

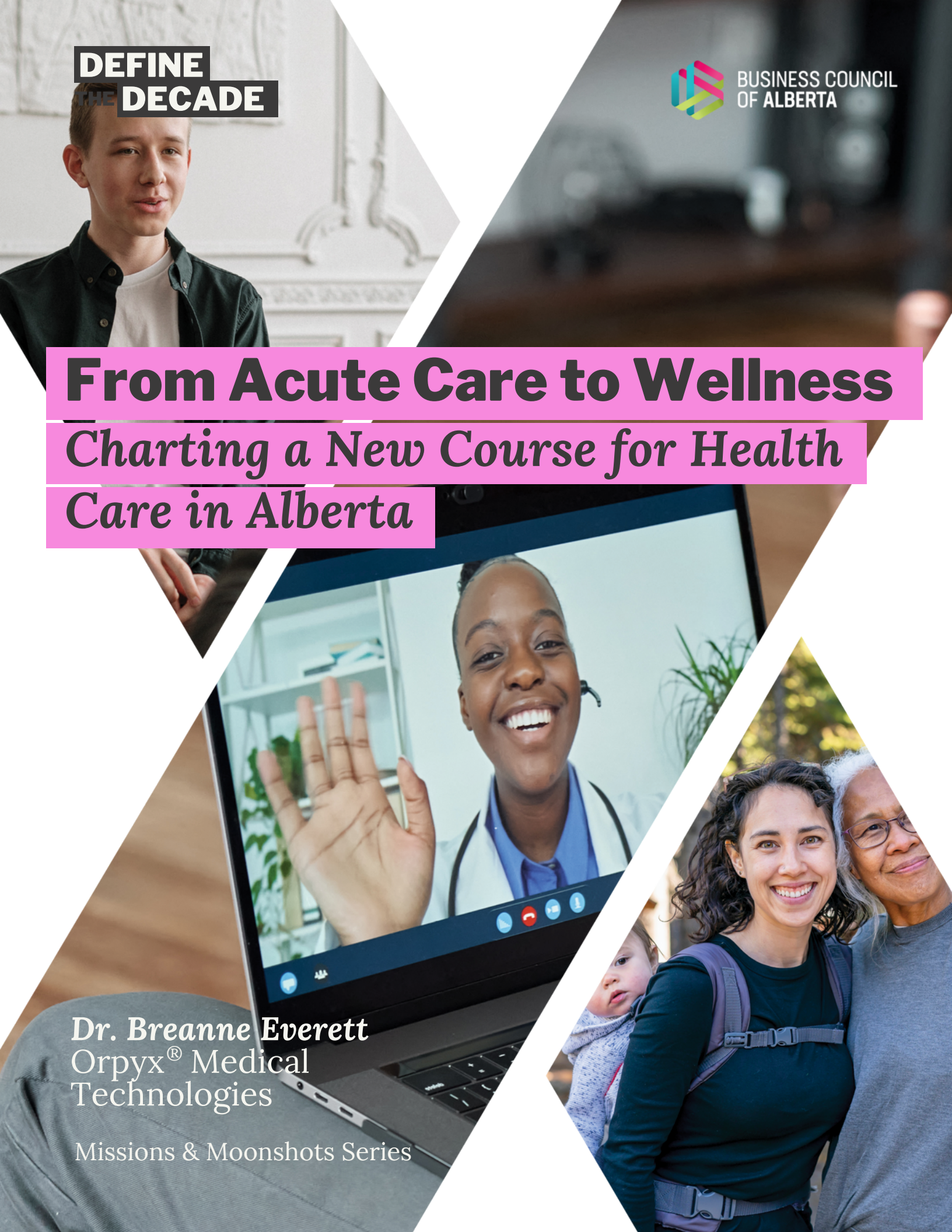
**DEFINE
THE DECADE**



From Acute Care to Wellness *Charting a New Course for Health Care in Alberta*

Dr. Breanne Everett
Orpyx[®] Medical
Technologies

Missions & Moonshots Series



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About the Business Council of Alberta

The Business Council of Alberta is a non-partisan, for-purpose organization dedicated to building a better Alberta within a more dynamic Canada. Composed of the chief executives and leading entrepreneurs of the province's largest enterprises, Council members are proud to represent the majority of Alberta's private sector investment, job creation, exports, and research and development. The Council is committed to working with leaders and stakeholders across Alberta and Canada in proposing bold and innovative public policy solutions and initiatives that will make life better for Albertans.

Land Acknowledgement

In the spirit of truth, reconciliation, and respect, we honour and acknowledge the lands upon which we live and work as guests, including the traditional territories of the First Nations in Treaties 6, 7, and 8 and the citizens of the Metis Nation of Alberta. We thank the First Peoples of this land, which we now call Alberta, for their generations of stewardship of the land, and we seek to walk together in the spirit of truth and reconciliation to build a shared future for all in Alberta.

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About the Author

Dr. Breanne Everett serves as the CEO and Co-Founder of Orpyx® Medical Technologies Inc., in addition to being a medical doctor with residency training in plastic and reconstructive surgery from the University of Calgary. Recognizing the significant impact of diabetic foot complications on patients and health care systems, she established Orpyx, a pioneering digital therapeutics company dedicated to enhancing the healthspan of individuals living with diabetes through customized remote care.

Dr. Everett's achievements have earned her numerous accolades, including the Governor General's Innovation Award, Alberta Women Entrepreneur Upsurge Entrepreneur Award,

the Calgary Award in Commerce, and in 2023, she became the first recipient of the Alberta Business Hall of Fame's Young Innovator Award, which recognizes the achievements of business leaders under 40.

She has also been named one of Avenue Magazine's Top 40 Under 40, one of Canada's Top 100 Most Powerful Women, and the University of Calgary's Graduate of the Last Decade. As a Loran National Scholar, she actively participates in the Loran Alumni Community and serves on the Canadian Medical Association's Joule Innovation Council and the Governor General Innovation Award Selections Committee.



Dr. Breanne Everett
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From a global health care perspective, Alberta is an example of excellence, particularly in the innovation and delivery of emergency and acute care. If an Albertan were to experience a catastrophic trauma, a severe car accident, or a serious medical event like a cardiac arrest or stroke, the care received in Alberta would rank among the finest worldwide. However, the province faces challenges in supporting individuals with all their care needs, hindering the improvement of overall health outcomes and the extension of the number of years Albertans spend in good health.

To deliver on this goal of better overall health outcomes, a shift is needed—one that encompasses, prioritizes, and resources for emergency interventions while simultaneously ensuring a comprehensive approach to individuals' health journeys. Central to this shift is the expansion of primary and preventative care. Presently, Alberta's health care system heavily prioritizes acute (and reactive) interventions, which are the costliest elements of care. If we can shift our focus and allocate resources towards less expensive and innovative preventative care, Alberta has the potential to provide more effective and efficient health care, alleviating the strain on emergency rooms, inpatient units, and other acute care resources.

Alberta possesses a wealth of financial and human capital resources that can be harnessed to significantly enhance the quality of life for its people. Already, the health system receives substantial funding—nearly \$25 billion, which accounts for over one-third of the 2023 budget—but it is crucial that we undertake a comprehensive evaluation of how those resources are allocated and how services are delivered. Notably, the University of Calgary O'Brien Institute for Public Health is pioneering efforts to reimagine how health care can be delivered in Alberta. If we have an openness to a complete transformation in our approach to health care, we can find more productive, sustainable, and engaging ways to spend our health care dollars while improving outcomes for Albertans.

In our pursuit of improvement, we must recognize notable examples where we have failed to deliver even a baseline of appropriate care. Access to care for remote communities and many marginalized populations is insufficient. Indigenous communities face significant obstacles, grappling with limited access to essential resources and efficient health care services. Recognizing the profound influence of social determinants of health, it becomes imperative to address the underlying factors that contribute to overall well-being. If our primary and preventative care strategy does not deeply consider the role of social determinants of health in the quality of care we deliver and the outcomes we strive for, we have lost. This calls for universal accessibility to fundamental elements such as food, shelter, clothing, and other crucial social components that significantly impact overall health. Establishing this requires a comprehensive approach that encompasses not only the provision of medical services but also consideration of the broader social and environmental factors that shape health outcomes.

Although the Alberta Advantage has traditionally been tied to our oil and gas resources, we can translate the character traits that drove our success in the energy sector to other sectors of the economy. By harnessing our entrepreneurialism, innovation, perseverance, and risk-taking mindset, we have the potential to reimagine a world-class health care system in Alberta, resulting in improved outcomes and a stronger economy. This transformative shift would not only enhance health care delivery but also make a significant contribution to the overall strength and prosperity of Alberta. For example, a flourishing health technology sector would generate employment, stimulate economic activity, and create opportunities for market expansion and exports, akin to the success achieved by companies like Genentech in California. By leveraging our expertise and unwavering determination, we can revolutionize health care and drive economic growth in Alberta.

Doing so starts with four innovative and groundbreaking strategies

- 1 Promoting & Supporting Team-Based Care**
- 2 Prioritizing Recruitment & Retention in Primary Care**
- 3 Integrating Remote Monitoring Technologies & Telemedicine Services**
- 4 Fostering a Culture of Innovation**

Promoting & Supporting Team-Based Care

First, to improve health care access for all Albertans, it is crucial to introduce alternative funding and governance structures to promote and support team-based care. This comprehensive approach to care involves a diverse group of health care producers with specialized skills, making them effective in addressing the diverse health care needs of patients.

This holistic approach also recognizes that social determinants such as access to food, housing, clothing, economic stability, neighbourhood, and built environments have a deterministic impact on an individual's health. Expanding alternative funding and governance structures will facilitate collaborative team-based care and allow for resources to be allocated towards addressing these underlying determinants. Additionally, tailoring accountability frameworks to different communities ensures that health care investments prioritize the specific needs and challenges faced by rural, remote, and Indigenous populations, leading to equitable access to care and improved health outcomes for all Albertans.

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Prioritizing Primary Care Talent: Recruitment & Retention

Second, urgent measures must be taken to address the recruitment and retention challenges faced by primary care providers in Alberta, ensuring an adequate workforce across the region. The shortage of family doctors is becoming increasingly severe, necessitating immediate efforts in recruitment, and bolstering local education and training programs to enhance future capacity. To achieve success, it is essential to offer competitive compensation packages, foster supportive team environments, and prioritize team-based care models. Additionally, there is a pressing need to expand capacity for training, assessment, and certification. Attracting dedicated individuals who can provide comprehensive primary care services—and establishing supportive environments conducive to their delivery—are vital steps in meeting the basic primary care requirements of all Albertans, regardless of whether they reside in urban, rural, or remote areas. By engaging with Albertans living significantly outside urban hubs and understanding their care journey, the glaring disparity in health care delivery becomes evident and demands immediate attention.

Furthermore, it is of utmost importance to prioritize the development of sustainable and well-serviced Indigenous health care infrastructure, both in urban areas and on-reserve locations, to provide primary health care services to First Nations communities.

By investing in, and improving access to, primary care for Indigenous populations, we can begin to address long-standing health care disparities and promote better health outcomes for these communities.

Integrating Remote Care & Telemedicine

Third, to optimize the outcomes of a team-based primary care approach, it is imperative to integrate remote care and ensure seamless delivery of continuous support. Remote care technologies, such as telemedicine and digital health platforms, can bridge geographical gaps and overcome barriers to health care access faced in remote and underserved areas. By leveraging these technologies, health care providers can remotely monitor patients, provide timely interventions, and deliver ongoing support for chronic disease management. This not only improves patient convenience but also reduces the burden on primary care providers and allows for a more efficient allocation of resources.

Establishing robust infrastructure and broadband connectivity in both urban and rural areas is essential to ensure the successful implementation of remote care. This infrastructure enables seamless communication and data exchange between health care professionals and patients, facilitating real-time consultations, remote monitoring of vital signs, and access to electronic health records. Moreover, health care systems should prioritize patient education and engagement, empowering individuals to actively participate in managing their health through remote care solutions. This can involve providing patients with user-friendly apps, educational resources, and remote monitoring devices to track their health metrics.

Furthermore, integrating remote care into team-based care models promotes collaboration among health care providers, enabling comprehensive and coordinated care delivery.

For instance, primary care providers can collaborate with specialists, nurses, pharmacists, and other allied health professionals through virtual consultations and shared electronic health records. This multidisciplinary approach enhances care coordination, improves communication, and enables timely interventions, particularly for patients with complex or multiple chronic conditions.

By embracing remote care alongside traditional care, Alberta can achieve a health care system that combines the strengths of both approaches. This integration promotes equitable access to care, enhances chronic disease management, and improves health outcomes for all Albertans, regardless of their geographic location or other social determinants of health.



Establishing an Innovation Pipeline & a Culture of Innovation

To unlock innovation in Alberta's health care system, it is crucial to overcome existing barriers and foster a culture of innovation. There is a significant opportunity for Alberta's health care system to implement supportive structures and cultivate a culture that embraces and adopts innovative products and services.

The province must establish robust systems that facilitate the swift implementation of innovative products and care practices. Failing to do so leads to missed opportunities for innovators and Albertans. Currently, the province's health care system lacks clear mechanisms and processes for integrating and utilizing new health and digital technologies; consequently, Alberta-based tech companies face persistent challenges when attempting to bring their innovations to the local market. As such, many health care tech companies launch their products elsewhere, depriving the community of their homegrown successes and the accompanying benefits. This unfortunate situation needs to be urgently addressed.

While the province must establish transparent and accessible pathways for innovation adoption within the health care sector, it is not enough to simply focus on establishing an innovation pipeline. A cultural shift is necessary, with innovation ingrained at the core of Alberta Health Services (AHS) and Alberta Health. Leadership has an opportunity to champion this transformation and disseminate innovation priorities throughout the entire health care delivery system. Until each family doctor, department chief, operating room nurse, lab technician, and hospital administrator perceive themselves as part of an innovative institution driven by constant change and improvement, our work remains unfinished.

World-class health systems like the Mayo Clinic, the Cleveland Clinic, and Denmark's health system have emerged as leaders because innovation is engrained. Denmark, for example, has seen a marked increase in life expectancy over the last two decades due to their prioritization of primary care and eHealth.

Unleashing innovation within Alberta's health care system is not only feasible, but also highly worthwhile. The province has already witnessed a wave of remarkable advancements, prototypes, and research that hold the potential to revolutionize health care practices. One notable breakthrough is the Syantra DX™ AI-driven Breast Cancer tool, which has demonstrated exceptional accuracy in clinical studies, leading to tangible lifesaving impacts for women. Another significant achievement is NanoTess's NanoSALV Catalytic antimicrobial wound dressing, which combats antibiotic-resistant strains and revolutionizes the treatment of chronic wounds. Additionally, our Orpyx SI® Sensory Insole system has emerged as a critical tool in preventing diabetic foot ulcers, a leading cause of foot amputations and a significant contributor to the direct cost of diabetes care. Lastly, Circle Cardiovascular Imaging is an excellent example of Alberta-grown success in medical imaging.

These examples highlight the remarkable innovations that have emerged from Alberta's world-leading health institutions. However, it is essential to acknowledge the substantial challenges faced by companies seeking traction in the province. The only significant success story of an Alberta company achieving health care innovation on a mass scale is Orpyx's establishment of a personal protective equipment division at the onset of the pandemic. With this business, over 120 million masks have been made in Alberta for Albertans.

With a sizeable \$25B health care industry existing alongside a burgeoning health care innovation sector, Alberta holds vast untapped potential. To unlock that, it is crucial to encourage, prioritize, and allocate resources toward fostering an environment that facilitates the adoption of these innovations. By embracing a culture of innovation, Alberta has the potential to enhance patient care and outcomes while establishing itself as a preeminent global leader in health care delivery.



Conclusion

With these four strategies, we can transform health care in Alberta and achieve the Healthy Lives Mission of Define the Decade. Doing so will empower full and equal health care inclusion for all populations—urban, rural, franchised, and disenfranchised; provide better tools for remote health care; enhance preventative maintenance and advanced screening; and lower wait times for inpatient, emergency, and ambulance care. By prioritizing investments in preventative care and technology, we can significantly reduce the burden on acute care resources and achieve improved health outcomes. In essence, by improving this specific aspect of health care, we catalyze improvements across all areas. We must demand and advocate for these advancements since we are investing in them.

Key to our progress lies in establishing partnerships, sharing knowledge and expertise, and coordinating efforts. It is in the best interest of all Albertans to ensure that every corporation, institution, and industry is deeply invested in our local economy and works collaboratively to implement lasting and positive change for everyone.

Albertans should be proud and excited about the health care innovations emerging from the province. We have all the pieces needed to build a world-class, inclusive, and proactive health care system. Now, our focus must be on assembling these pieces in the correct order, aligning them to fulfill a vision of the best health care for all Albertans.



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Define the Decade is a vision for the future of Alberta and a roadmap to get there. To learn more about this project and how you can get involved, please visit DefinetheDecade.com