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HEALTH CONSULTANCY & ADVISORY SERVICES INC

Health Matters Bulletin

BY REBOOT HEALTH CONSULTANCY & ADVISORY

ISSUE #1

- Cervical Cancer
- Integrated Care Systems

Contributors Reboot Health Consultancy & Advisory Founding Partners
Roche & Cerner

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Issue 1

Welcome to the first edition of the Health Matters Bulletin, a regular publication provided by the Reboot Health Consultancy & Advisory Group and our Founding Partners. The Group's Objective is bringing together policy, industry and health leaders to discuss poignant topics in healthcare by creating opportunities and organizing formal, ongoing dialogue, and focused communications on a health innovation topics with specialized Health Matter's subject experts. We invite you to review articles which provoke thought leadership and foster collaboration, catalyze healthcare innovation to optimize the use and deployment of increasingly scarce resources in this country.

- Editors: Alan Low, Greg Spievak, and Howard Waldner, Reboot Health Consultancy and Advisory Inc.

Acknowledgments

Issue 1, Article 1

Cervical Cancer Deaths in Canada – An Unnecessary and Preventable Situation?

Co - Authored by

Aleina Spigelman

M.Sc. : Roche Diagnostics Canada

Howard Waldner

MBA CHE ICD.D : Director Reboot Consulting and Advisory Services, Adjunct Professor, school of Public and Population Health UBC

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Integrated Care Systems To Improve Primary Care and Population Health

Authored By

Ryan Irwin

PhD MPA MSc BSc (hons), Senior Population Health Strategy Executive, Cerner

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Cervical Cancer Deaths in Canada

Cervical Cancer Deaths in Canada – An Unnecessary and Preventable Situation?

As part of an advance publication for the upcoming Reboot Healthcare Summit to be held virtually and in-person in Vancouver on 21-22nd October 2021, a series of articles will explore healthcare issues where we can sustain the momentum for change, and move from innovation to implementation. This article reviews the state of cervical cancer screening and incidence in Canada, and examines how innovation by increasing screening rates in underserved populations and improving the test used for such screening could change the landscape and save lives.

1. The State of Cervical Cancer in Canada

An estimated 1,350 Canadian women were diagnosed with cervical cancer in 2020. An estimated 410 died from it[1]. A significant proportion of these cases arise from individuals living in underserved communities especially First Nations, Metis and Inuit[2]. This from a disease that is almost entirely preventable with effective screening, vaccination and education. The World Health Organisation and the Canadian Government have committed to eliminating Cervical Cancer by 2030 and 2040, respectively. While achievable, eradicating cervical cancer will require, commitment and action from patients, physicians, governments and industry, through implementation of novel screening initiatives, improved testing and education from childhood and beyond.

There is, right now, a confluence of events that when viewed together might be seen as “the perfect storm” which could provide a real opportunity for our Health Systems to simply -do better- in our collective efforts to reduce morbidity and mortality.This perfect storm timing is exactly what is needed to drive change in our vulnerable and underserved population to make lasting changes for the next generations of women and their communities.

2. Need for innovation in our traditional approach

For many years health system efforts to reduce cervical cancer cases have focused on traditional PAP screening and diagnostic methods. Sample collection being a PAP test that typically takes place in a family doctor's office or a central specialty clinic in an urban setting. Current education often consists of a physician direction advising "this is what you do" with little regard to what the patient wants.

This approach, while it has been effective in significantly reducing the overall population incidence of cervical cancer, does not meet the needs or wants of the many women who live in rural or remote communities, and/or those who are unable or unwilling to access screening services. As a result, it is these populations that bear a disproportionate burden of disease.

In a HPV Focal Study Report[3] the BC Cancer agency reported that "screening and HPV vaccine coverage in most Canadian provinces and territories still falls below the targeted uptake rates" and "that screening strategies must change to HPV molecular testing."

Despite the evidence and recommendations, a clearly demonstrated need, and a culture that does not empower people or patients - no Canadian province has switched from PAP to HPV testing for its population-based screening program. As a result screening programs continue to miss targets particularly in underserved populations. And that means that women continue to die of this preventable disease.

3. Early leaders and change agents

There are however some early leaders and change agents who are looking at innovative ways to bend this curve. Recent studies in ON[4] and MB[5] also evaluated the effectiveness of a self-sampling methodology for HPV testing with highly encouraging results.

Building on that work, a group in SK has recently gone one step further, designing a program that will provide culturally-appropriate information and education for women in underserved communities – rural and remote communities in the north, and inner-city in Saskatoon – followed by self-sampling kits. Women will be encouraged to collect their own sample in ways and at times that are comfortable and convenient for them. Women will mail in those samples for HPV testing. All women with a positive test will receive follow up care at or as close as possible to their home communities. This project, in providing holistic care, has the potential to build trust in the health system, provide more responsive and appropriate care, and reduce the burden of disease. It will also build a model for public health screening programs in SK and across Canada, thus having an impact far beyond the women whose lives will be touched directly.

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1 Canadian Cancer Society: https://www.cancer.ca/en/cancer-informayion/cancer types/cervical/statistics

2 CPAC press release: https://www.partnershipagainstcancer.ca/news-events/news/article/eliminate-cervical-cancer/#:~:text=First%20Nations%2C%20Inuit%20and%20M%C3%A9tis,death%20rate%20from%20the%20disease.

A clinician who is part of this Saskatchewan leading practice project[6] shared a personal reflection [7].

"Having moved to Saskatchewan just 12 short months ago, I've had the unfortunate experience as a gynecologic oncologist to meet and diagnose more than 5 young women with invasive cervical cancer that was already metastatic at presentation. Two of these women were in their 20's, with 4 children. Even more heartbreaking, is that I have to tell these women that they will not see their children grow up, and their children will be left motherless in less than 2 years. This, from a disease that is almost entirely preventable with appropriate screening and vaccination.

Less than half of all women in Saskatchewan who are eligible for traditional cervical cancer screening with PAP test are screened. In the north and in underserved populations such as new immigrants, indigenous and metis, screening rates are estimated to be as low as 19%. More than 90% of the cervical cancers are caused by the Human papilloma virus (HPV), and screening for HPV can be achieved using a self-collected vaginal swab as an alternative to the conventional PAP test, that currently requires women to book an appointment, go to a clinic and have the procedure done by a medical professional. While for some, this is a merely a routine visit to their local family doctor, many women who do not have a family doctor or other primary health care practitioner, do not live near a clinic or do not understand the risks associated with skipping PAP tests, are at a much higher risk of undiagnosed HPV and potentially life ending cancer."

"We have developed a project approach that looks to change the outcomes in this under-screened segment of Saskatchewan's population. Our team will target those who have not had a PAP test in the past 5 years, we will determine who is at high risk for cervical cancer and take appropriate medical actions to ensure life saving measures are done."

The project's goal is to evaluate sample self-collection, HPV testing including sequencing to understand strain circulation, and holistic care. This will provide supportive evidence for a responsive and effective population-based screening program with HPV testing and the option for self-sampling. They will do all this in partnership with the communities to ensure that it is all done in accessible, respectful and culturally appropriate ways."

"It is our goal to show how self-collection methodology with the expected resultant increased levels of screening and follow up intervention will allow a greater population to take control of their own health outcomes and ultimately reduce the number of patients received in our hospitals presenting with life ending cancer."

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[3] http://www.bccancer.bc.ca/health-professionals/clinical-trials/hpv-focal-study

[4] https://bmjopen.bmj.com/content/1/1/e000030

[5] https://pubmed.ncbi.nlm.nih.gov/31285661/

[6] HPV (Human Papilloma Virus) Self-Sampling for Primary Cervical Cancer Screening in Underserved Saskatchewan Women project.

[7] Dr. Jennifer Brown Broderick MSc ENG, MD, FRCSC, DABOG

4. The case for change and action and "The perfect storm"

There are three key things that make now the time to turn innovation into implementation:

- The World Health Organization (WHO) and the Canadian Government have both publicly stated their intention to eradicate cervical cancer (Achieving this will require a move to HPV testing for population-based screening, and will require that under-screened populations are reached. Projects have been collecting the evidence and are building the road map for how to do this.

  All Canadian Provinces and territories have increased their molecular testing capacity to part of their COVID-19 pandemic management and response. Going forward, as vaccination rates continue to rise it can be argued that COVID-19 testing demand could reduce significantly. If this occurs then it will also provide an opportunity for HPV molecular screening volume to be undertaken within existing capacity and resource.

- The Truth and Reconciliation Commission's Calls to Action included a number that are health-related. One (#19); in particular calls on government to close the gaps in health outcomes between Aboriginal and non-Aboriginal communities:

- Population-based HPV screening with the option for self-sampling is a perfect opportunity to answer that call to action.

Given all of the above, there has never been a better time and opportunity, using established health outcome and health economic methodologies, to demonstrate that these innovative approaches can deliver true value based healthcare and improve the health status of all people, and in particular, underserved women who have long been neglected by our healthcare system.

For more information, contact: zvc389@mail.usask.ca

By Aleina Spigelman, M.Sc. : Roche Diagnostics Canada

By Howard Waldner, MBA CHE ICD.D : Director Reboot Consulting and Advisory Services, Adjunct Professor, school of Public and Population Health UBC

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8 https://s22438.pcdn.co/wp-content/uploads/2020/11/Elimination-cervical-cancer-action-plan-EN.pdf

9 https://www.rcaanc-cirnac.gc.ca/eng/1524499024614/1557512659251)

10 https://www.rcaanc-cirnac.gc.ca/eng/1524499024614/1557512659251

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Integrated Care Systems To Improve Primary Care and Population Health

Introduction

It is generally accepted that a common key goal of health systems around the world is to improve the health status of the population served. This article discusses one aspect of this laudable goal – specifically, the need to ensure meaningful access to higher quality primary health care which is seen as a fundamental prerequisite in providing safe and effective care to our growing and ageing population.[1]

Integrated care as a means to support primary care access and population health improvement

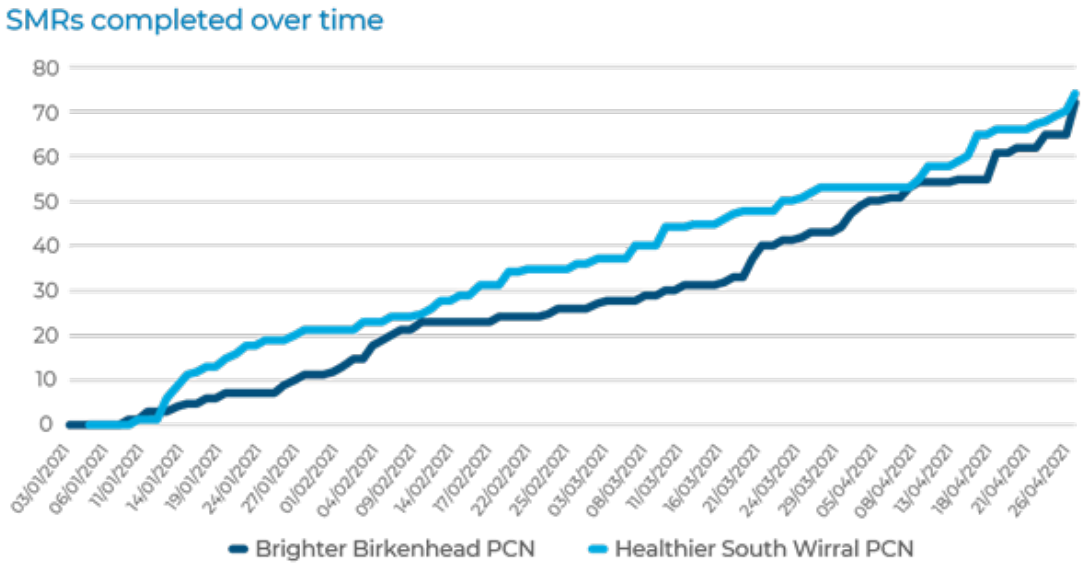
Truly integrated care systems that provide consistent care to patients and clients over time, are believed to be an essential component in the complex journey to improve the health status and outcomes of a given population. This can only be truly optimized in a system where skilled primary and secondary health care teams can have access to meaningful "joined-up data" and shared intelligence. In addition, the necessary resources and infrastructure are needed to make timely interventions that support health improvement. The ability to access this "joined up data" and shared intelligence are seen as essential tools and enablers to successful population health management.[2] However, the sheer volume of data and information available as well as knowing what do to with it can create a challenge for large, complex health and care systems with multiple and sometimes competing priorities.

Case Study – Data-driven structured medication reviews in primary care networks, Merseyside, Wirral – UK

Healthy Wirral Partners (HWP) - a place-based health-system covering a population of around 335,000 people in the UK, have been working with Cerner to co-develop and implement digital tools to support Primary Care Networks in providing proactive, personalised structured medication reviews (SMRs) with local residents as part of a wider population health strategy. This particularly included supporting those in care homes, where residents are disproportionately affected by COVID-19 due to their underlying age, frailty risk and the care home environment which requires close, personal care and use of shared living spaces which can lead to greater virus transmission.

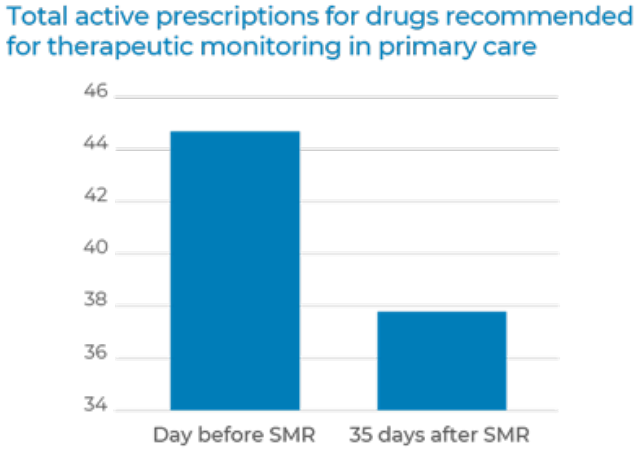
In this project, HWP, "joined up" data from across primary, acute, community and mental health care settings, leveraging Cerner's HealtheIntent® population health platform, which was used to proactively identify and prioritise patients who would most benefit from a structured medication review to improve individual outcomes and prevent the need for higher resource care delivery resulting from poor medicines management.

Figure 1: Increased Structured Medication Reviews (SMR) completed across two Primary Care Networks in the Wirral, UK



Drugs recommended for therapeutic monitoring in primary care are particularly important to review in the care home population in order to support reduced risk of polypharmacy and anticholinergic burden.[3] During the use of the tool in practice for a group of 30 local residents, the total number of active prescriptions for drugs recommended for therapeutic monitoring in primary care were assessed one day prior to, and 35 days after the delivery of the HealtheIntent®-enabled SMRs – where a reduction in active prescriptions was demonstrated (Figure 2).

Figure 2: Total number of active prescriptions for drugs recommended for therapeutic monitoring in primary care one day prior to, and 35 days after the delivery of the HealtheIntent®-enabled SMRs



A further service evaluation conducted by Imperial College London demonstrated a mean reduction of 3.28 prescribed items per person 8-weeks post intervention, compared to 8-weeks pre-intervention. On the assumption of an average prescription item cost of £9.35 per item and recommended course length of 28 days, this could indicate the SMR intervention supporting a reduction in prescribed items of £398.68 per person per year if reduced prescribing was sustained.[4,5]

There was also evidence that SMR's conducted with HealtheIntent® resulted in an improved identification of patients from areas of higher deprivation, with a higher anticholinergic burden score and being prescribed more higher-risk drugs to improve targeting of SMRs to more impactable individuals.

Using 'joined-up' data in this way, to support proactive and preventative health interventions, will also support emerging and future approaches to care allowing health and care stakeholders, together with the individuals and communities they serve, to make the best use of their collective resources and assets to improve health outcomes.

for more information about cerner, see: https://www.cerner.com/ca/en (CANADA) and https://www.cerner.com/gb/en (UK)"

By Ryan Irwin PhD MPA MSc BSc (hons), Senior Population Health Strategy Executive, Cerner
ryan.irwin@cerner.com

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1. Kindig, D., & Stoddart, G. (2003). What is population health? American Journal of Public Health, 93(3), 380–383. https://doi.org/10.2105/AJPH.93.3.380

2. NHS England. 2020. https://www.england.nhs.uk/integratedcare/ (Accessed online 30th June 2020)

3. NHS Specialist Pharmacy Service. Suggestions for Drug Monitoring in Adults in Primary Care. September 2020. Access online at www.sps.nhs.uk on 29th June 2021.

4. NHS England. 2020. https://www.nhs.uk/nhs-services/prescriptions-and-pharmacies/nhs-prescription-charges/ (Accessed online 28th September 2021)

5. Pharmaceutical Services Negotiating Committee. 2007. Medicines wastage and 28-day prescribing guidance. Pharmaceutical Services Negotiating Committee. London.

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