

A black and white photograph of a person wearing a white lab coat, holding a clipboard and pen. The image is partially visible on the left side of the slide.

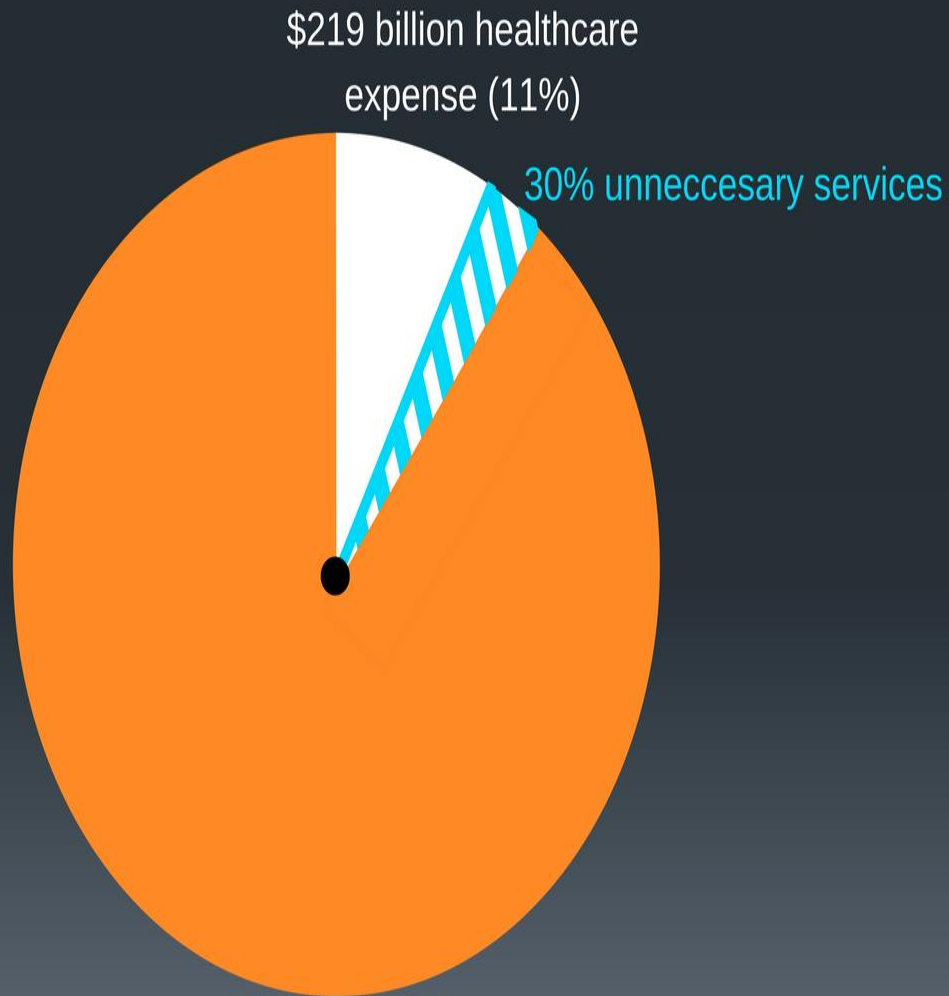
Choosing Wisely NL

Choosing
Wisely
NL

Choosing
Wisely
Canada



Canada's GNP 2015



Newfoundland and Labrador has the highest per capita rate of provincial government health expenditures in Canada



NL



Canada

TPMI Scope

- **Personalized medicine** is a medical model that separates patients into different groups - with medical decisions, practices, interventions and/or products being tailored to the individual patient based on their predicted response or risk of disease (Academy of Medical Sciences 2015)

The **right service** for the **right person** at the **right time**.

The Implementation Science Piece

NL Support encourages and facilitates Patient-Oriented Research through:

- Building capacity - training, student funding
- Funding targeted research
- Doing its own POR

From the outset, we had the Quality of Care Program - projects built on existing teams, areas of interests to researchers and system - not totally POR



Amanda Hall

Knowledge Translation Lead

Quality of Care Projects



Utilization

Laboratory

Imaging

Drug

Long-Term Care

Acute Hospital

Hospital
Interventions

Family Screening

Projects

Renal Function

Carotid Artery
Testing

Psychotropics in
the Elderly

Prediction of LTC
Bed Needs

Remote
Monitoring

Coronary Revasc.

Access to
Genetic Testing

Lactate Dehyd.

Peripheral Artery
Testing

Antibiotics

Personal Care to
Nursing Home

Pharmacy Clinic

Stroke

Ferritin

Colonoscopy

PPIs

Early Recovery
after Surgery

Bariatric Surgery

Low Back Pain

Peripheral
Cardiovasc.

Types of Questions

Knowledge Translation

- How can we move knowledge to action?

Implementation Science

- What intervention(s) works, for whom and under what circumstances; how can they be adapted and scaled up in ways that are accessible and equitable?

Effectiveness

- “Can an intervention work” under “normal/usual” conditions?

Efficacy

- “Does an intervention work” under ideal circumstances?



We needed...

- A patient-oriented program of research that would encompass the vision of getting the **right intervention** to the **right person** at the **right time**

We reviewed...

- The patients perspective - **engaged with patients**
- The provincial context - **budget constraint**
- The environment response - **NLMA input to government**
- The recommendation to reduce low-value health care - **Choosing Wisely Canada**



Choosing Wisely Canada

- CWC has over 200 recommendations for reducing unnecessary testing and other interventions
- Choosing Wisely is bottom-up clinician-led approach to building around patient awareness of testing
- It focuses on common clinical conditions for which testing or treatment has little supporting evidence and may have risk or harm
- This initiative is simple and has had remarkably rapid uptake



CHOOSING WISELY NL

- In-line with ongoing efforts to improve Quality of Care
- Evidence of utilization in NL
- Evidence about appropriate utilization from CWC
- Theoretical framework for behaviour change
- Identify intervention and barriers to change behaviour
- Apply interventions
- Collect evidence on change in utilization
- Inform policy

Choosing Wisely NL Governance Structure



Initial Targets for Intervention

- Guided in part by Choosing Wisely Canada
- Prioritizes by patients, RHA's, and physicians
- Will be open to other sources of evidence of best practice
- Focus is on best health outcomes as well as efficiency and cost



Template

Measure utilization
pattern at baseline



Compare to best practice
recommended by CWC



Design intervention using
theoretical domain framework



Measure utilization
pattern after intervention

Work Completed To Date

- Engaged patients
- Identified initial targets for intervention
- Worked with NLMA and IBM on process to reach physicians individually and confidentially electronically to provide data on comparative practice/ resources use pattern

Work Completed To Date

- Engaged in hiring personnel with implementation expertise, jurisdictional scans, literature reviews
- Developing the access to data and analytic capacity to examine resources use and practice pre- and post-intervention
- Working on best ways to reach the public when necessary (e.g. antibiotic use)

Use of Blood Urea in General Practice

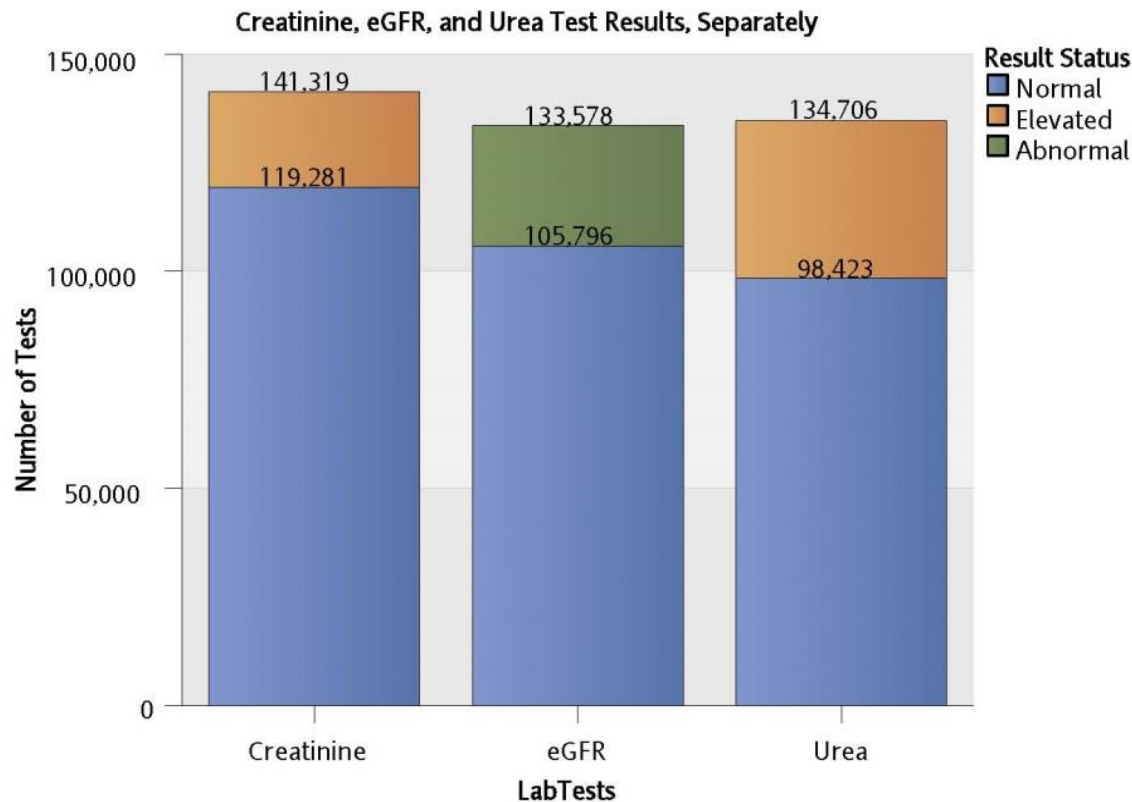
1 July – 31 December 2015

Practice Points

- Blood urea is not necessary to evaluate stable kidney function
- eGFR should not be used to evaluate acute deterioration in Kidney function
- In acute deterioration, blood urea may be increased by decrease in blood volume, hypercatabolism, or by bleeding retained in the body.

Tests results separately, 1 July – 31 December 2015

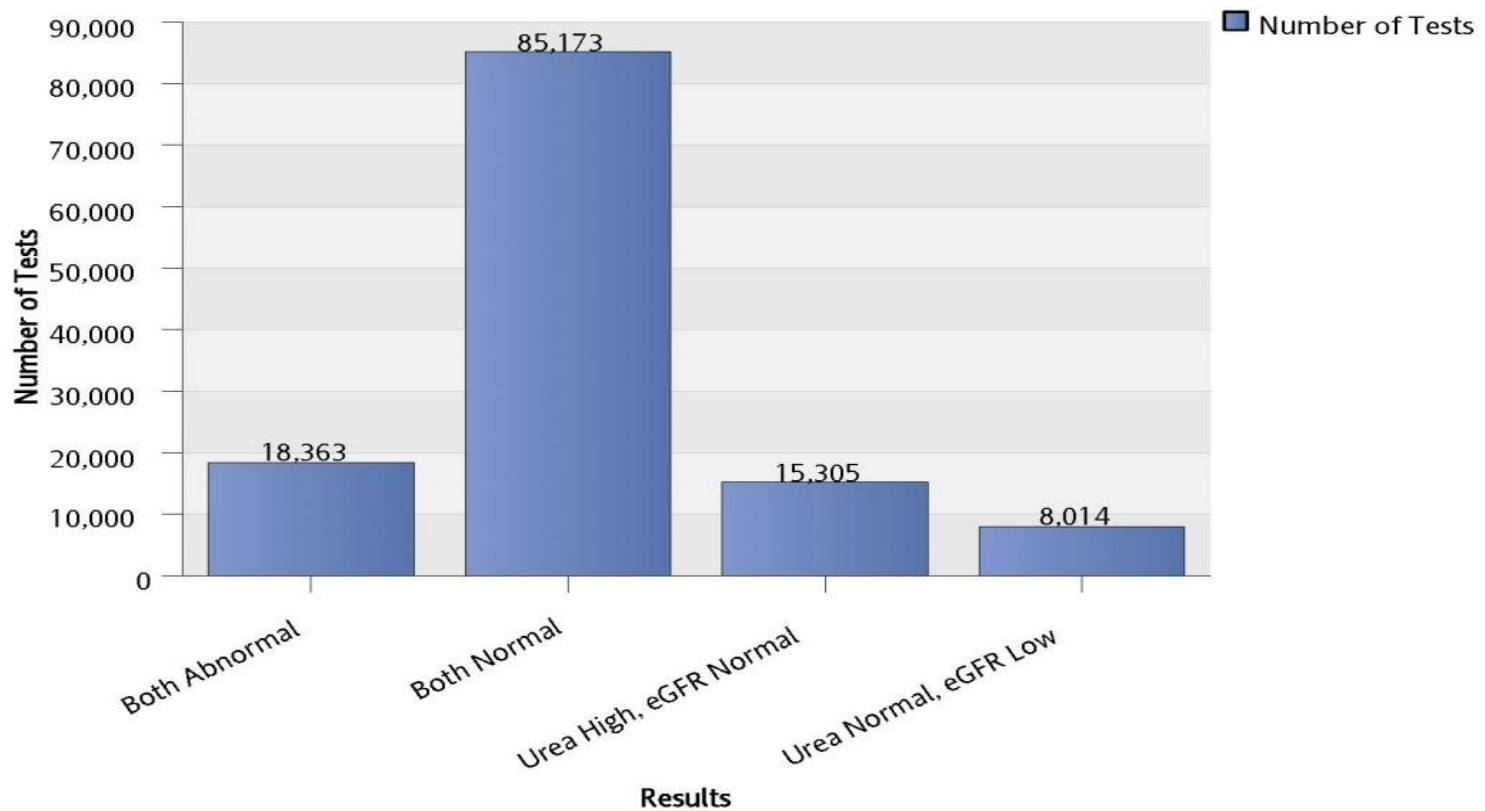
In general practice, blood urea is usually ordered with serum creatinine, and is unnecessary in stable patients.



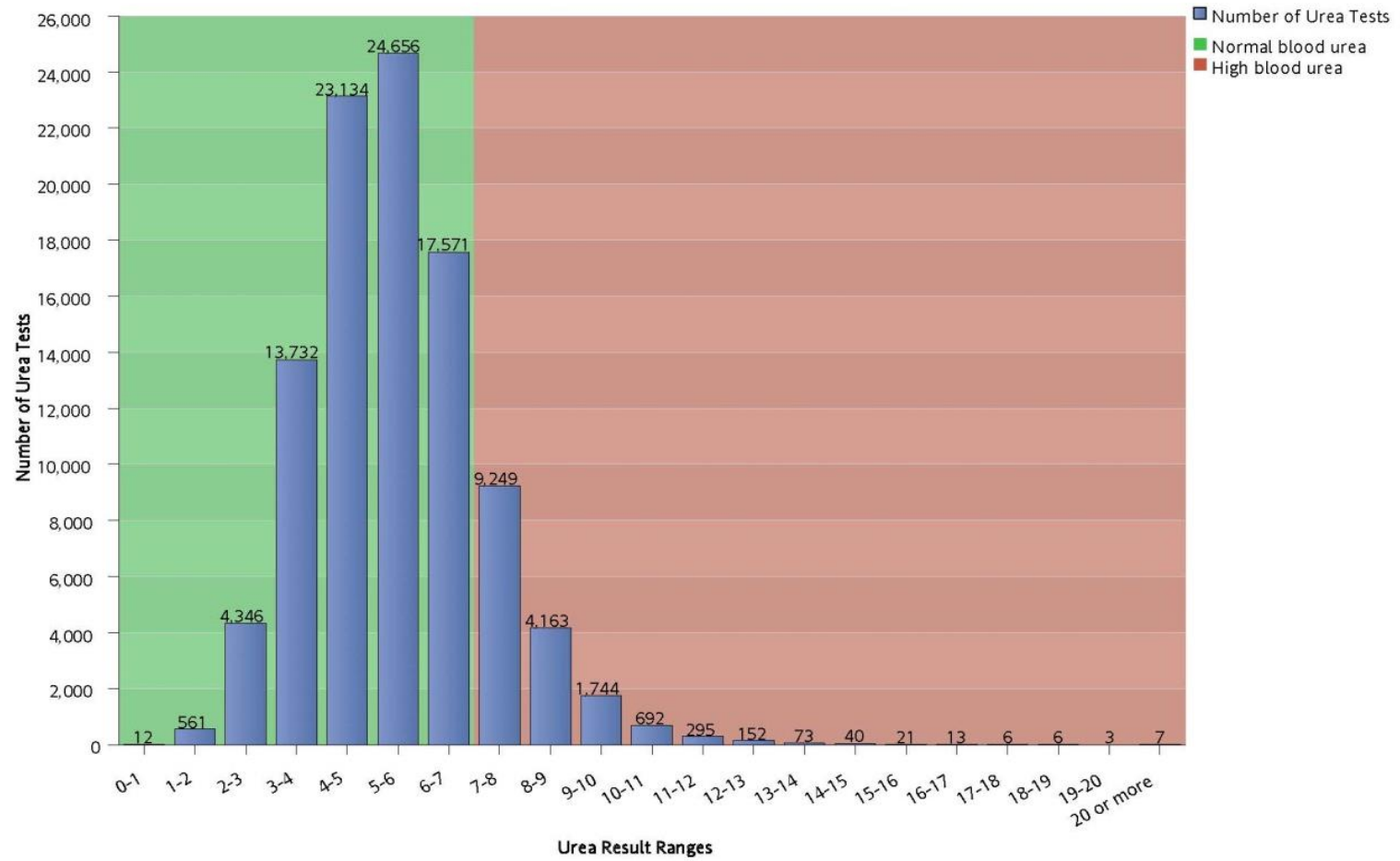
Abnormals	Percentage
Creatinine High	16%
Urea>7 mmol/l	27%
eGFR<60 ml/min	21%

eGFR vs Urea, 1 July – 31 December 2015:

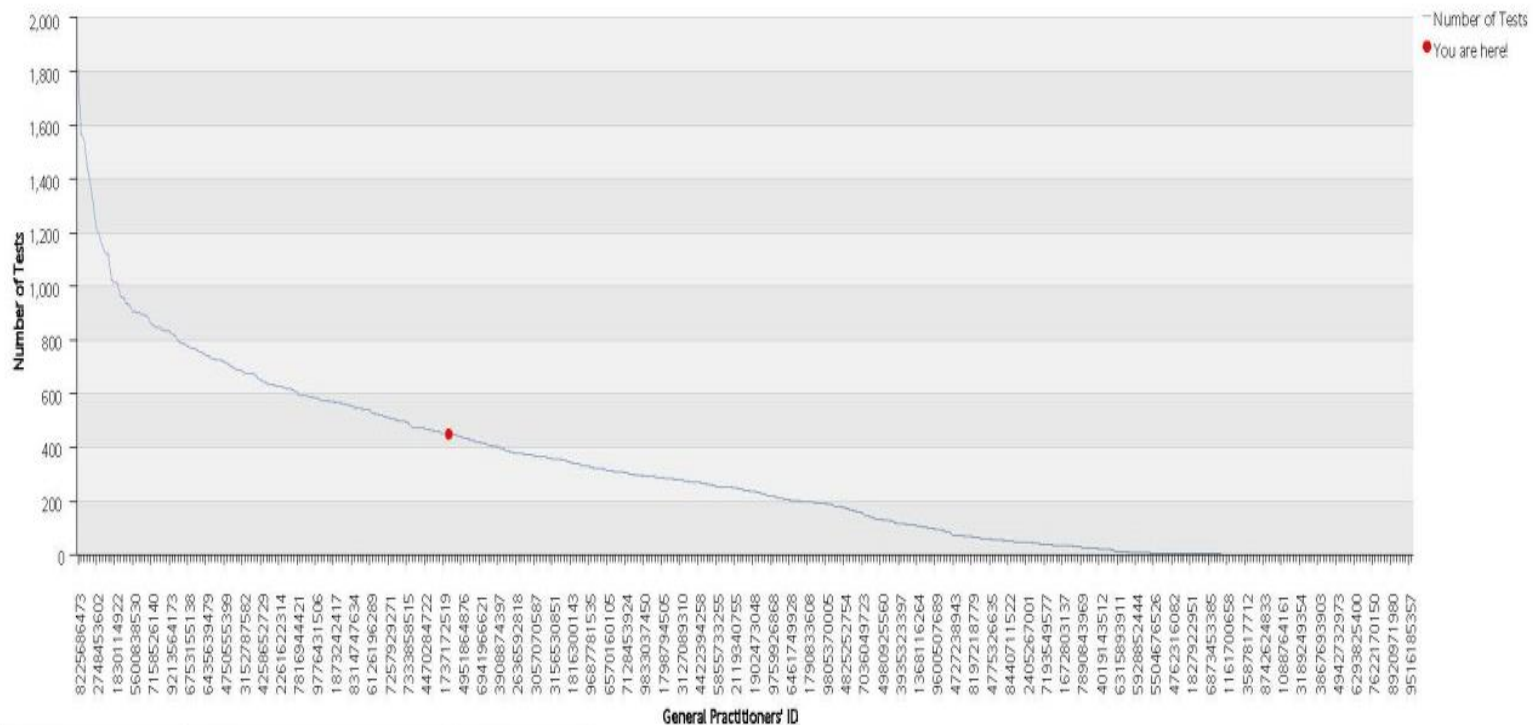
*High blood urea with normal eGFR in stable patients creates unnecessary diagnostic confusion



Blood Urea in Patients with normal eGFR



Number of Urea Tests submitted by General Practitioners:



Your ID	Your Number of Tests	Your Rank
3,527,895,503	450	122



Practice points: *Secondary Stroke*

- Occurs after an initial stroke or warning event (TIA or “mini-stroke”)
- Most within 48 hours
- Severely disabling or fatal
- **80% Preventable**



Practice Points

**Carotid Endarterectomy (CEA)
within 14 days of symptom onset:**

- Acutely symptomatic patients
- Carotid territory events

Implication:

- **Rapid carotid imaging and surgical intervention**



Guideline

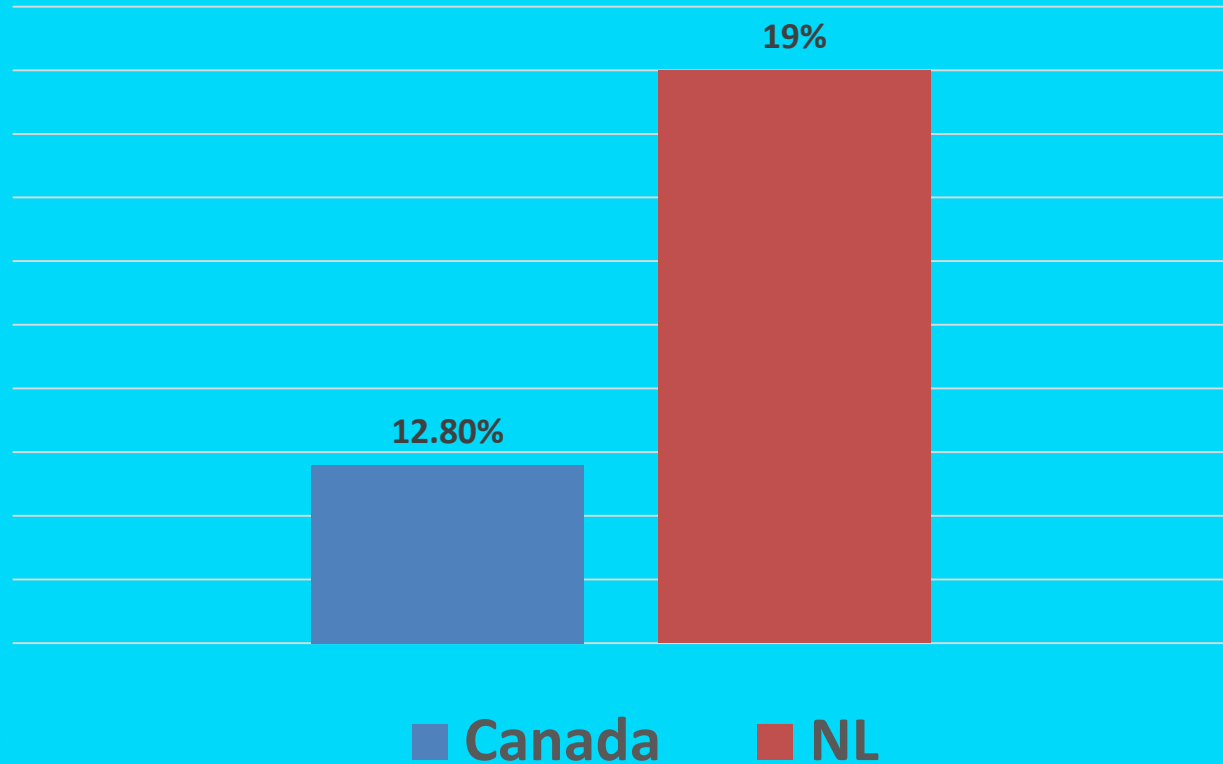
Refer patients with acute carotid territory symptoms for immediate investigation

Within previous 48 hours:

- **Unilateral weakness**
- **Aphasia**
- **Amaurosis fugax**

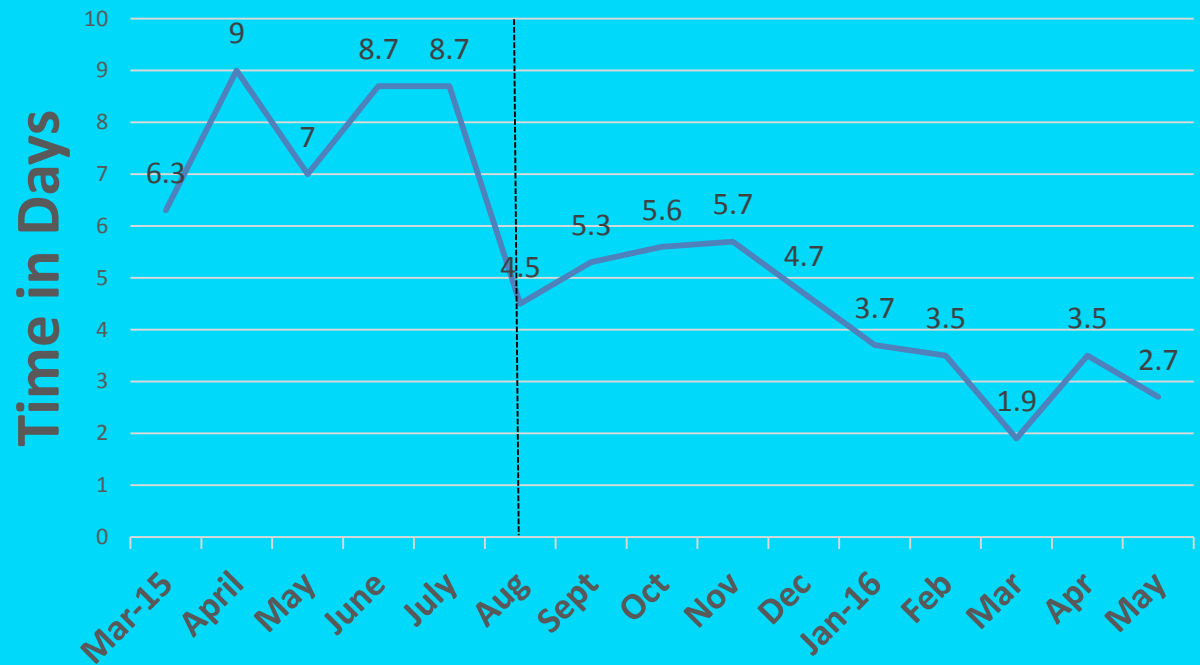
Why?

Incidence of Secondary Stroke (Quality of Stroke Care in Canada 2011)



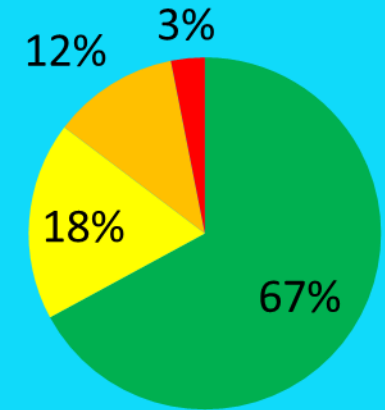
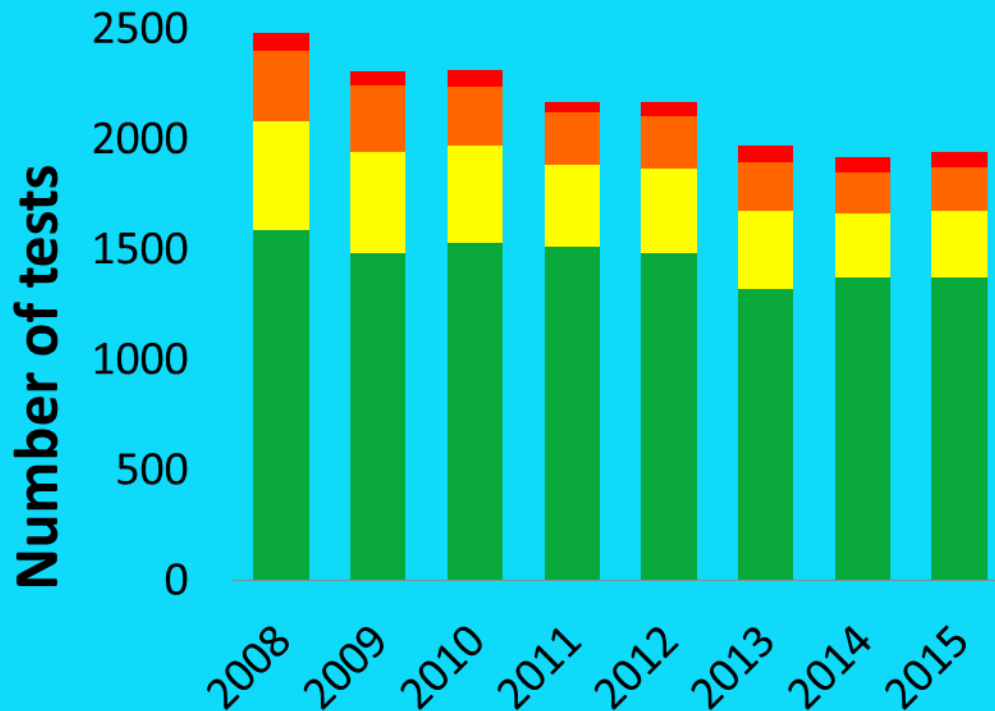
Current Utilization

P1 Carotid U/S Wait Time March 2015 - May 2016



Current Utilization

Carotid Testing 2008-15

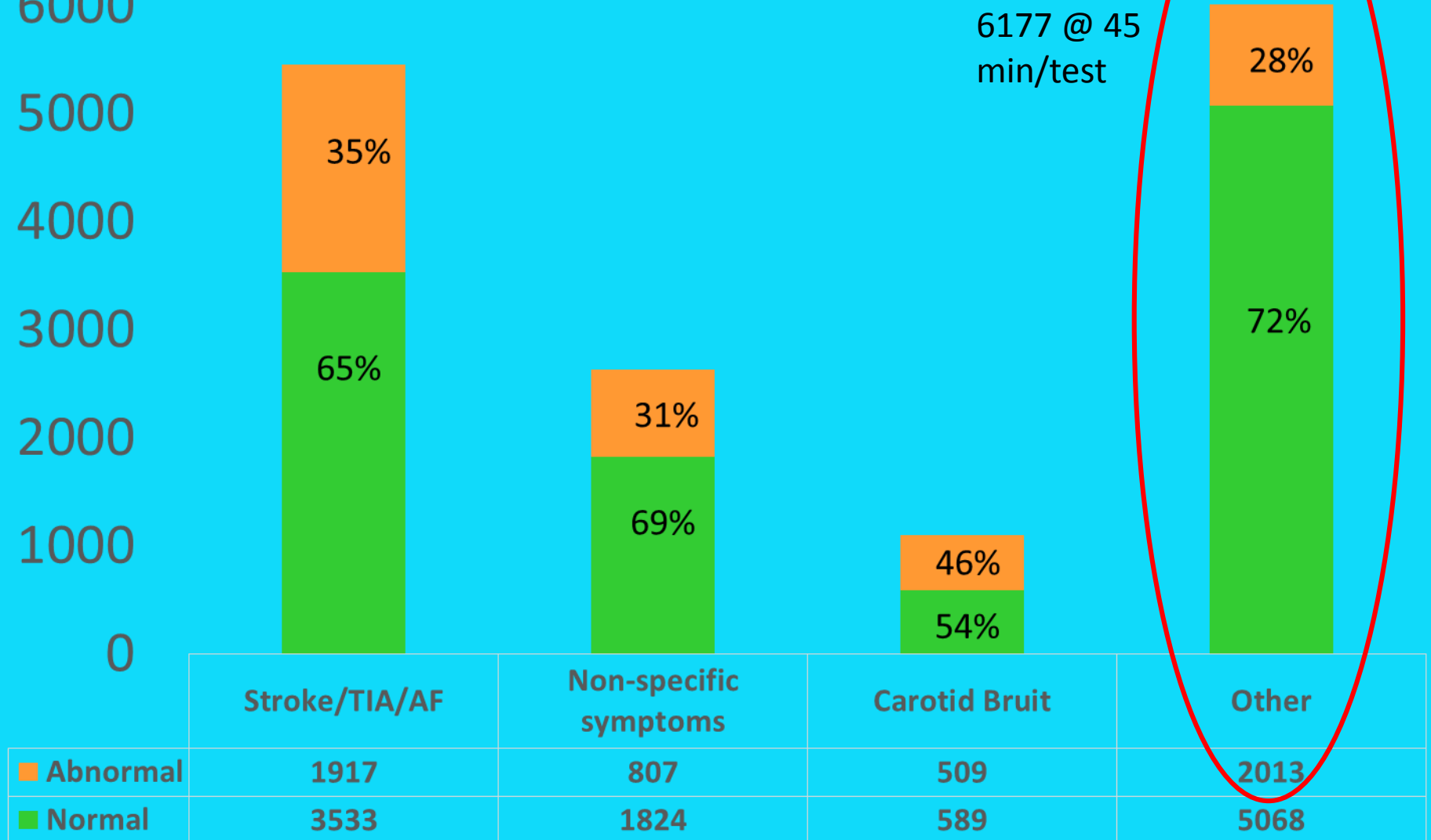


- Normal
- > 50% Stenosis
- > 70% Stenosis
- Complete Occlusion

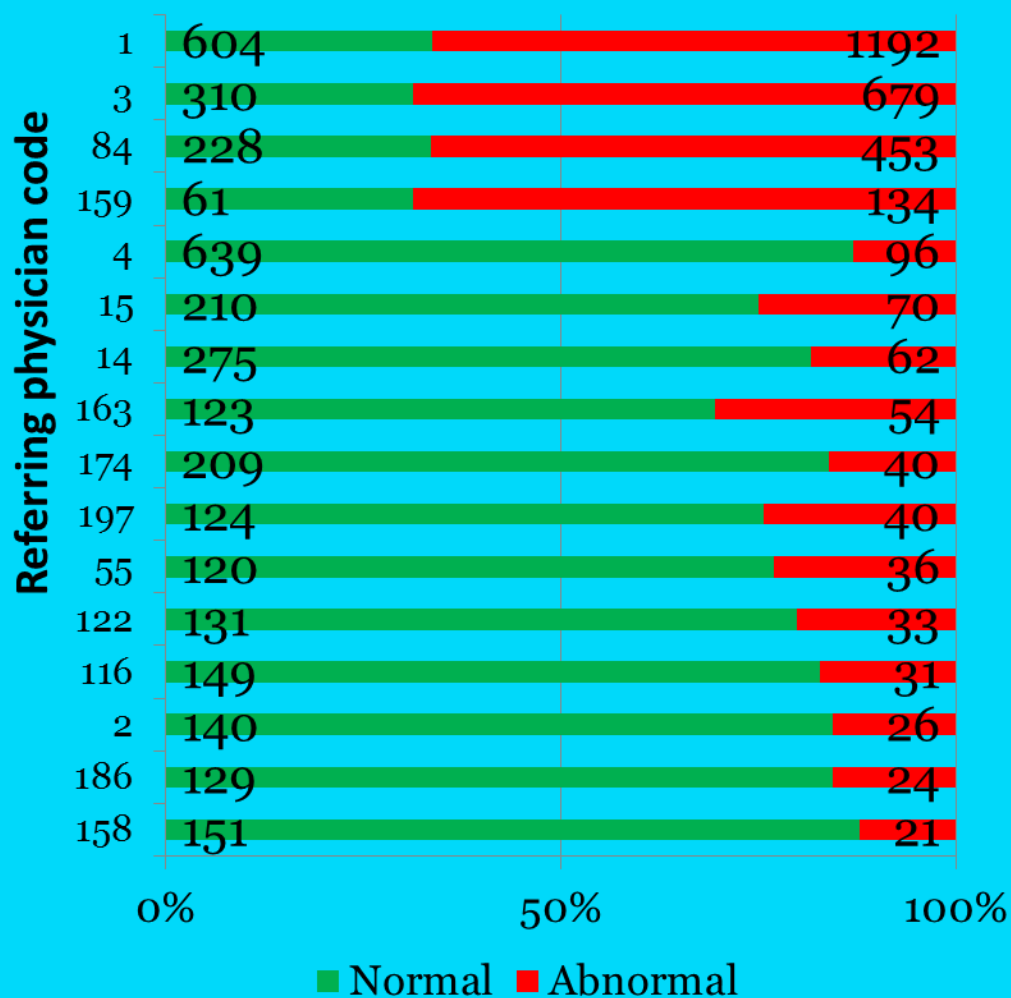
Outcome by Indication 2007-14

6000
5000
4000
3000
2000
1000
0

6177 @ 45
min/test



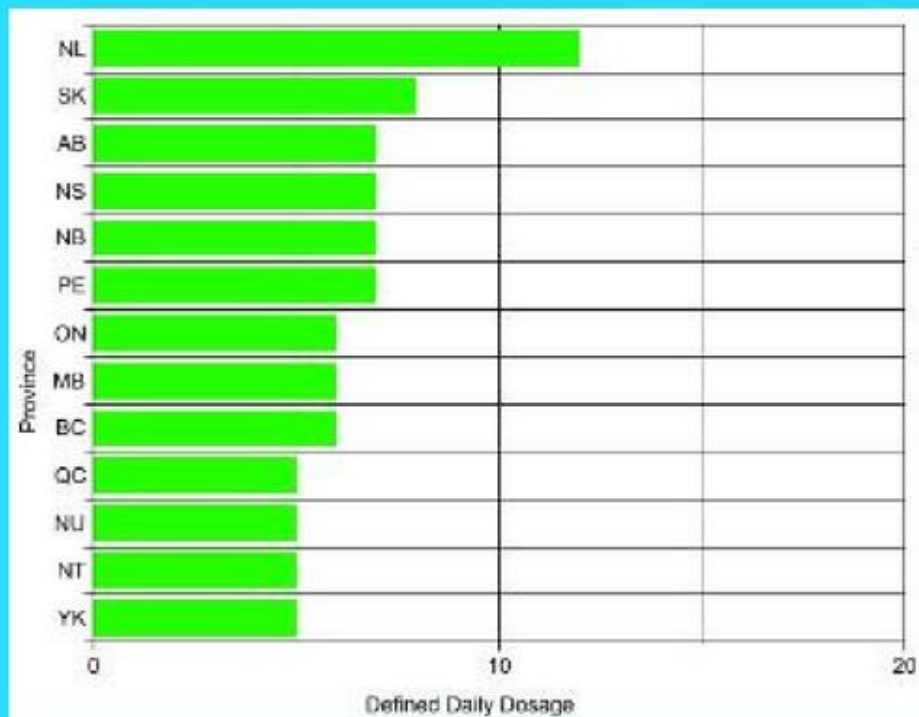
Current Utilization



Dr. Browne On Carotid Tests

<https://drive.google.com/file/d/0B-kNEwIOrCWfM1dwSFf0aS1PeUk/view?usp=sharing>

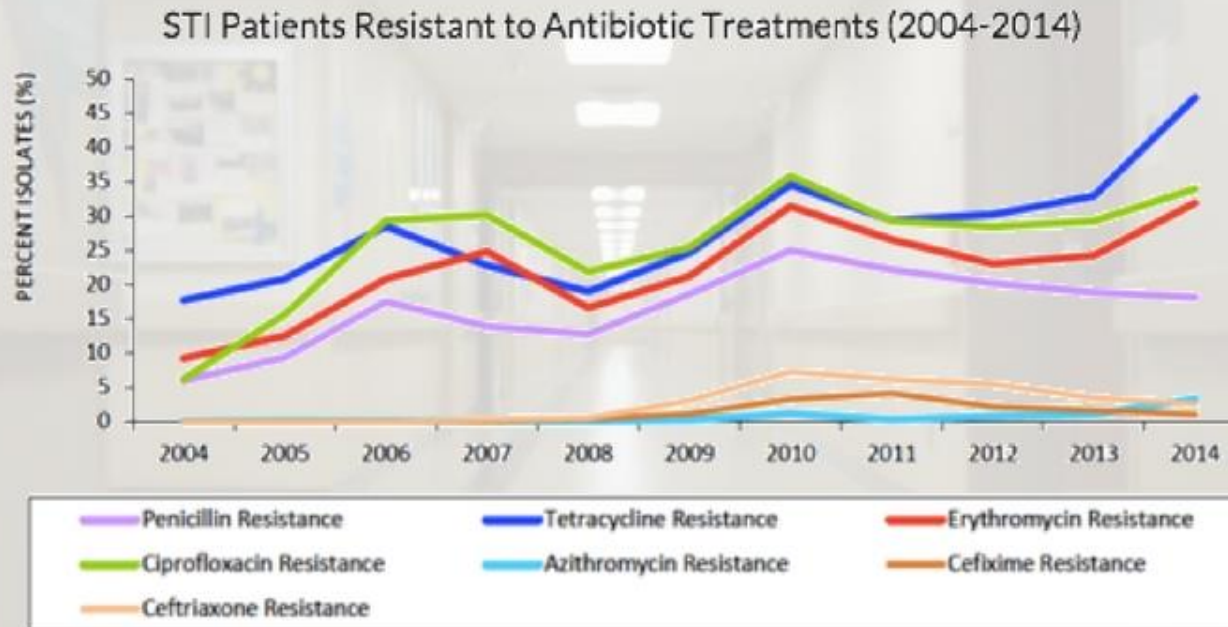
HERE ARE THE NUMBERS...



**IN 2014, DOCTORS IN NEWFOUNDLAND & LABRADOR GAVE MORE ANTIBIOTICS THAN DOCTORS IN ANY OTHER PROVINCE
ONE-THIRD HIGHER THAN THE SECOND HIGHEST USE RATE**



THERE'S SOME BAD NEWS...



**BACTERIAL RESISTANCE TO
ANTIBIOTICS IS INCREASING**

what can we do?



1. DON'T USE ANTIBIOTICS FOR UPPER RESPIRATORY INFECTIONS THAT ARE LIKELY VIRAL IN ORIGIN, SUCH AS COLDS, INFLUENZA-LIKE ILLNESS OR SELF-LIMITING SINUS INFECTIONS OF LESS THAN 7 DAYS DURATION

2. DON'T USE ANTIBIOTICS TO TREAT BACTERIA IN THE BLADDER IN OLDER ADULTS UNLESS SPECIFIC URINARY TRACT SYMPTOMS ARE PRESENT

Choosing Wisely Canada

IN CHILDREN AND ADULTS, ANTIBIOTICS SHOULD NOT BE USED TO TREAT MILD INFECTIONS CAUSED BY VIRUSES, NOT BACTERIA

- Colds or influenza-like illness
- Sinus infections
- Bronchitis with uncomplicated wheeze or cough
- Uncomplicated sore throats
- Ear infections

First Campaign: Reduce Urea Testing In Family Practice

- Summary slide an email from NLMA: 300 active doctors
- Click to obtain personal utilization data: 1/3
- Required information by paper 43: 1/8

Second Campaign: Antibiotic use

- Email and education slides
- Decision aids by post
- Peer comparison in 3 months

First Public Campaign: Antibiotic use

- Press release: TV x 3, Radio x 4
- Slides on website
- Video
- Twitter and Facebook

Next Campaigns

1. Carotid artery testing
2. Peripheral vascular disease testing
3. LDL and Troponin testing in the community
4. Ferritin testing
5. Colonoscopy
6. Antibiotics in Nursing Homes
7. Low back pain imaging
8. Antipsychotics in Nursing Home