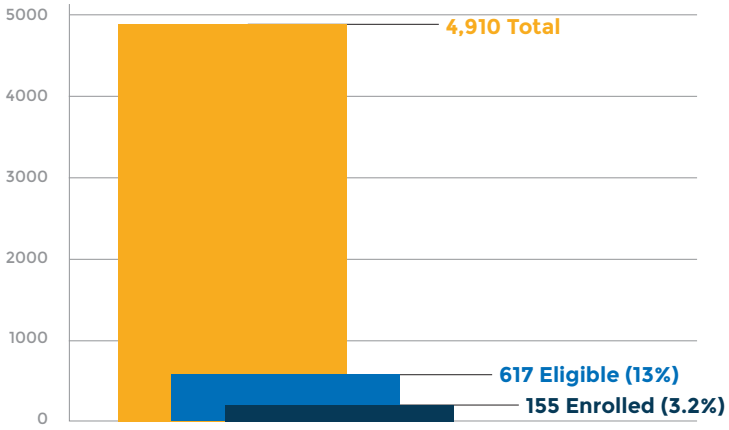
Practice Points

1. Electronic monitoring of patients with chronic disease is now possible but its feasibility is uncertain.
2. Patients admitted with COPD and/or heart failure were identified through examination of electronic data from the ER or by referral (1 Jan – 30 Aug 2016).
3. Patients were provided with a tablet, BP cuff, pulse oximeter and weigh scales. Biometric data and symptoms were delivered to the RM centre. RNs contacted the patient when individualized thresholds were surpassed.

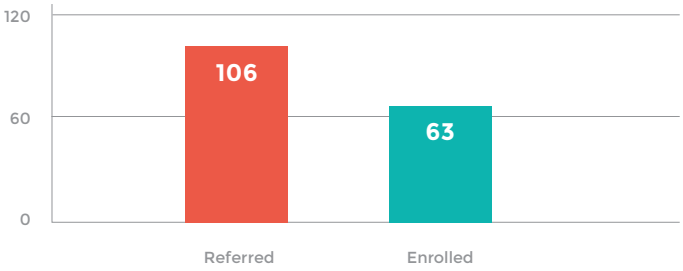
Majority of referrals had COPD



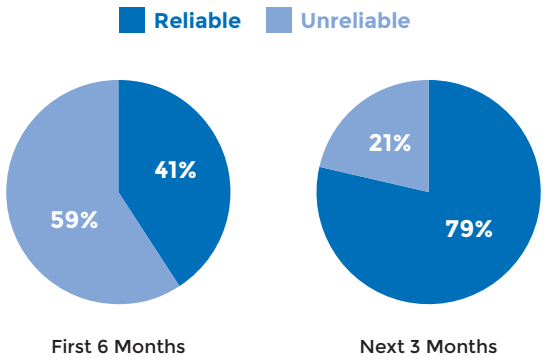
Electronic identification was inefficient



Referral was efficient but slow



Initially, electronic units were unreliable



Patient Satisfaction: Early Survey Results

N=30	Strongly Agree %
Being in this program has made my quality of life better.	80
Being in this program allows me to better manage my own health.	90
Being in this program means my family and/or those who help me with my care feel sure that I am getting the care I need.	80

Thresholds were too tight

16,208 of 55,814 measurements (29%) were threshold violations.

Conclusions

1. Problem-filled feasibility period was evident for enrollment, functioning of equipment, and threshold setting for intervention by RN.
2. Patient satisfaction was high.
3. Impact on prevention of hospitalization will be studied.

Stroke Care in St. John's Hospitals

Quality of Care NL

Practice Points

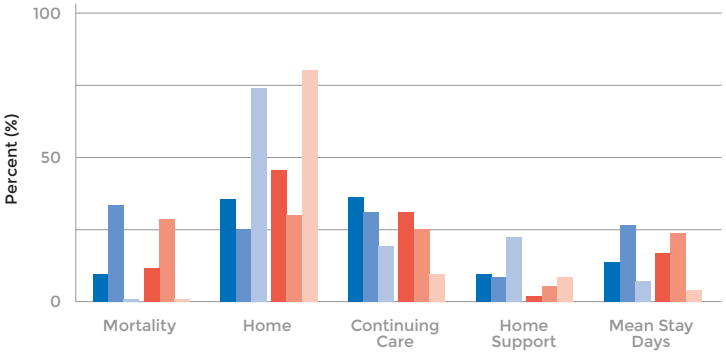
1. Optimal stroke care includes early presentation to the ER, use of CT to differentiate ischemic from hemorrhagic stroke, use of thrombolytics on diagnosis of ischemic stroke with discharge of survivors on anti-thrombotics.

2. Stroke care units may improve stroke outcomes. St. Clare's has a stroke unit and the Health Sciences Centre (HSC) plans to have one.

3. A retrospective cohort study of incident stroke patients at Eastern Health from Feb 2012 – Dec 2015 was undertaken.

Stroke Outcomes

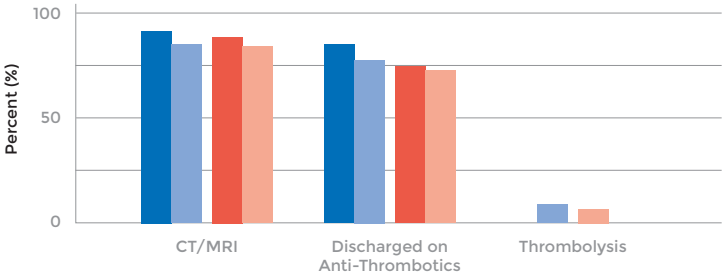
Independent of age, hospital had no significant effect on mortality or discharge to home.



St. Clare's
Ischemic Stroke
Hemorrhagic Stroke
TIA

HSC
Ischemic Stroke
Hemorrhagic Stroke
TIA

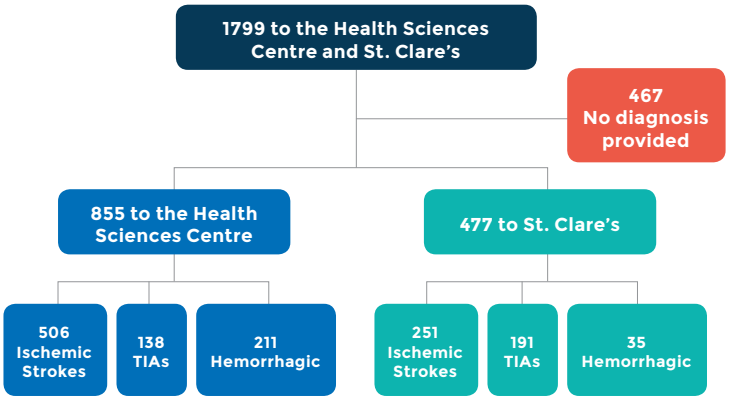
Interventions



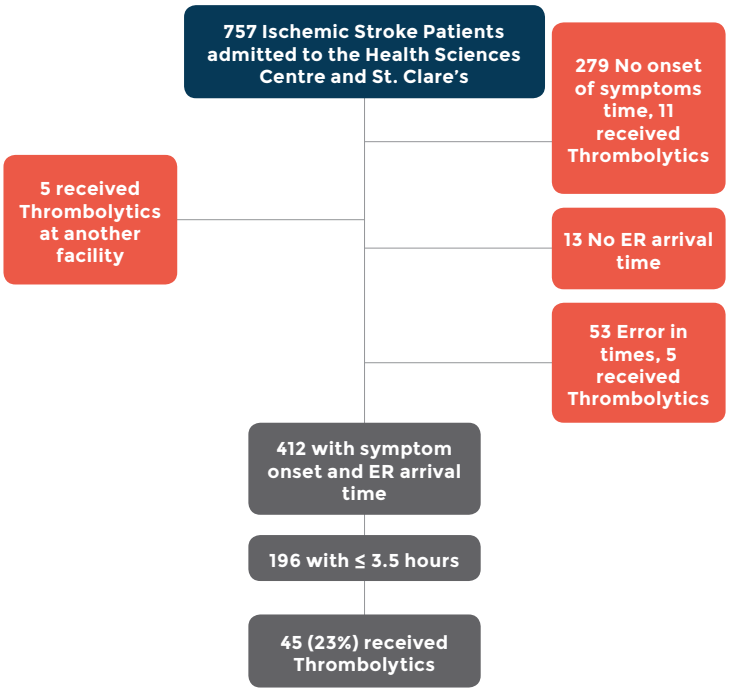
St. Clare's
TIA
Ischemic Stroke

HSC
TIA
Ischemic Stroke

Different case mix in the two hospitals



Ischemic Stroke Patients



Conclusions

1. No evidence that quality of care was better at St Clare's.

2. Care gaps exist in both hospitals, particularly in the use of thrombolytics.

Enhanced Recovery After Surgery – 1 Year Update

Quality of Care NL

Practice Points

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

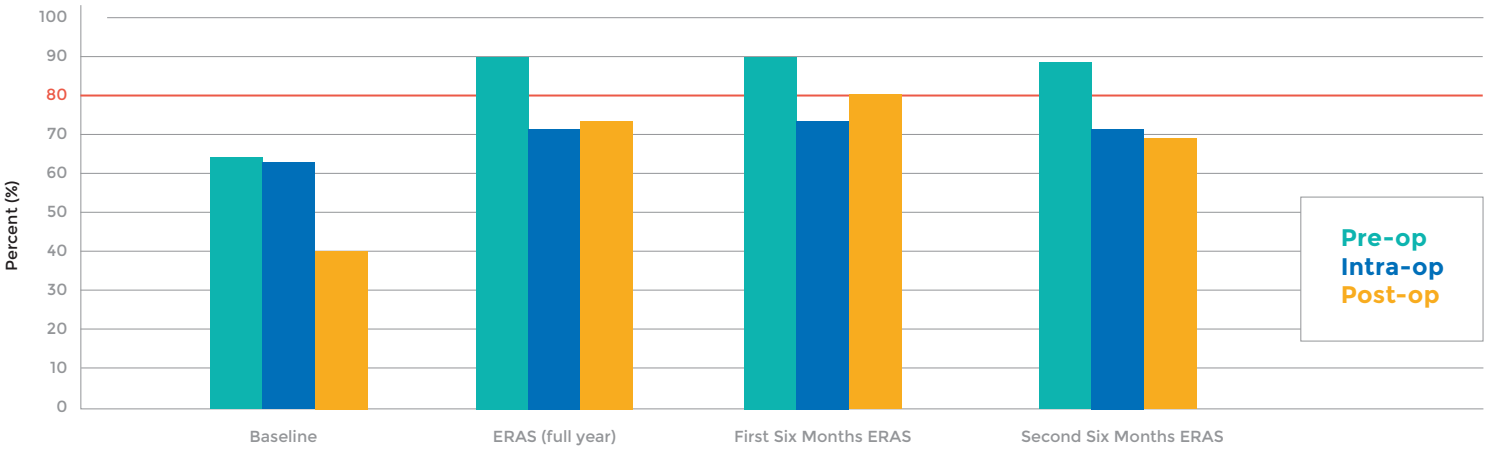
2. ERAS guidelines were implemented at St. Clare's Hospital for elective colorectal resections from March 1, 2016 – February 28, 2017 with the goal of reducing length of stay (LOS).

3. Compliance to guidelines and outcomes were obtained and compared to baseline for colorectal resections in 2014. Patient outcomes from 2015 were also obtained.

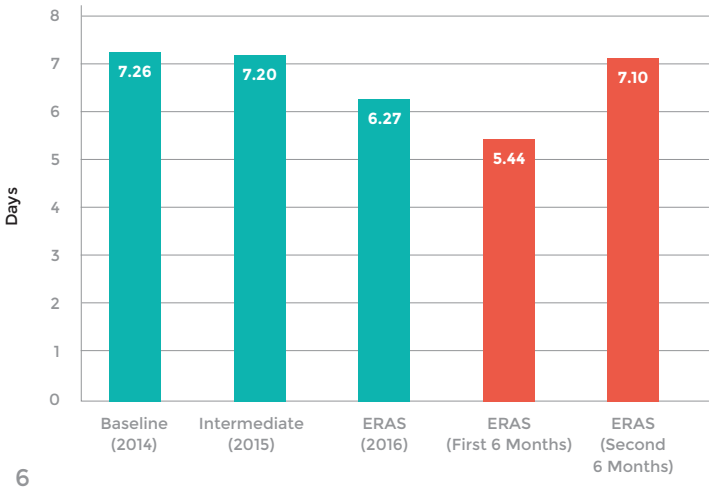
Summary of Patient Outcomes

	Baseline (2014)	Intermediate (2015)	ERAS (2016)	ERAS (First 6 months)	ERAS (Second 6 months)
Complication Rate	45%	39%	43%	41%	44%
30-day Readmission Rate	9%	9%	8%	10%	5%
30-day Mortality Rate	1%	1%	1%	0%	2%

Compliance to guidelines improved with implementation of ERAS program but adherence to post-op guidelines deteriorated in second six months:



Median length of stay significantly decreased in first year of ERAS program but regressed in second six months compared to first six months:



Conclusions

1. Adherence to post-op guidelines deteriorated in second six months after introduction of ERAS and length of stay regressed.

Antipsychotic Use in Nursing Homes

Choosing Wisely NL

Methods

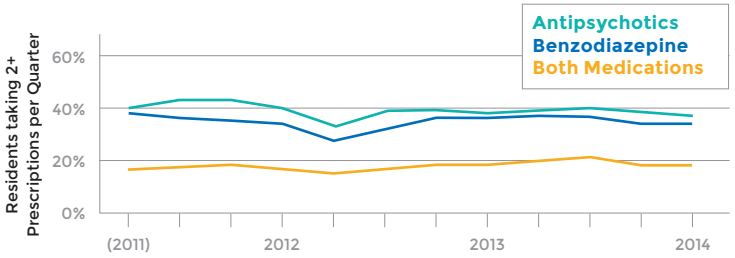
1. All residents were 65 years and older and receiving prescription medications via the NL public drug plan.
2. Antipsychotic and benzodiazepine users were defined as those receiving two or more prescriptions per quarter.
3. 40% of residents were antipsychotic users; 37% were benzodiazepine users.
4. 18% of residents used both an antipsychotic and benzodiazepine in the same quarter.

Conclusions

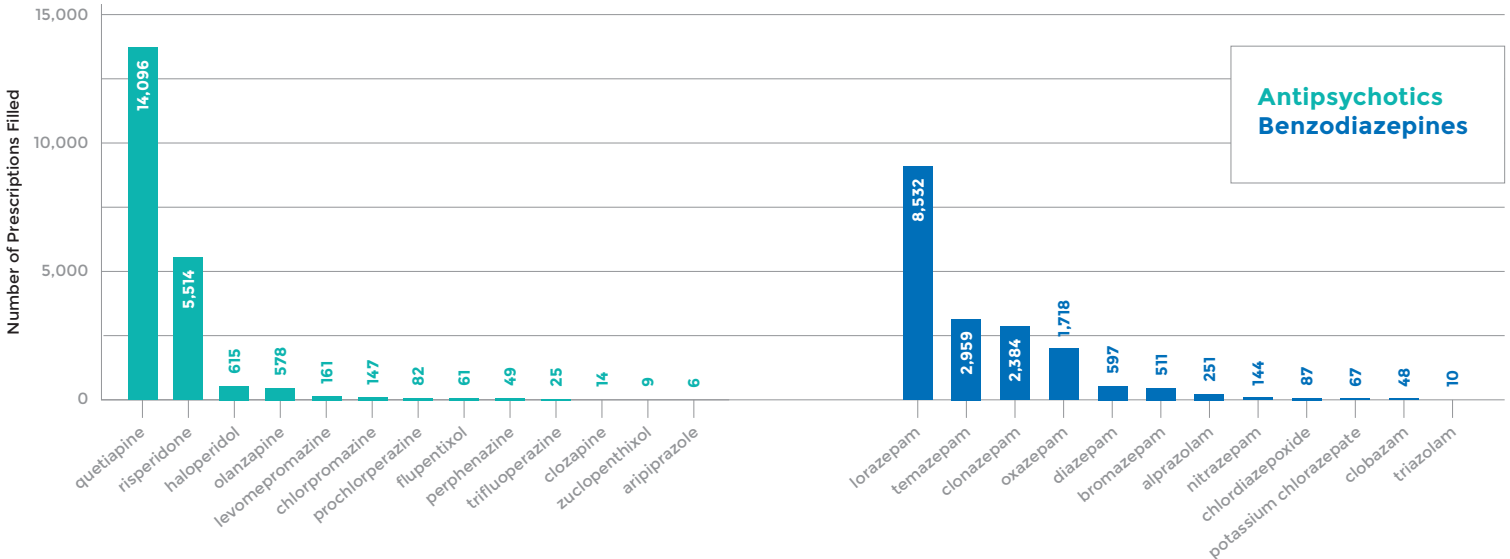
1. 4-6 fold difference in prevalence across long-term care facilities.*
2. Further research is required to ascertain reasons for variations in prevalence across facilities.

*Analysis restricted to facilities with 30 or more patients

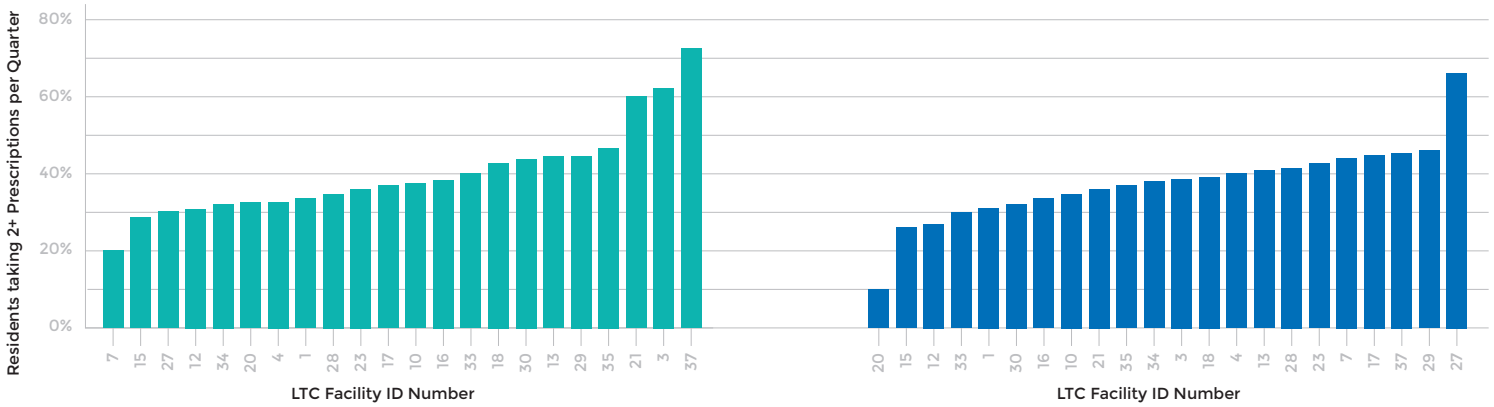
Trends Over Time for Antipsychotic and Benzodiazepine Prevalence Amongst Seniors in Long-Term Care Facilities



Number of Psychoactive Prescriptions, Long-Term Care Facilities, 1 April 2011 to 31 March 2014



Percentage of residents taking drug by Long-Term Care Facilities, 1 April 2011 to 31 March 2014



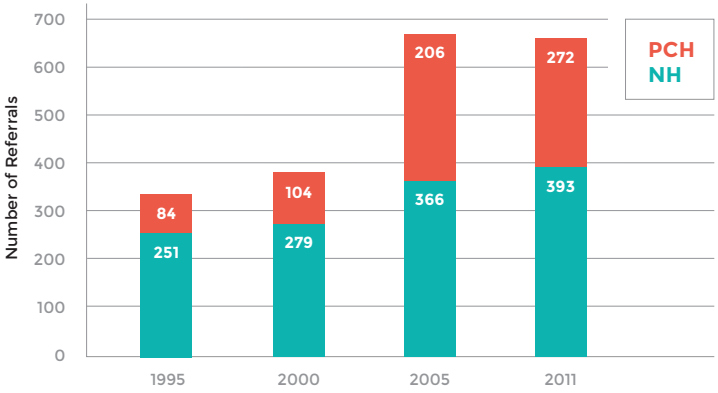
Predictions of Need for Institutional Long-Term Care (LTC): St. John's Region

Quality of Care NL

Practice Points

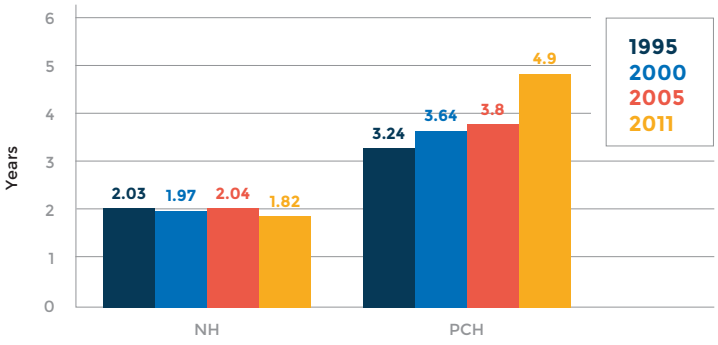
1. Beds needed = incidence x average survival.
2. Allocation to nursing home (NH) or personal care home (PCH) depends on co-morbidity.
3. Since 1995, LTC has restructured from a NH-dependent system (1,048 NH and PCH 334 beds) to a more balanced system (944 NH and 914 PCH beds).
4. Cohort of incident clients from 2011 was compared to cohorts from 1995, 2000 and 2005. Since 1995 the number of clients <65 years has increased from 22/year to 54 with 70% admitted to NH.
5. No change has occurred in age and sex distribution over time.

Referral to NH/PCH in clients ≥ 65 years



The number of clients referred to LTC has been increasing steadily for both NH and PCH, but the proportion referred to PCH has increased from 25 to 41%.

Clients ≥ 65 years Median Survival in Years

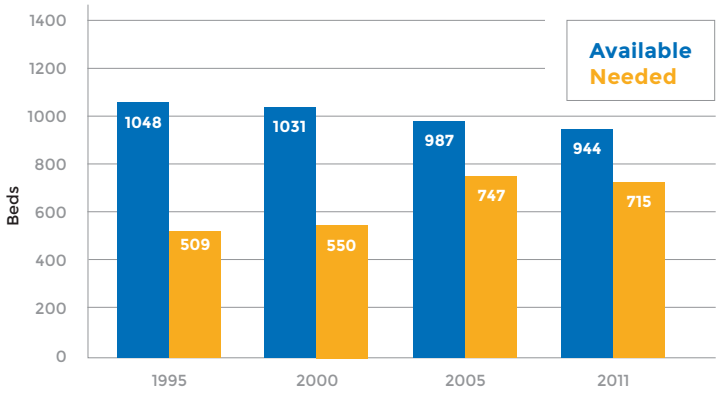


Survival in PCH has lengthened likely due to decreased co-morbidity on entry to PCH.

Conclusions

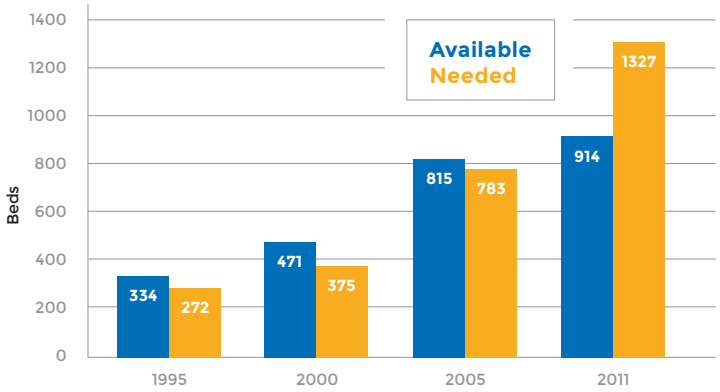
1. Increased demand for LTC beds persists, which together with increased survival of clients referred to PCH will lead to diminished access to LTC, particularly for clients waiting in acute hospital beds.

NH Beds available vs needed for clients ≥ 65 years



Increase in number of clients < 65 years who live longer has large impact on availability of NH beds. A long tail of survivors in NH will decrease availability of NH beds.

PCH Beds available vs needed for clients ≥ 65 years



Increased demand for PCH beds, together with increased survival is now associated with decreased availability, assuaged by transfer from PCH to NH.

Future Projects Planned

1. Outcomes of Coronary Revascularization

Cardiology practice in coronary artery disease has changed to more use of angioplasty and drug eluting stents and less use of coronary bypass grafting. This project will determine whether this change in practice is associated with improved survival, fewer admissions for cardiac events, and change in admission for bleeding events.

2. Drop the Pre-Op

Choosing Wisely Canada recommends not doing screening tests in patients at low – moderate surgical risk undergoing surgery of low – moderate risk. Baseline assessment of test use will be made in the provincial hospitals and interventions introduced to apply the **Choosing Wisely Canada** guideline.

3. Antibiotics in Nursing Homes

Asymptomatic bacteriuria is frequent in nursing home residents but **Choosing Wisely Canada** recommends not treating this unless specific urinary tract (UTI) symptoms are present. This project will assess baseline use of antibiotics in provincial nursing homes for UTI by whether or not symptoms were present, and evaluate interventions by the Regional Health Authorities to enhance more appropriate use of antibiotics.

4. Access to Colonoscopy

Guidelines exist to prioritize patients who need colonoscopy. This project will evaluate the proportion of patients who receive colonoscopy within the recommended period by hospital and by doctor in Eastern Health.

5. In-hospital Laboratory Testing

The quantity of daily laboratory testing in patients admitted to the St John's hospitals is substantial. A program will be initiated and evaluated to reduce unnecessary testing in the medical wards of these two hospitals.

6. Impact of stroke unit at Health Science Centre

The quality of stroke care at the St John's hospitals has been evaluated at baseline following which a new stroke unit has been introduced at the Health Sciences Centre. The impact of this unit will be evaluated by comparing rate of appropriate interventions and outcomes at the Health Sciences Centre compared to St Clare's hospital over time.

7. Impact of Comprehensive Geriatic Assessment in frail patients

Comprehensive geriatric assessment will be provided to frail patients admitted to one ward in St Clare's and outcomes will be compared to similar patients admitted to another internal medicine ward in the same hospital.

Blood Urea Testing – Six Month Update

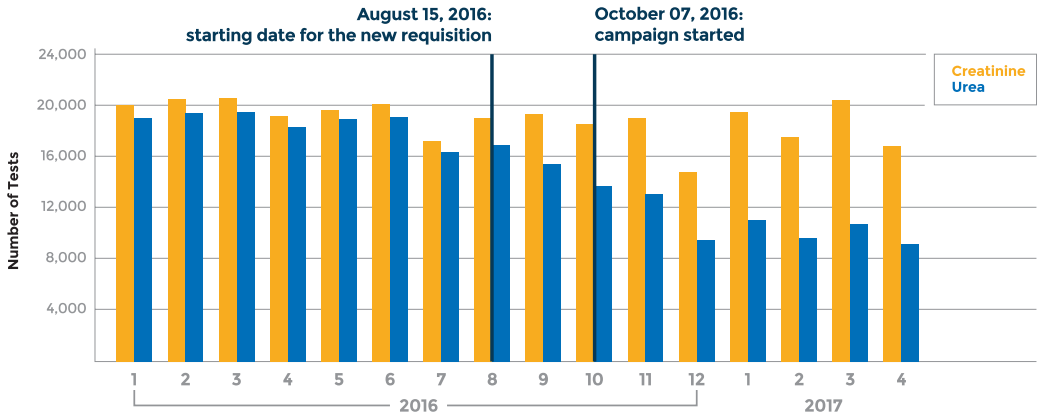
Practice Points

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 gastro-intestinal tract.

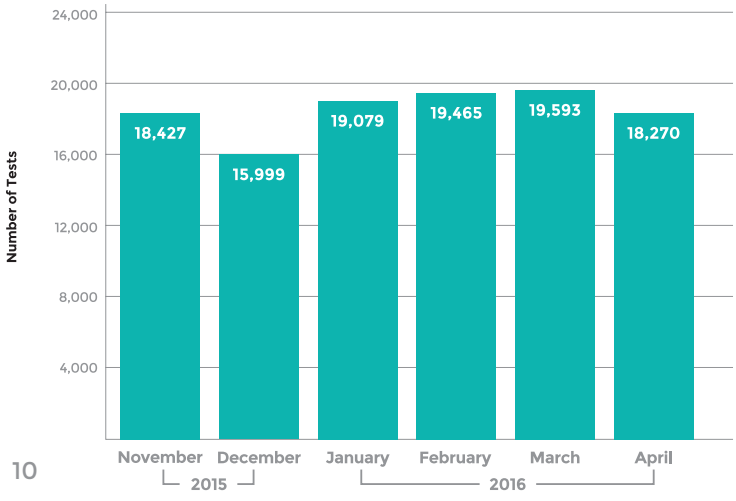
Methods

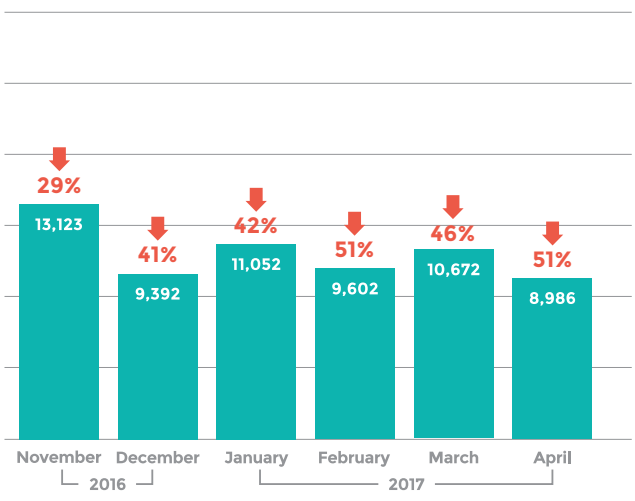
1. Quality of Care NL, using a peer comparison program and academic detailing, attempted to uncouple the ordering of blood urea from serum creatinine.
2. During the Quality of Care NL Campaign, the ordering of blood urea was changed: physicians are now required to provide a written order for blood urea.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

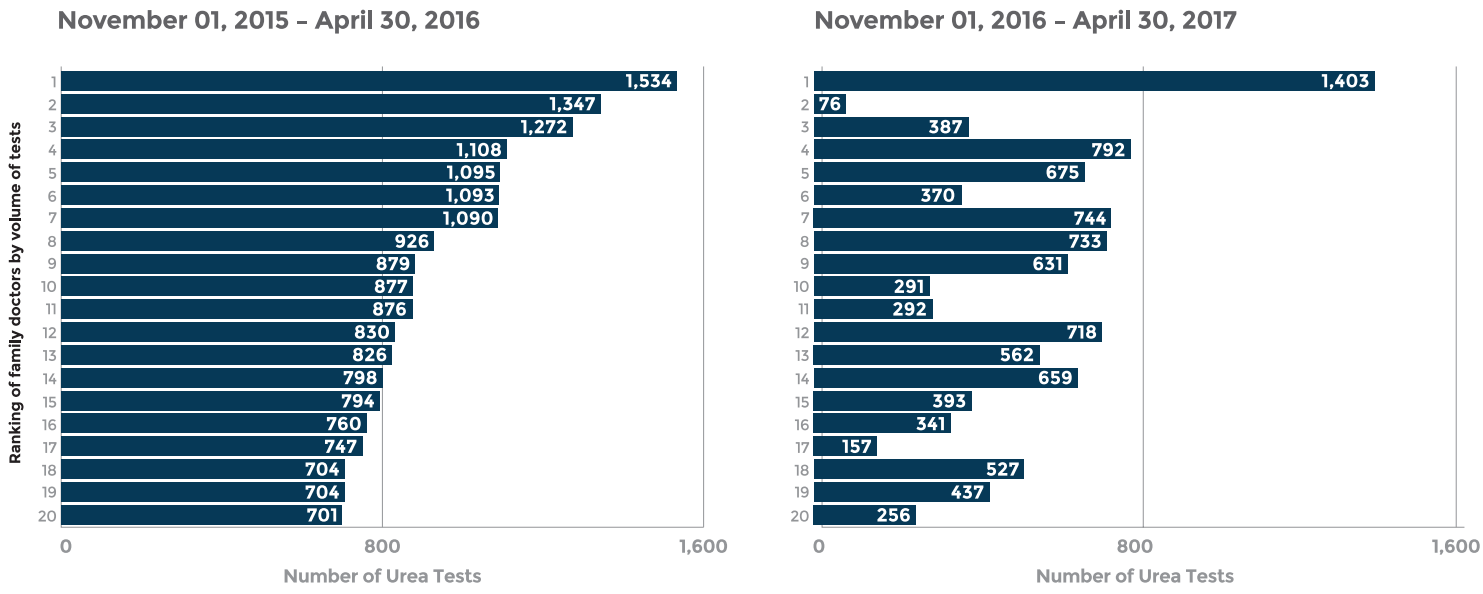


Blood urea tests ordered by family doctors

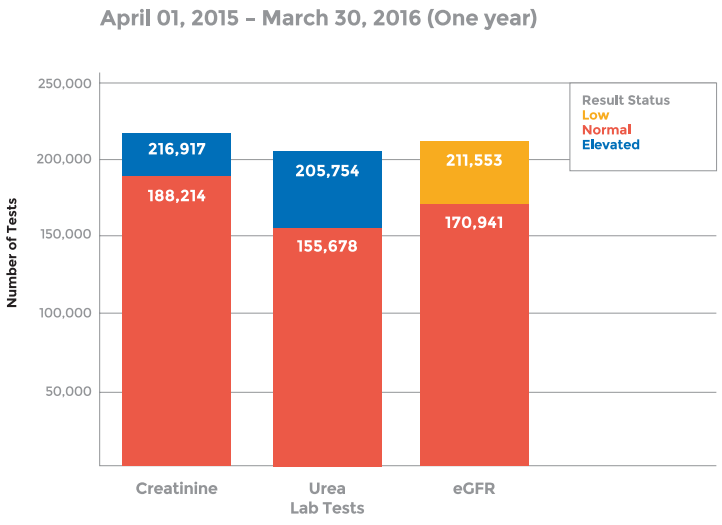




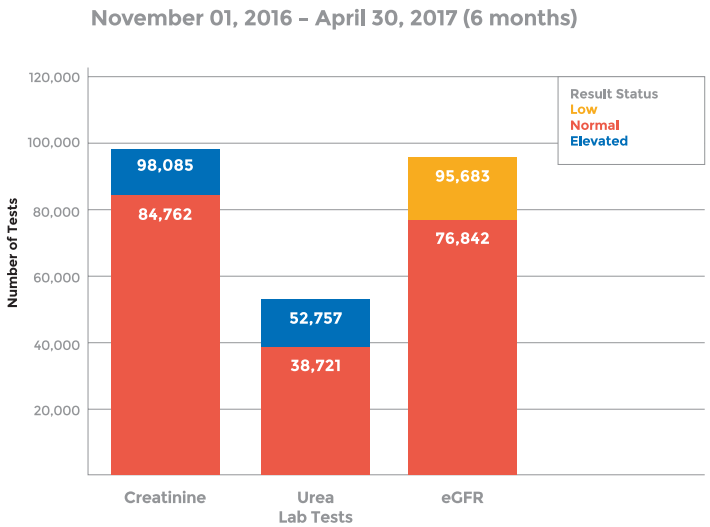
Comparison of top 20 family doctors by volume of blood urea tests Nov 2015 – April 2016 and Nov 2016 – April 2017, 12 of whom substantially diminished volume of ordering



Kidney function tests ordered by family doctors



Similar number of serum creatinine and blood urea tests



46% fewer blood urea tests than serum creatinine

Conclusions

1. 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.

Iron Testing

Quality of Care NL

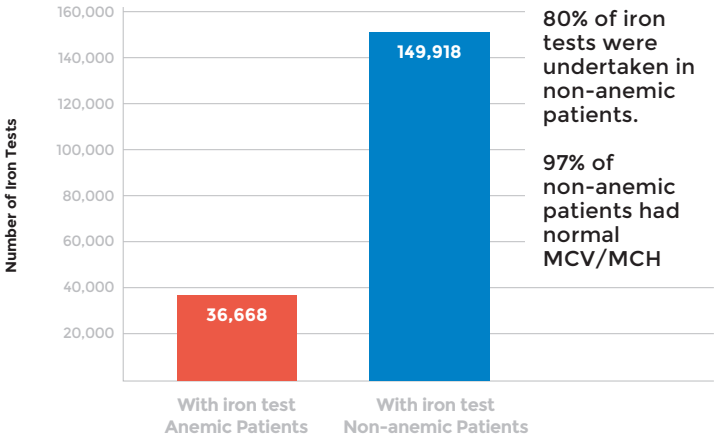
Practice Points

1. Iron sufficiency is usually measured with serum ferritin rather than iron saturation.

2. Asymptomatic non-anemic patients should not be tested for ferritin, and testing should be individualized in symptomatic non-anemic patients, as it is uncertain whether treatment of hypoferritinemia with oral iron will lead to clinical benefits.

3. Patients with anemia and low MCV should be tested for ferritin, because: (a) Older adults with iron deficiency anemia should be investigated for gastro-intestinal cancer. (b) Women of reproductive age require iron if iron deficient.

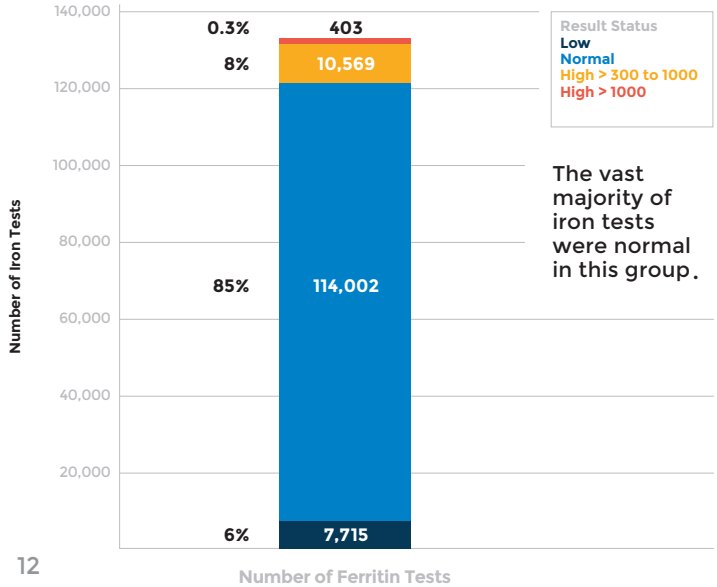
Number of iron tests ordered by family doctors, by anemia (2014-16)



80% of iron tests were undertaken in non-anemic patients.

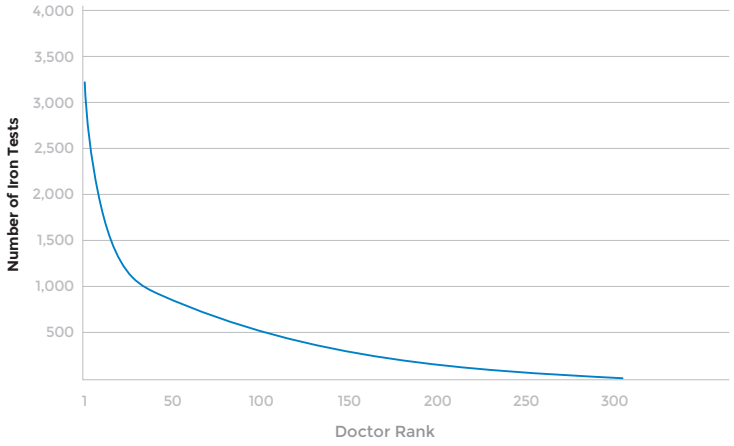
97% of non-anemic patients had normal MCV/MCH

The number of ferritin tests done in people with normal HGB, MCV, and MCH (2014-16)

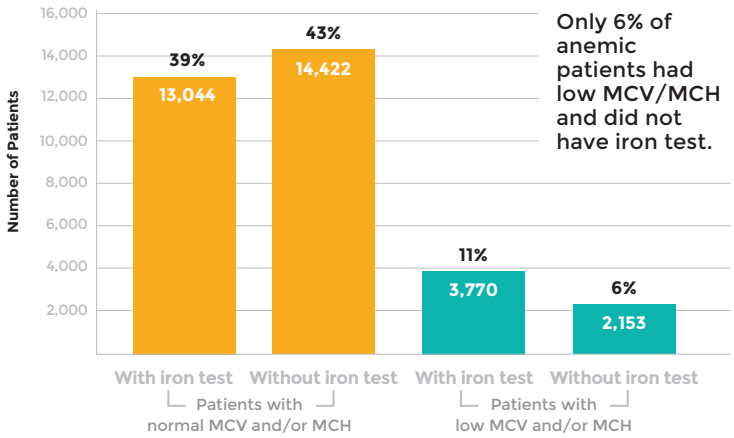


The vast majority of iron tests were normal in this group.

Iron tests ordered by family doctors in non-anemic patients with normal MCV or MCH, ranked by test ordering volume:



Iron testing in anemic patients by MCV/MCH level



Only 6% of anemic patients had low MCV/MCH and did not have iron test.

The analysis reveals both potential over- and under-use of iron testing.

OVER testing in those without anemia is substantial, low yield and costly. **A ferritin test costs $10.**

Although small in number:
- UNDER testing adults over the age of 60 with likely iron deficiency anemia risks not diagnosing bowel cancer.
- UNDER testing women aged less than 40 with likely iron deficiency anemia may be associated with a missed opportunity to treat symptoms and to prevent problems in pregnancy.

Potentially Unnecessary Laboratory Ordering

Quality of Care NL

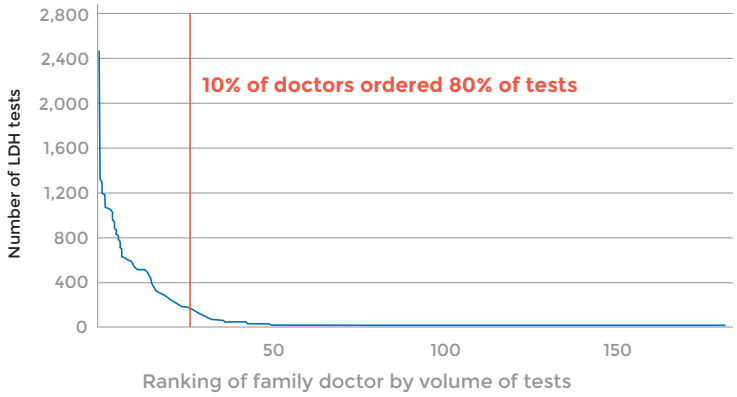
Practice Points

1. LDH testing is useful for hemolytic anemia and cell growth disorders; there is little need for it in family practice.
2. Creatine kinase is a useful test in patients with a high index of suspicion for muscle disease; it is no longer needed for monitoring asymptomatic patients on statins.
3. Serum ferritin is a useful iron status test where hemochromatosis or hypoferritinemia are suspected as a cause of symptoms; it is likely not useful in patients with normal hemoglobin and normal MCV/MCHC. (See graph on page 12)
4. Blood urea not a useful test to measure kidney function in stable patients.

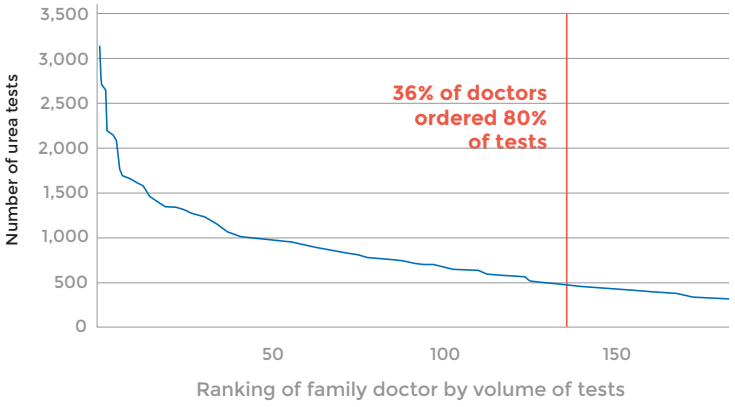
Conclusions

1. A minority of doctors order the majority of these four laboratory tests.
2. These tests are best ordered for appropriate clinical indications.
3. They are not useful as screening tests.
4. Individual tests may be low cost – LDH, creatine kinase, and urea are $2 each, and ferritin $10 – but the costs mount as the volume of testing increases.

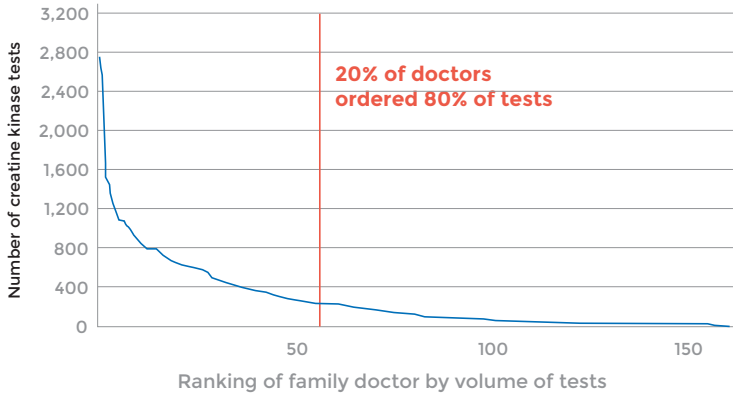
Volume of LDH testing in general practice by family doctor



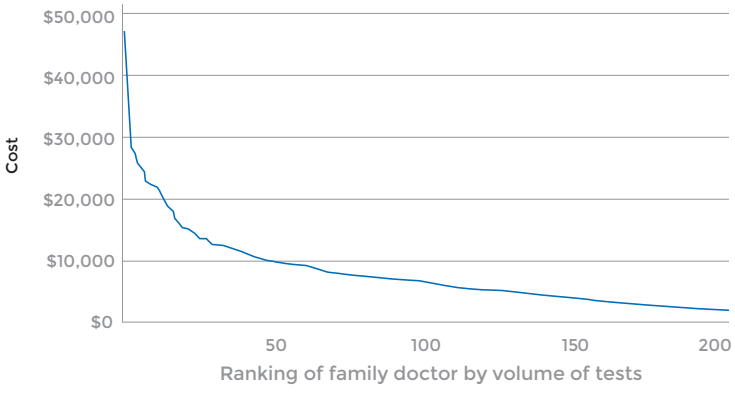
Volume of urea testing in general practice by family doctor



Volume of creatine kinase testing in general practice by doctor in family practice



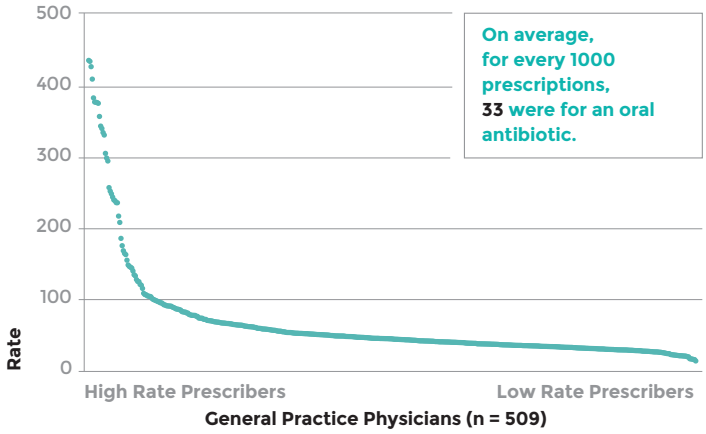
Combined annual cost of the four tests, by ordering doctor in family practice 1 April 2015 to 31 March 2016



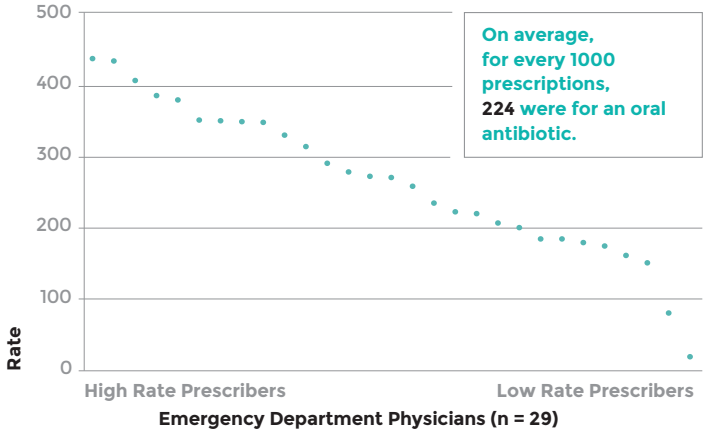
Antibiotic Overuse – Phase 2, Physician Audit

We sent general practice and emergency department physicians a snapshot of their antibiotic prescribing for patients over 65 years of age, 1 April 2015 – 31 March, 2016.

Oral Antibiotic Prescription Rates Per 1000 Prescriptions



Oral Antibiotic Prescription Rates Per 1000 Prescriptions



Choosing Wisely Canada Recommendations

Don't prescribe antibiotics for **asymptomatic bacteriuria (ASB)** in non-pregnant patients.

Don't prescribe alternate second-line antimicrobials to patients reporting non-severe reactions to penicillin when beta-lactams are the recommended first-line therapy.

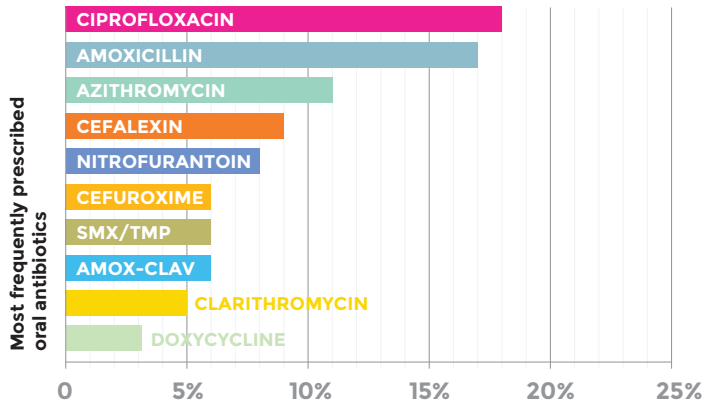
Don't use antibiotics for **bronchitis / asthma** in adults and for children with **bronchiolitis**.

Don't use antibiotics for upper respiratory infections that are likely viral in origin, such as **influenza-like illness**, or self-limiting, such as **sinus infections** of less than seven days of duration.

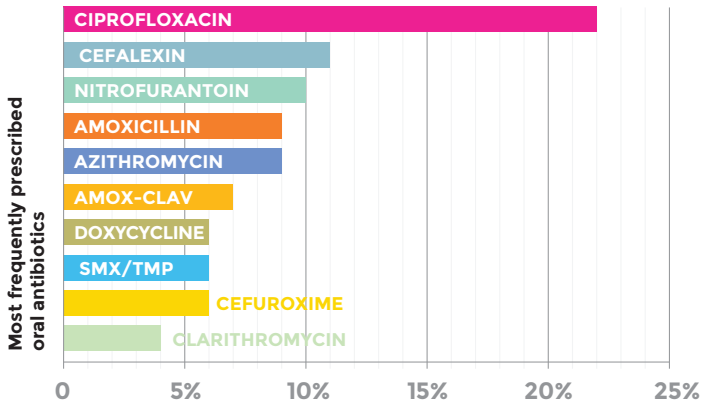
What can we do?

- Write a post-dated prescription with clear instructions for the pharmacist not to fill until the specified date.
- Leave a prescription at the receptionist's desk to be picked up if symptoms persist.
- Ask the patient to re-contact the office if symptoms persist for a specific time frame.

Most Frequently Prescribed Oral Antibiotics by General Practice Physicians for Patients 65 years and Older



Most Frequently Prescribed Oral Antibiotics by Emergency Room Physicians for Patients 65 years and Older



Imaging in Low Back Pain – CT Scanning

Practice Points

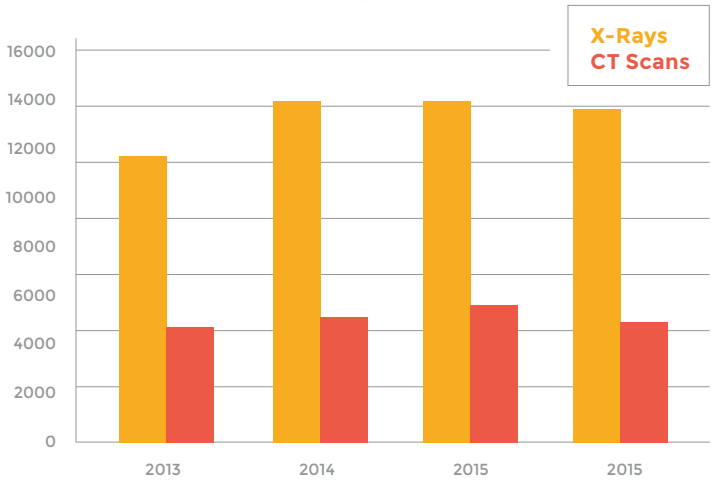
1. NL orders more CTs than any province in Canada.
2. Our rate of 218.9 CTs per 1000 people is 50% higher than the Canadian rate.
3. For low back pain, the use of routine imaging has increased over the last 15 years.
4. NL orders twice as many CTs for lower back pain per 100,000 people as Ontario.
5. Imaging of the lower spine before six weeks does not improve outcomes.

The harms of these tests for routine low back pain:

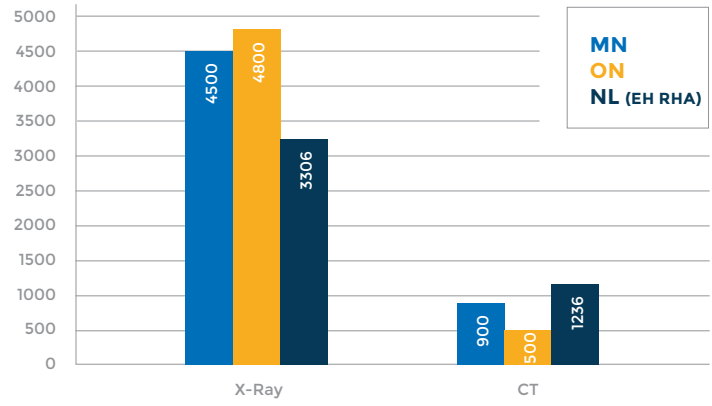
- Exposure to radiation (1 back CT = 200 chest x-rays) and consequent increased risk of cancer.
- High rate of incidental findings.

Utilization in NL

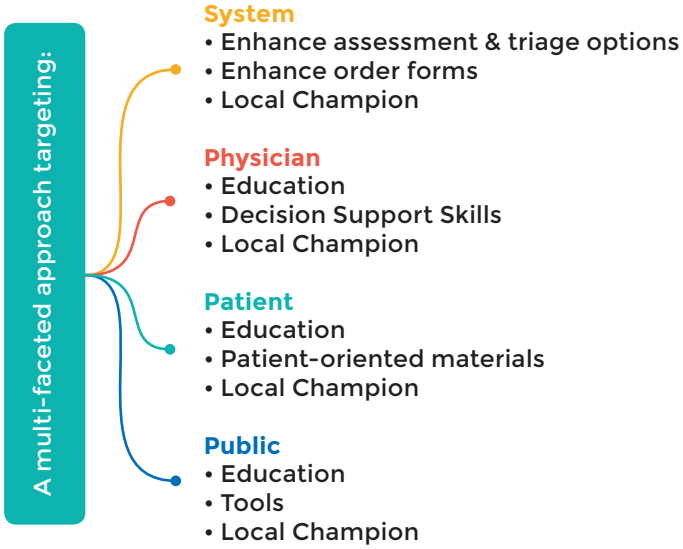
Total number of X-rays and CT scans of the Lumbar Spine in Eastern Health per year 2013 – 2016



Age and sex standardized rates per 100,000 people in Manitoba, Ontario and Newfoundland (EH)



What can we do?



Choosing Wisely Canada Recommendations

Don't do imaging for lower back pain unless red flags are present (such as severe or progressive neurological deficits, suspicion of osteomyelitis, cancer, or fracture).

Screening in Families of Patients with Colorectal Cancer

Quality of Care NL

Practice Points

1. In NL, families at high risk for colorectal cancer (Lynch Syndrome and familial colorectal cancer type X) screening colonoscopy in first degree family members significantly reduces the risk of colorectal cancer (CRC) by removing polyps that predispose to cancer.
2. The rate of familial CRC in NL is the highest in the world where 30% of incident cases have one or more first degree relative with CRC. This history places family members at higher risk than the population, and the extent of screening is based on the degree of family risk.
3. The content of a screening program for family members can be calculated from knowledge of the family history and characteristics of the incident case.
4. An algorithm has been created that integrates this information using Amsterdam and Bethesda criteria, which provides good predictions of the frequency of colonoscopy recommended by a geneticist for those family members who should have a colonoscopy.
5. Decision Aid coming soon.

The Decision Aid helps answer three important questions

1. How frequently should the family members of a patient with colorectal cancer receive screening, i.e., colonoscopies?
2. When should the screening begin for family members?
3. Should this family meet with a genetic counsellor?

Familial Risk Stratification

High

Amsterdam I or Amsterdam II Criteria
- Colonoscopy every 1-2 years

Intermediate High

Age/Cancer modified Amsterdam Criteria (ACMAC) or ≥ 3 Bethesda Criteria
- Colonoscopy every 2-3 Years

Intermediate Low

1 or 2 Bethesda Criteria
- Colonoscopy every 3-5 years

Low

Did not qualify under any risk criteria
- Colonoscopy every 5 years if patient with CRC was < 65 years at diagnosis
- FIT testing every 5 years if patient with CRC was ≥ 65 years at diagnosis

Infomation Required:

Has the patient had colorectal cancer?	Yes / No
Age at time of colorectal cancer diagnosis?	Age
Was the colorectal cancer synchronous or metachronous?	Yes / No
Does one of the patient's parents have a history of colorectal cancer?	0 / 1 / 2+
What was the youngest age of Lynch syndrome cancer diagnosis?	Age
How many of the patient's siblings have colorectal cancer?	0 / 1 / 2+
What was the youngest age of colorectal cancer diagnosis?	Age
How many of the patient's siblings have a history of any Lynch syndrome cancers?	0 / 1 / 2+
What was the youngest age of Lynch Syndrome cancer diagnosis?	Age
How many of the patient's children have colorectal cancer?	0 / 1 / 2+
What was the youngest age of colorectal cancer diagnosis?	Age
How many of the patient's children have a history of any Lynch Syndrome cancers?	0 / 1 / 2+
What was the youngest age of Lynch Syndrome cancer diagnosis?	Age

16

Future Projects Planned

1. Vascular Testing

Impact of peer comparison/academic detailing on use of carotid artery testing and on peripheral artery testing in Eastern Health.

2. Potentially Unecessary Labratory Ordering

Impact of peer comparison/academic detailing on use of four biochemical tests.

3. Pediatric Ultrasound Use

Utilization of ultrasound in infants for (a) hip dysplasia, where infants may be referred prematurely, (b) sacral abnormalities, where infants may be unnecessarily referred for investigation of a dimple (c) abdominal investigation for unnecessary screening will be examined.

4. Cancer Screening in Metastatic Breast Cancer Patients

This project examines unnecessary screening for colorectal cancer, cervical cancer and other cancers in patients whose life expectancy is such as to get no benefit from the screening, as suggested by **Choosing Wisely Canada**.

5. IgE Testing

Choosing Wisely Canada suggests that IgE testing should be undertaken only in selected patients. Utilization of these tests will be examined and compared to peer practice.

7. Use of Myoviews

Choosing Wisely Canada has suggested that these tests are not indicated in asymptomatic patients and may be overutilized.Also they are indicated in defining coronary risk in symptomatic patients and may be underutilized at the expense of unnecessary cardiac catheterization The project examines of utilization of myoview in nuclear medicine and the need for myoview in patients undergoing cardiac catheterization.

Survey of Physicians Awareness and Attitudes to Choosing Wisely NL

n=262
Response Rate=88%

Survey

1. **Are you aware of Choosing Wisely NL?** (CWNL)

   Yes 256 (98%)
   No 6 (2%)

2. **If you are aware, do you know that CWNL is a partnership between Memorial Medical School and the NLMA?**

   Yes 191 (73%)
   No 69 (27%)

3. **Have you read the email sent to you on any of the first 3 CWNL projects?**

   Yes 186 (71%)
   No 68 (26%)

   If No, would receipt of a paper copy in future be a benefit to you?

   Yes 45 (17%)
   No 38 (15%)

4. **Have you accessed your personal data on the secure CWNL website for either the blood urea or prevention of secondary stroke projects?**

   Yes 113 (43%)
   No 139 (53%)

   If No, would receipt of a paper copy in future be a benefit to you?

   Yes 72 (28%)
   No 50 (19%)

5. **Have you looked at the slides on Antibiotic Use in NL on the CWNL website?**

   Yes 128 (49%)
   No 134 (51%)

6. **Did you receive the prescribing and information aids (via mail) to help you communicate with patients?**

   Yes 200 (76%)
   No 55 (21%)

7. **Were these aids of any benefit to you?**

   Yes 128 (49%)
   No 25 (10%)
   Somewhat 66 (25%)

8. **Do you want to be a participant in CWNL? (CWNL Participant will be someone who will read CWNL reports and act on them)**

   Yes 169 (65%)
   No 33 (13%)
   Unsure 57 (22%)

9. **Do you want to be a Clinical Leader of CWNL? (CWNL Clinical Leaders are local champions for Choosing Wisely NL who implement recommendations through clinical practice and are local spokespeople for the campaign)**

   Yes 38 (15%)
   No 135 (52%)
   Unsure 86 (33%)

10. **Do you want to participate in a credit providing CME program based on CWNL projects?**

    Yes 219 (84%)
    No 37 (14%)

11. **Do you want to provide any feedback on how CWNL would best engage with doctors?**

    1. Face to face in clinic
    2. Email with personal data
    3. Continuing medical education

12. **Do you have any advice on overcoming barriers to or facilitating participation in CWNL?**

    1. Better communication with doctors
    2. Provide CME credits
    3. Educate the public

13. **Gender:**
    Male 125 (48%)
    Female 133 (51%)

14. **Years in practice:**
    Range 0-50 years
    Median 17 years

15. **City/Town of practice:**
    St. John's 148 (56%)

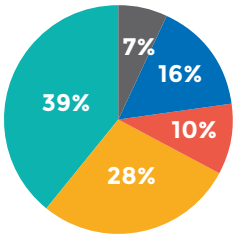
16. **Any Other Comments:**

Survey of Public Awareness and Engagement with Choosing Wisely NL

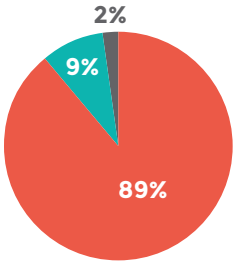
Survey Methods

1. Systematic sampling from selected households from listed telephone numbers in NL.
2. Interviews of 401 residents in May 2017. Response Rate of 9%.

Are there a lot of unnecessary tests, treatments, and procedures that are not helpful to patients in our provincial health system?



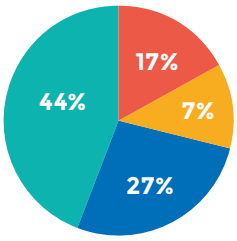
Prior to today, have you seen or heard anything about Choosing Wisely NL?



	NL	St. John's/Avalon	East	West
Yes, have heard	9%	12%	5%	6%

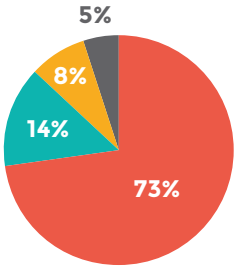
- 46% saw or heard about CWNL on TV and only 5% at doctors office/hospital

Are you familiar with FAST, which is a way to remember and identify the common symptoms of a stroke?



	Agree %
Patients need support or information to help make better decisions about which services they need for their health	93
Doctors have the main responsibility to reduce unnecessary tests, treatments, and procedures	84
Unnecessary tests, treatments, and procedures create unnecessary stress and burden for patients	81
Getting rid of or reducing unnecessary tests, treatments, and procedures means less waste in the health system	80
Lowering the number of unnecessary tests, treatments, and procedures will improve patient care	69
Getting rid of or reducing unnecessary tests, treatments, and procedures is all about saving money in the health system	68
Doctors do unnecessary tests, treatments, or procedures, or write prescriptions because they think patients want them	54

In your personal opinion, do you think antibiotics are required to treat a cold or flu?



Conclusions

1. Unnecessary interventions are not helpful to patients who need support or information to help make better decisions about which services they need. Doctors have the main responsibility to reduce unnecessary interventions.

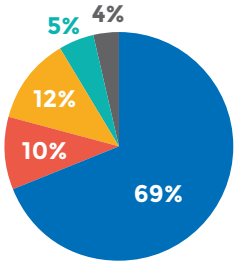
Survey of public priorities for health care issues

NEWFOUNDLAND AND LABRADOR SUPPORT
Support for People and Patient Oriented Research and Trials

As part of the priority setting process for Quality of Care NL and the associated programs, the NL Support Unit for People and Patient Oriented Research and Trials (NL SUPPORT) conducted a province-wide survey to determine the priorities of health care system users, based on the January 2015 "What We Heard" document produced by the Department of Health and Community Services

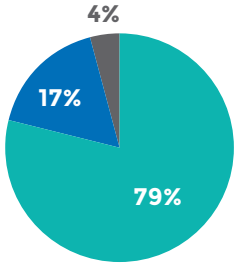
Survey Methods

1. Postal survey sent to a 1000 NL residents - response rate 8% (N = 77).
2. Survey advertised on social media and through community networks (N = 208)
3. Of the 285 respondents, 69% were from Eastern, 79% were female, 56% were <50 years, 29% were between 50-64 years and 12% ≥ 65 years
4. Respondents ranked a list of potential health care problems by order of importance (1-4)



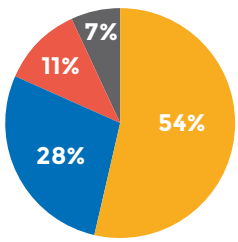
Area of Residence

Eastern
Western
Central
Labrador-Grenfell
Not Reported



Gender

Female
Male
Not Reported



Age

<50
50-64
≥ 65
Not Reported

Percentage of people who indicated these health care problems as the most important in NL

Not enough is being done to help people with mental health problems and addictions.	28.2%
I have to wait too long for medical care and I have trouble getting medical care when I need it.	24.9%
Not enough is being done to help people make healthy choices before they get sick.	18.2%
I have to see a different family doctor every time or my doctor or nurse doesn't seem to know my medical history	5.6%
I have to travel too far for health services.	5.6%
There are not enough community services and supports to help me after I leave the hospital or to make sure I can stay in my home longer instead of going to a care home.	4.9%
I don't have enough access to other health professionals, such as nurses, pharmacists, and physiotherapists.	2.5%
I don't know which programs and services are available to me or when and how I can use them or my doctor or nurse doesn't know which services they can send me to.	2.5%
There is no nurse practitioner in my community.	2.1%
Other	4.6%

Conclusions

1. From a public perspective the most important health care problems are mental health and addictions, wait times/access to medical care, and preventative medicine.

Notes

Quality of Care NL

Quality of Care NL

QCNL projects:

Focus on the delivery of the right treatment, to the right patient, at the right time.

Choosing Wisely NL™

CWNL projects:

Focus on the reduction of unnecessary tests, treatments and procedures by implementing Choosing Wisely Canada Guidelines.

Questions? Email pparfrey@qualityofcarenl.ca
Visit us online at **www.qualityofcarenl.ca**