The Saskatchewan Cancer Registry: innovative uses to accelerate improvement in quality of cancer services

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Outline

- Background
- The Saskatchewan Cancer Registry
- Saskatchewan Health System Reform
- Mapping The Cancer Patient Value Stream
- Lessons and Future Directions
Saskatchewan

- Population: ~1.1 million
- Major urban centres:
  - Saskatoon (~260,000)
  - Regina (~210,000)
- Economy:
  - Agriculture
  - Potash and uranium
  - Oil and gas
The Saskatchewan Cancer Agency

- Responsible for provision of cancer services to the people of Saskatchewan
- Prevention, early detection, treatment, research
- Two primary treatment facilities: Regina & Saskatoon
- Operates the Saskatchewan Cancer Registry
The Saskatchewan Cancer Registry

- One of the world’s oldest cancer registries, started in 1932
- 1944: Population-based
- 1977: Computerized registry system created
- 2011: Eureka
The Saskatchewan Cancer Registry

- ~260,000 patients currently in the database; ~350,000 case records
- ~9000 new cases registered every year

Content
- Patient information
- Tumor information
The Saskatchewan Cancer Registry

- Twenty-two positions in the Cancer Registry Department

- NAACCR Gold Standard Certification six years standing

- Contributed to ten volumes of IARC’s “Cancer Incidence in Five Continents”
Use of Saskatchewan Cancer Registry Data

- Epidemiology and surveillance
- Planning and evaluation of cancer control activities
- Cancer outcomes research
- Quality improvement
Surveillance – Statistics and Reporting

Saskatchewan Cancer Control Report

Saskatchewan Cancer Control Report
Profiling Cancer Stage at Diagnosis

Long-Term and Short-Term Projections for Cancer Incidences and Mortality in Saskatchewan

Cancer Projections Network (C-Prax)

Prepared by
Epidemiology Department
Saskatchewan Cancer Agency
Prepared for
Canadian Partnership Against Cancer (CPAC)

January 2012

Annual Report
OF THE
SASKATCHEWAN CANCER COMMISSION
FOR THE CALENDAR YEAR
1932

HONORABLE FREDERICK DENNIS MUNROE, M.D., C.M.
Chairman.
REGINALD OLIVER DAVISON, M.D.
Deputy Chairman.
DAVID LOW, M.D., C.M., F.R.C.S. (C.)
Commissioner.

[Signature]
Roelee G. Conroy, King’s Printer
1932
Surveillance – Statistics and Reporting

- Canadian Cancer Registry for *Canadian Cancer Statistics*
- CPAC for System Performance Reports
- NAACCR for *Cancer Incidence in North America*
- IARC for *Cancer Incidence in Five Continents*
Saskatchewan Health System Reform

- 2009: Patient First Review
  - Recommended a system-wide shift towards patient-centered care
  - Called for changes in patient experience, service delivery, and system administration
Saskatchewan Health System Reform

- 2011: Saskatchewan Healthcare Management System
  - Based on Lean: Set of philosophies and methods for continuous quality improvement
  - Applied across the entire provincial health system
  - Data-driven methodology
Value Stream Mapping

- A Lean-management tool for assessing the current state of a process in its entirety and designing a more streamlined and effective process from its beginning through to the final step.
- Visualize interrelated activities as a complete process.
- Optimize process, not pieces of the process.
Mapping The Cancer Patient Value Stream

- Concerns that the patient cancer journey is fragmented
- Past improvements have been system focused and not client focused
- A patient’s cancer journey crosses many components of the health system
- Without a full understanding of the patient journey, opportunities to reduce waste and improve quality of care are missed
Traditional Approach

Screening ➔ Diagnosis ➔ Treatment ➔ Follow-up ➔ Discharge

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Value Stream Approach

Screening → Diagnosis → Treatment → Follow-up → Discharge
Rectal Cancer Patient Value Stream

- Value stream map for typical rectal cancer patient, from time of positive screen to discharge
- Combination of registry and chart abstraction
High Level Current State Rectal Process Flow Map
High Level Future State Rectal Process Flow Map

FIT positive

- Seen for scope within 2 weeks for patients who have symptoms or findings suggestive of malignancy.
- All other patients are seen in 4-6 weeks’ time.

Definitive diagnosis usually takes about a week.

Within 2 weeks oncologist discusses with patient & refers simultaneous requests for staging CT/MRI/EAU

Patient needs to see RO/MO on the same day within 1 week of referral

Neoadjuvant treatment start within 2 weeks.
Adjuvant treatment start within 4 weeks.

After neoadjuvant treatment, patient undergoes surgery at 6 weeks at the most.

Post surgery patient needs to be seen for adjuvant chemo with a plan to start chemo in approximately 4 weeks’ time.
Lessons and Future Directions

- Linking screening and follow-up data with registry data
- New data fields to add to registry
- Improve turnaround times
- Communication between registrars and potential users of data
- Leverage cancer registry in quality improvement activities
Questions