

PENICILLIN ALLERGY DE-LABELING PROJECT AT UHNBC

Accessibility to Healthcare



INTRODUCTIONS

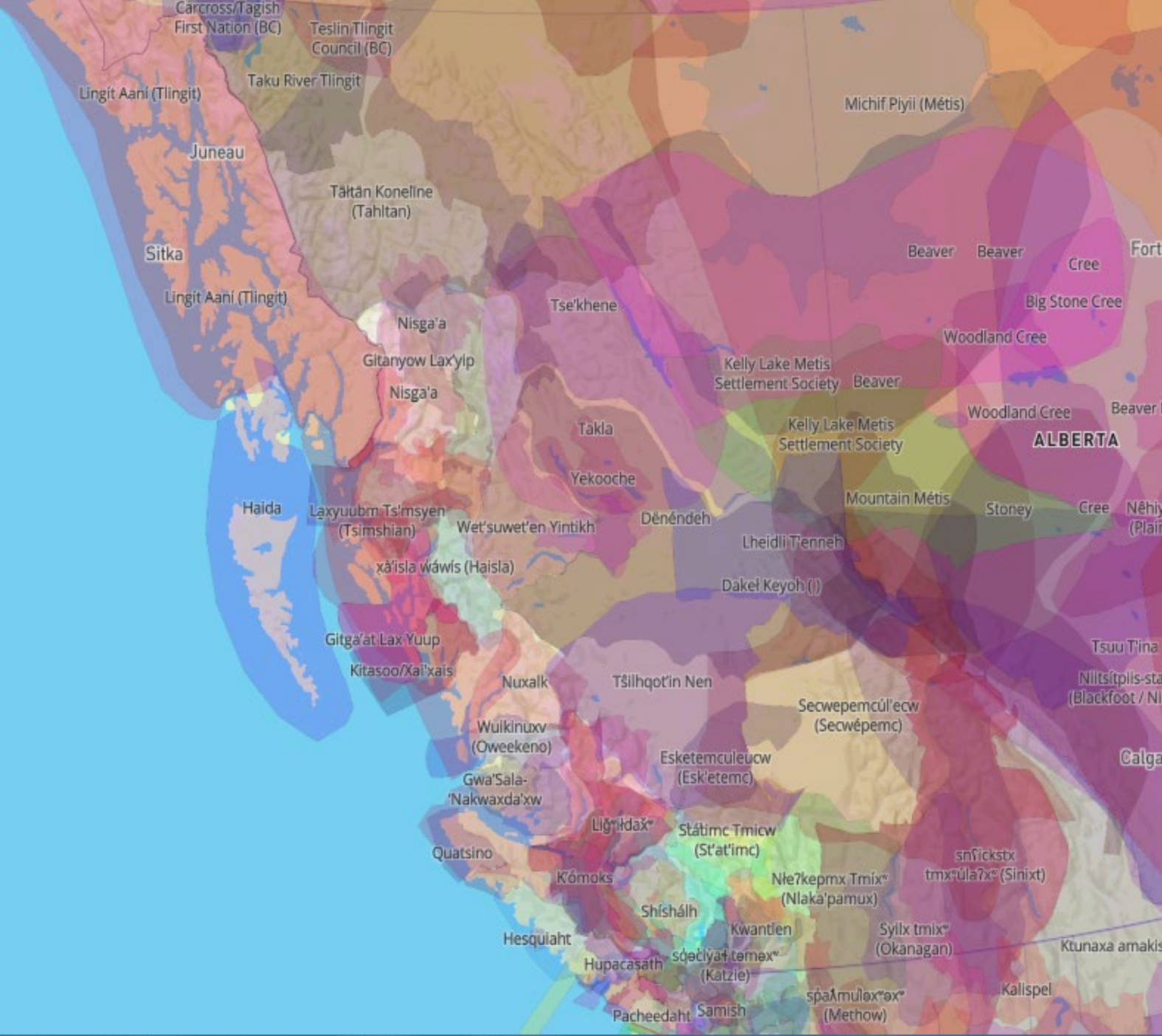
Heather Gummow

Dr. Irina Sainchuk

Sumeet Hayer

DISCLOSURES

We have no conflicts of interest and nothing to disclose



Prince George is situated on the traditional territory of the Lheidli T'enneh and their traditional lands cover much of the area from present-day Prince George to the Rocky Mountains. We wish to acknowledge respect and honor the keepers of the land in which we conducted our work.

We would like to acknowledge that the land we live and work on is comprised of many traditional, ancestral, and unceded territories of First Nations, Métis, and Inuit.

ACKNOWLEDGEMENTS

We'd like to acknowledge the physicians, staff, programs, and partners that enabled this project to take place

Project Overview

Regionally and provincially resources have been allocated to support the Spread of successful QI projects



This project originated as a Physician Quality Improvement project at BC Children's Hospital




Dr. Sharla Olsen and Dr. Irina Sainchuk identified this work as a priority



Engaged a team of individuals to develop a Penicillin Allergy De-labeling Clinic at UHNBC

Journey

Project team consisted of physicians, operational leadership, pharmacy, nursing unit clerk, health information management staff, spreading QI team, etc.



Operational and financial approval



Engagement with Departments of Emergency, Obstetrics and ICU



Facilitated multiple process mapping sessions to document clinic and patient flow

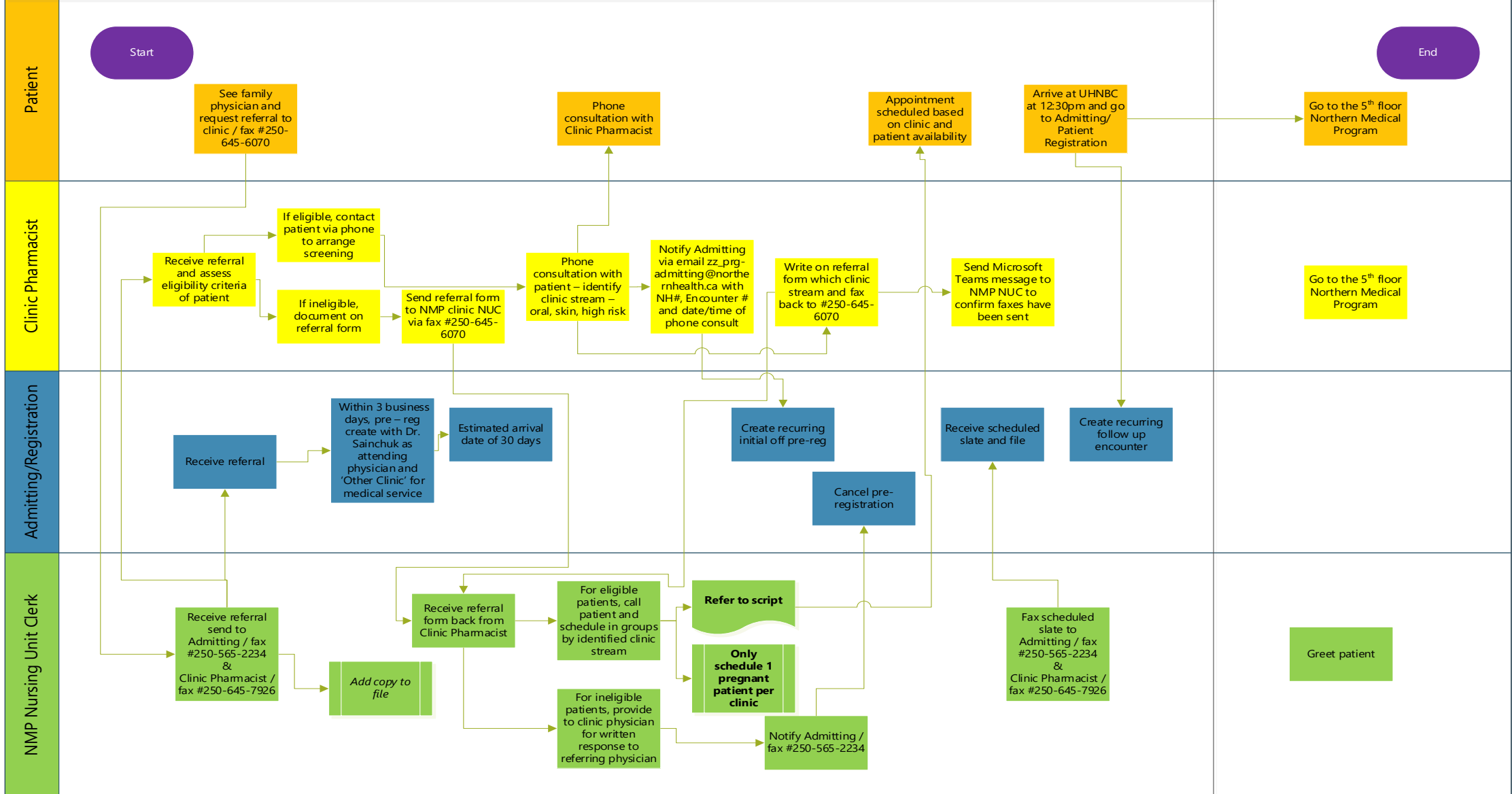


Development of data analysis spreadsheet

Penicillin Allergy De-labeling Clinic, UHNBC

Referral through to patient arriving at clinic

Thursdays @ 1pm



DID YOU KNOW?

10% of the population report they have an allergy to penicillin, however; after careful evaluation, 90% of these individuals are found not to be allergic

In patients who are allergic to penicillin, 50% outgrow their allergy after 5 years and 80% outgrow after 10 years of avoidance

HARMS ASSOCIATED WITH USING ALTERNATIVE ANTIBIOTICS

Increased risk of “superbugs”

More side effects

Needing to use several antibiotics in combination to treat the same infection

If you are pregnant there is an increased risk of infection post delivery

Not being able to treat syphilis effectively

More expensive

BENEFITS

Removing a penicillin allergy label ensures patients have the best antibiotic options available for treatment of infections for the future.

Supports our Institute for Healthcare Improvement (IHI) Quadruple Aim framework by supporting better outcomes, improving patient experiences, as well as lowering costs.

PATIENT PARTNER PERSPECTIVE

- KE, 40 y/o with interstitial lung disease (ILD) with frequent respiratory infections requiring antibiotic therapy
- Penicillin allergy label has greatly limited the available treatment options
- De-labeled successfully in summer 2023 which has opened the possibilities of antibiotic choices
- Potentially resulting in more targeted treatment, less side effects, reduced healthcare costs and less antimicrobial resistance

ACCESSIBILITY TO EQUITABLE CARE

“The development of the Penicillin Allergy De-Labeling Clinic at UHNBC provides a unique opportunity for patients with a penicillin allergy label to be safely assessed and ensures the population of the North has access to equitable care”

Alicia Rahier, AMS Lead Pharmacist

TO DATE

Clinic is running one group visit per month

Patients are pre-assessed and categorized into three streams of clinic – Oral Challenge, Skin Testing, Allergist Referral

Safely de-labeled 33 patients with no adverse outcomes

Of the 33 patients, 60% female without child, 21% female with child and 19% male

Average cost savings per patient \$2,650 / total cost savings for project \$87,450

PENICILLIN ALLERGY DE-LABELING PROJECT AT UHNBC

AIM:

By January 2023, develop and implement a clear and safe process to assess and de-label patients with a penicillin allergy label at the University Hospital of Northern BC



TOTAL PATIENT REFERRALS

98



PRE-ASSESSMENT COMPLETE, AWAITING APPOINTMENT

46



WAITING TO HEAR FROM PATIENT

16



TOTAL PATIENTS DE-LABELED

33

OF THE 33 DE-LABELED PATIENTS:

26 PATIENTS WERE FROM PRINCE GEORGE, 3 FROM VANDERHOOF, 1 FROM SMITHERS, 1 FROM FORT ST. JOHN, 1 FROM HOUSTON, AND 1 FROM BURNS LAKE



60% female without child, 21% female with child, 19% male



100%

OF PATIENTS HAD NO REACTION DURING THE TESTING PROCESS AND WERE SUCCESSFULLY DE-LABELLED!

WHY IS THIS BENEFICIAL?

"Inappropriate penicillin allergy labels result in suboptimal antimicrobial treatment, increased risk of surgical site and resistant organism infections, adverse drug events, and higher healthcare costs." (1)

THE AVERAGE PATIENT ACCESSING THIS TESTING IN PRINCE GEORGE VERSUS HAVING TO TRAVEL TO VANCOUVER SAVED A TOTAL OF \$2,650

INCLUDING KM/FLIGHTS, HOTEL, MEALS, TIME LOST AT WORK, CHILDCARE, ETC.

TOTAL PATIENT COST SAVINGS TO DATE:

\$87,450

SQI SPREADING QUALITY IMPROVEMENT

northern health
the northern way of caring

References: 1. [https://aacjournal.biomedcentral.com/articles/10.1186/s13223-023-00777-4#:~:text=Inappropriate%20penicillin%20allergy%20labels%20result,higher%20healthcare%20costs%20%\\$B5%\\$D](https://aacjournal.biomedcentral.com/articles/10.1186/s13223-023-00777-4#:~:text=Inappropriate%20penicillin%20allergy%20labels%20result,higher%20healthcare%20costs%20%$B5%$D).

KEY ENABLERS FOR SUCCESSFUL SPREAD



Leadership & Prioritization



Scale & Scope



Training & Education



Culture

Next Steps

Collaboration opportunities with the local pediatricians will continue to be explored and further Spread will be considered with communities across the North.

The SQL team will continue to monitor the success of this project and review and analyze data with the broader team.

CONNECT WITH THE TEAM



SQI@NORTHERNHEALTH.CA



250-612-8553

Questions

