



REPORT TO THE CITY OF EDMONTON

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Message from the CEO

This has been a year of acceleration for Health Cities. Throughout 2021, we have made major strides in data, accessibility to care though innovation, and created a network for companies to grow other companies.

On the data front, a provincial working group around synthetic data was formed comprised of Alberta Health, Alberta Health Services, the Institute of Health Economics, Alberta Innovates and the University of Alberta to map out use cases for synthetic data and develop principles of data sharing with collaborators outside of the health system, such as industry. These principles will set the stage for future data projects with industry collaborators on health data, all with the aim of driving data-driven decision-making in health.

Our virtual care projects have expanded, and we have now generated and published data. This data will inform policy and enable regional innovators to scale solutions in Alberta and abroad. The emerging prospect to partner with local social services organizations has been a wonderful opportunity to view health innovation solutions in a more inclusive way. We are excited about our recently launched project with Jasper Place Wellness Centre as well as initial discussions with Boyle Street Community Services, Bissell Centre, Canadian Mental Health Association, and others to create a broader space for innovators and impacts in our community. A Data Collaboration Working Group has been established to explore data coordination and standardization amongst these groups.

Success breeds success and the region has many industry success stories of companies that have successfully designed and developed health solutions, secured regulatory approval, and sold into health systems locally and beyond. Our goal with our new Companies Growing Companies initiative, in collaboration with Invest Alberta, is to build a network of companies that have practical experience that can help scale other companies. We kicked off this series this fall and will be developing more formal networks around this concept in 2022.

With our current projects and projects to come, Health Cities continues our commitment to the power of the health sector to fuel economic growth and diversification, while supporting better health outcomes for all.

I want to take this opportunity to thank our collaborators and stakeholders, and more importantly our innovators and companies in helping us achieve our mandate.

We look forward to working with you in 2022, as we explore how to build on the work we have done in new spaces and with new collaborations.

Reg Joseph



Increasing Access through Innovative Collaborations

Partnerships are central to securing access to care for all Albertans. By creating innovative collaborations, we leverage the strengths of our companies to meet the evolving needs of our communities. Health Cities continues to participate in and facilitate numerous innovative collaborations between non-traditional partners to address issues related to care access, while promoting economic growth and diversification.

Helpful Home Virtual Roundtable

Evidence has shown that technology can play a meaningful role in helping older adults remain safe, independent, and connected to their communities. With the decrease in caregivers, and

ratio of care spaces to care recipients in supporting older adults, aging at home is a priority for all entities involved.

Hosted by Health Cities, Best Buy Canada and the Brenda Strafford Foundation, key stakeholders participated in a Helpful Home Virtual Roundtable discussion to help develop a framework that can be used as a model for a helpful home in Alberta. Representatives from various sectors that have an interest in seniors and aging in place participated, including government, industry, service providers and patient groups. Outcomes of the session included identifying barriers, required partners and actions to support aging at home with technology. A document summarizing the session can be found here.

"Through our work with Health Cities, I am pleased to have been invited to participate in the Helpful Home session with Best Buy. Participating in discussions with a range of people outside of the public sector is critical to fully understand the ecosystem that we're operating in in Alberta. Sessions like these will assist in informing my policy work related to technology and an aging population."

Kesa Shikaze Director | Alberta Health

These discussions align with current growth trends in the home care market as well as a provincial push in this direction. With the number of people aged 80 and above expected to grow from 4 to 10 percent in the next 30 years, the market for home care is expected to continue to grow. One of the objectives under Alberta's Budget 2021: Strategic Plan 2021-2024 is delivering cost effective, sustainable, client-centered healthcare to all Albertans. 1

Our region is home to wonderful innovators - from clinical based organizations like the Glenrose Rehabilitation Hospital to policy and health economics expertise at the Institute of Health Economics and of course, our innovators and companies. We need to create spaces and opportunities for local innovators and companies to test, try and validate new solutions that

¹ https://open.alberta.ca/dataset/6f47f49d-d79e-4298-9450-08a61a6c57b2/resource/f3364b1c-bfd1-4d0f-adb0-475e777eb0bd/ download/budget-2021-goa-strategic-plan-2021-24.pdf



enable improved health outcomes and decrease costs; developing model homes will enable this.

Additionally, this roundtable encouraged collaborations between companies that typically wouldn't work together, as well as the opportunity to include input from the many players invested in seniors' care. This is just one example of the many on-going conversations Health Cities is having with non-traditional partners - a model that can be used to fuel economic growth and increase access to many different types of care.

Industry's Role in Increasing Vaccination Access

Launched in July 2021, Health Cities joined Alberta Health and a coalition of companies (including WestJet, Suncor, and Purolator, to name a few), known as the Industry for Vaccination Coalition (IFV), to create a Mobile Vaccination Clinic providing COVID-19 vaccinations, targeting hard-toreach populations including First Nations and rural communities. Alberta companies ACESO Medical & TRAXX Coachlines facilitated the logistics of administering the vaccinations. A press release for the initiative is available here.



"Health Cities has been an integral part of the Industry for Vaccination Coalition and its primary initiative, the Mobile Vaccination Clinic. Through this initiative, we have been able to increase access and uptake of vaccination across the province with a focus on rural, remote worksites, and partnerships with First Nations communities."

Scott Crockatt

Vice President, Communications and External Relations | Business Council of Alberta Co-chair | Industry for Vaccination Coalition

Health Cities took an active role in the launch, facilitating the fiscal administration of the Clinic.

This initiative highlights industry's role, working together with government, in improving vaccination access, and overall health for all Albertans. Partnering with the many nontraditional, industry partners on this initiative supports us as we look to other innovative ways to collaborate and support economic diversification.





Between July 2021 - November 2021, over 3700 doses were administered through the Mobile Vaccination Clinic throughout the province of Alberta. This number includes several rural communities and First Nations communities.

Total Doses	3754
First Doses	1598
Second Doses	1899
Third Doses	258
Number of Sites Visited	105

Health Innovation in Indigenous Communities

In September 2021, Health Cities signed a Relationship, Cooperation and Enterprise Charter with Enoch Cree Nation.

"The best part of our growing relationship with Health Cities is learning about the innovations that become possible when groups come together to create new relationships, share in each other's understandings, and solve problems. As Enoch Cree Nation continues to reinvent the ways we do health, we look forward to continuing to work with the Health Cities team and health sector stakeholders to create research, learning, commercialization, and investment opportunities for our Nation to help improve healthcare for all Treaty Peoples."

Chief William 'Billy' Morin

Enoch Cree Nation

Our First Nations communities serve as an example, showing how critical culturally relevant community-based care is to ensuring improved health outcomes. Enoch Cree Nation (ECN) has undertaken a bold vision of how their Nation views healthcare delivery in its community and, more importantly, the deliberate role that ECN will take to lead that change. This bold vision makes them a great partner for validating and piloting new innovations. Some of the projects



that Health Cities has led may serve as models, connecting model care pathways with innovation.

We look forward to working with Enoch Cree Nation, along with other First Nations, to look at models that serve as new ways of delivering care which can be scaled to other communities (all while contributing to economic growth in the region).

Remote Monitoring for Chronic Care

In March 2021, Health Cities announced the Alberta Central Zone PCN Home Health Monitoring Project, a collaboration between Alberta Health Services (AHS), Alberta Central Zone Primary Care Networks (PCNs), Boehringer Ingelheim (Canada) Ltd., TELUS Health, Alberta Innovates, Health Cities and the Ministry of Seniors and Housing. The initiative uses teams of PCN nurses and physicians to remotely monitor and care for patients with chronic health conditions,

"[The Central Alberta PCN Home Health Monitoring Project] provided easier access to the healthcare team for more rural patients. With the remote access that home health monitoring provides, patients could get education and support from the monitoring team to help better selfmanage their conditions at home."

Brooke Elworthy

HHM Project Clinical Lead | Camrose Primary Care Network

minimizing risk of exposure to COVID-19 while easing stress on the health system.

Along with our partners on the project, Health Cities published an article in Healthcare Management Forum discussing the project, its results and insights. The publication of this paper is essential, as our ability to drive policy and culture change in provincial health systems depends on the data that validates how these platforms promote better health outcomes. This piece also promotes insights to drive scale-up testing environments for regional companies.

Conversations on the project continued on SAGE Public Health's podcast episode, featuring the project leads. Listen to the full podcast here: Home health monitoring during the COVID pandemic: Results from a feasibility study in Albertan primary care.

Health Cities interviewed a series of patients enrolled in the program to provide insight into their experiences. Feedback from participants was crucial as we look to grow and scale this platform beyond its current use. The interview to the right is just one example; the rest of our Patient Stories are available here.





Through our various outreach we are demonstrating the viability of home health monitoring, therefore driving adoption, scale and economic diversification. Partners are currently in discussions with the Ministry of Health and the Ministry of Seniors & Housing to expand use of this technology beyond its initial purpose. More information is available in our White Paper.

Enabling Data-Driven Decision-Making by Improving Data Access

Health Cities continue to drive the conversation around the importance of health data in datadriven decision-making. The conversation around data, specifically health data, is a complex topic with many stakeholders involved. Throughout 2021, we continued our work towards driving a consensus on synthetic data.

In September, Health Cities brought together members of government, Alberta Health Services, Alberta Innovates, University of Alberta, Institute of Health Economics and the Office of the Information and Privacy Commissioner with the goal of developing a methodology that would allow health information custodians to create, use and appropriately disclose synthetic data. This workshop introduced participants to the concept of synthetic data and provided background on our work in this area so far.



This workshop is a critical step (the first of its kind in Canada) in moving novel data platforms into health systems to drive better data-driven decision-making in health. A white paper will be published to further report on the project and spread awareness of the many applications of data in health.

Additionally, Health Cities and the Institute of Health Economics (IHE) welcomed Merck Canada as an industry partner on our Synthetic Data Project. Merck Canada joined existing partners Alberta Innovates and the University of Alberta. Merck's participation supports the acceleration of research in the field of synthetic data use with the goal of helping improve health outcomes for Canadians. The involvement of a multinational company like Merck will help validate synthetic data and its various uses, which can then be leveraged by regional companies.



In partnership with Replica Analytics, Health Cities presented at the first annual Synthetic Data Summit, a virtual event attended by over 200 people. Speakers from Replica Analytics, University of Alberta, Merck, Johnson & Johnson, Novartis and the Bill and Melinda Gates Foundation shared their insight on synthetic data and how it enables academia and the life

"This research collaboration on synthetic data will help facilitate access to health information critical to scientific advancement and, in absence of readily accessible patient-level data, unlock access to relevant information needed to generate meaningful analyses for decision makers while protecting privacy, ultimately helping Canadians have access to innovative medicines."

Virginie Giroux

Director, Access and HEOR | Merck Canada

sciences industry to use health data in research as well as product development and launch efforts. A recording of the Summit is available here.

By establishing the ability to freely access and share health datasets, while preserving patient privacy, we will support improved health outcomes and economic growth. By eliminating barriers to information sharing, we attract the attention of multinational corporations to our region. The goal is to prove the industry data access model through the project with Merck and then create access for regional Small and Medium-Sized Enterprises (SMEs) companies to develop novel solutions.

Health Cities continues to look at data in a variety of ways, including exploring data related to social services and health; and taking opportunistic data projects with the health system and industry to provide combined value.

Learn more about these opportunities in the What's Next section of the report.

Leveraging Assets to Support Our Companies

Throughout 2021, Health Cities has invested in preparing our companies for success by supporting and leveraging the valuable assets we have available in Alberta. The services and expertise of our existing companies, as well as our talent, will continue to play a crucial role in the success of our growing companies, and in the continued growth of our health sector.

Companies Growing Companies

"The goal of this collaboration was to support health innovation companies in growing and reaching new markets and to show investors and entrepreneurs what Alberta can do to help them start up, scale up and succeed without limits."

Lynette Tremblay

Vice President, Corporate Affairs | Invest Alberta

Health Cities, in partnership with Invest Alberta, launched a new virtual series entitled Companies Growing Companies, which highlights Alberta assets that can help companies find market success, in Canada and beyond. The overall goal of the series was to create a critical mass where companies can plug into assets available in the province. We also want to establish and share the network of assets available in Alberta, making them widely known and utilized.

Through this series, we are supporting economic growth in the province by financing assets which are actually platforms, with which many companies can utilize to succeed. This model will not only help our local companies but also attract foreign direct investments to the region.

The first three sessions saw participation of companies from a variety of industries. More than 40 people attended these live events in November 2021, with the series planned to evolve in 2022.

Alberta companies featured include:

- Tangent Design Engineering an engineering and product design consultancy;
- Andau Medical a medical device and dental device company specializing in sales, marketing, regulatory affairs and distribution; and
- Flawless Inbound- a management consulting company providing expertise in digital sales, marketing, and administrative framework.

Recordings of the sessions are available here.





Improving Health System Integration



Throughout 2021, with support from PrairiesCan, Health Cities and Brightsquid offered two

successful cohorts of the Digital Health Integration Readiness Platform (Pre-HaTCH), welcoming 18 companies collectively. Participant companies joined from Edmonton and Calgary, as well as a company from the U.S. who is looking to move into Canada.

The second cohort received funding through the University of Alberta's Health Hub & Accelerator program, which helped funnel University startups to our program, supporting our on-going connection to post-secondary institutions.

"It's exciting to work on solutions that will help numerous advanced technological processes in the Health Industry."

Mike Stewart

Vice President, Business Development | My Viva Inc (participant company)

The platform aims to better prepare SMEs to reach commercialization of their products and services and navigate the complex integration requirements that are critical to success in the Alberta health system. The Pre-HaTCH platform is an important step for the success of health companies in the province and will allow companies starting out and growing in Alberta to remain in the province throughout all stages, fueling and contributing to economic development for the region.

More information on the platform and its participants is available on our website.

Supporting and Leveraging Our Talent

Recent studies, particular in the bio health sector, have shown that many of the skills our students need for future roles might not be learned in a classroom. Opportunities like workintegrated learning, practicums and internships offer skills to fill these crucial gaps and teach our talent what may not currently be available in a classroom.



Health Cities continues to support the critical link between our post-secondary institutions and the health sector. In 2021, we welcomed 4 students as interns from a variety of programs, including the University of Alberta's Master of Nursing and Bachelor of Nursing as well as NorQuest College's AutismCanTech! Program.



Elizabeth Darko **Master of Nursing Student University of Alberta**

Interning with Health City provided me to experience unique opportunities and gain a better understanding of health innovations. My experience exposed me to the range of different options that I may consider for my career development.



Kelly Remus Master of Nursing Student University of Alberta

My internship with Health City was a unique and valuable experience! I was able to learn about unique innovations that helped broaden my perspective of the opportunities within healthcare in Alberta.

Mitchell Yeung

AutismCanTech! NorQuest College

What I enjoyed most during my 2 months as an Administrative Intern at Health Cities was getting hands-on experience with data entry and being able to utilize the technical skills that I learned during the CanTech program. I want to thank the people at Health Cities for offering me this opportunity to experience what it is like to work in the digital economy and opening my eyes to new possibilities for a career.



Jackie Libon Bachelor of Nursing Student University of Alberta

My experience as an intern with Health Cities was invaluable, as I was able to gain an understanding of another crucial part of healthcare. I have grown to recognize the vital importance innovation, economics and collaboration are within healthcare and how Health Cities contributes to enhancing Alberta's healthcare system.

We welcomed Cassandra Rasko in the role of Manager, Stakeholder Engagement and Justin Pitt moved into a new role of Coordinator, Business Operations. See the Health Cities Operations & Team page for our full staff list.

Upcoming and Recently Launched Health Cities Projects

Uniting to Increase Access for Vulnerable Populations

Health Cities is working with a variety of social and health providers in our communities, including PCNs, long term care facilities, continuing care facilities, First Nations communities and social services organizations.

Health Cities', in collaboration with JPWC and DynaLIFE, launched the partnership to help eliminate barriers for equitable care for vulnerable Albertans, specifically for diagnostic testing. DynaLIFE provided JPWC with centrifugation equipment that is required to prepare samples until they can be transferred for processing, allowing on-site sample collection and reducing inefficiencies in the unfulfilled requisition processes. The goal for our work with JPWC is to create a testing and validation center for new and novel technologies that are targeted towards solving issues of accessibility for our vulnerable populations.



"We are always looking for opportunities to bring appropriate, low-barrier, clientcentered health solutions to our community, and our partnership with Health Cities and DynaLIFE does just that. We are grateful for partners that are willing to advocate for change on both an individual and system level and are excited that this is just the beginning of our work together."

Murray Soroka

Founder & CEO | Jasper Place Wellness Centre

This partnership supports a collective goal of supporting our community and increasing access to care for all Albertans, while creating a model that can be further expanded.

Providing Remote Assessments to Students in Rural Alberta

Children with mild to moderate speech and language disabilities/delays may be at-risk for future learning problems. Lack of accessibility to assessments, interventions and treatment remain considerable barriers to the future success and learning outcomes of our students.

Health Cities has put forth a proposal to the Ministry of Education for a pilot project to rapidly assess up to 300 K-12 students in rural Alberta schools, increasing accessibility for those with barriers. The pilot project is to be launched in January 2022.

This collaboration serves as an additional example of Health Cities working with non-traditional partners, specifically government ministries, to help close existing gaps in care. The lessons learned from improving accessibility to children in the education sector will lend itself to models we can use in health.

Health Cities is currently exploring additional opportunities with other potential collaborators including the Ministry of Children's Services and the Ministry of Community and Social Services, to look at additional innovative projects.

Connecting Companies and Investors

The ability for the health sector to contribute to job growth and GDP is directly reliant on the number of investable companies. Investors, in any sector, need to see the end-user market potential and path to sales. For the health sector this means a live clinical environment where companies can test, trial, validate, and scale their solutions while securing direct feedback on clinical utility, appropriate payers, and system impacts.

With initiatives like home health monitoring and remote based diagnostic imaging, Health Cities has created live clinical trial sites. In 2022, we will continue to focus on bringing key investor groups to connect with those companies that we are scaling.



Health Cities, with physician angel group HaloHealth, held an event for several regional companies in September 2021. Physicians, who are frequent and integral collaborators when deploying health care innovations, had the chance to engage with companies behind the scenes as investors, offering invaluable insight to our growing companies.

Also, Health Cities is playing a key organizing role in the Startup TNT Life Sciences Summit in partnership with Startup TNT, Applied Pharmaceutical Innovation, Innovate Calgary, Innovate Edmonton, HaloHealth and Thin Air Labs in 2022. The summit provides Alberta life sciences companies with the opportunity to raise funding and help build an investor network.

We are also actively working with Thin Air Labs, A100 and other angel and financing organizations to connect them directly with companies that are scaling in Health Cities' clinical sites.



Health Cities' Voice in the Community

In 2021, Health Cities' voice resonated not only regionally, but provincially and nationally as well. The conversations we participate in help build on the work we are doing, creating opportunities for additional partnerships, discussion, and policy change.

Panels & Speaking Engagements

Health Cities has participated in more than 30 speaking engagements and panels throughout 2021. Our expertise remains in demand as we advocate for policy change and showcase the ability we have both provincially and nationally to innovate, scale and commercialize.

Highlights include:

- Walrus Leadership Forum on Health Care (hosted by Andre Picard) national
- Novad Alberta Innovation Panel Discussion: Secondary Uses of Health Data and Related Economic Impact (presented by Novo Nordisk, University Hospital Foundation and Ministry of Foreign Affairs of Denmark) - international
- CHIEF Spring Symposium Moderator for *Innovative Strategies* for Consumer-Focused Healthcare (presented by Digital Health Canada) - national
- AI Enabled Care Symposium (presented by Michener Institute, IVADO and the Vector Institute) - national



Health Cities Talks

Health Cities continued its virtual Health Cities Talks series, as well as introduced a new series entitled, Health Cities Talks Community, highlighting why building support networks is critical to success. The new series asks innovators and business owners how they arrived at success, who helped them along the way, and what lessons other innovators can learn from their experiences.

- Health Cities Talks (moderated by Mack Male, Taproot Publishing)
 - Digitalization of Health with Zamplo (formerly Zoelnsights), M.A.G.I.C. Clinic, and the Institute of Health Economics
 - Data and Health Innovation with Bio-Conversion Databank Foundation



NOVAD ALBERTA INNOVATION
PANEL DISCUSSION:
SECONDARY LISES OF HEALTH DATA AND RELATED
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- Health Cities Talks Community (moderated by Stephanie Gillis-Paulgaard, Take Roots Consulting)
 - Alaxo with Alaxo Airway Stents, BioAlberta and Korte Consulting



In the News

Our voice and expertise have been showcased in numerous publications and media throughout 2021, including:

- Edmonton Journal Western economic diversification agency announces \$5.5 million for Alberta medical companies
- Edify Squeaky Clean Data
- University of Alberta Folio Even better than the real thing: Simulated, anonymized data could be key to health-care innovations

Health Cities issued 5 press releases in 2021:

- March 2021 New Digital Health Platform Prepares Companies for Integration in the Health System
- March 2021 Central Alberta Primary Care Networks Use Home Health Monitoring to Improve Patient Care
- May 2021 Alberta Project Explores Use of Synthetic Data as Alternative to Health Data Utilization
- May 2021 Alberta Platform Provides Clarity to Health System Integration
- July 2021 Alberta Groups Unite to Increase Access to Care for Vulnerable Populations

Podcasts & Publications

- **Podcasts**
 - Home health monitoring during the COVID pandemic: Results from a feasibility study in Albertan primary care SAGE Public Health
- **Publications**
 - Home health monitoring during the COVID pandemic: Results from a feasibility study in Alberta primary care Healthcare Management Forum



Our outreach remains a critical component of building connections with our future partners and scaling the platforms from our projects. For example, following the University of Alberta



Folio Interview on Synthetic Data, Health Cities was approached by Amazon Web Services (AWS) to explore potential opportunities for collaboration around synthetic data. We are now in exploratory conversations.

Health Cities' Collaborations with the Innovation Community

Health Cities continues to collaborate with other players in the innovation community, supporting and strategizing with those organizations which are also committed to helping Alberta's innovative companies and catalyzing economic growth.

Strategy Sessions with Ecosystem Players

- Edmonton Global
 - Health Cities provided a Letter of Support for Edmonton Global's project with RUNWITHIT Synthetics to create the Synthetic Edmonton Metropolitan Region Environmental Intelligent Advanced Lab (SEEITAL) as a Single Synthetic Environment (SSE).
- **Innovate Edmonton**
 - Health Cities provided a Letter of Support for Innovate Edmonton's Capital City Pilots' application for PrairiesCAN – Regional Innovation Ecosystem Program.
- University of Alberta Health Hub and Accelerator

Explore Edmonton Legacy Council

Health Cities was invited to participate in a new ambassador program, working in collaboration with stakeholders across the region to contribute to Edmonton's economic growth and reinforce our international reputation for excellence in academic research and business.

MOU with Invest Alberta

Health Cities and Invest Alberta signed an MOU with the intention of forming a partnership to guide and advance economic growth in Alberta and the Edmonton Metro Region to bring investment and resources to the province. Our first collaboration is our Companies Growing Companies series, showcasing the assets available to Alberta companies looking to grow/expand to new markets.

Start Alberta Ecosystem Dashboard

The A100, Alberta Enterprise Corporation (AEC), and the Venture Capital Association of Alberta (VCAA) have teamed up to launch the Start Alberta Ecosystem Dashboard, a new platform designed to help the province's tech startups access capital, which Health Cities sponsored and helps administrate.



What's Next

Throughout 2021, Health Cities has fueled improved accessibility, as well as scaled platforms and tools (while supporting our growing companies). In 2022, we will continue to build on and broaden this focus, leveraging the lessons we have learned to increase access, be a resource to our companies, and power economic growth.

Mental Health

Mental health continues to be an area with issues related to access.

Health Cities is committed to defining our role in the area of mental health. We are in conversations with the Canadian Mental Health Association - Alberta Division (Rural Mental Health Project), United Way, University of Alberta, SAGE Seniors Association and more to explore how we can scale existing platforms and technologies to support the mental health of all Canadians.

IoT

IoT (Internet of things) continues to be an area of opportunity in health technology. IoT can make health systems more efficient, make care delivery safer and help monitor patients.

In 2022, Health Cities will explore opportunities around IoT (Internet of things) to impact health, including participation and content planning for the IoT North Conference in Calgary in March 2022.

PrairiesCan (WD) Health Analytics & Diagnostics (HAD) Cluster

PrairiesCan (formerly Western Economic Diversification Canada) has earmarked significant funding for Alberta's Health Analytics and Diagnostics (HAD) cluster which is led by Health Cities, to implement several complimentary initiatives that scale Alberta companies for the global market.

The overall purpose of this cluster is to leverage key Alberta assets that companies typically currently do not have access to.



Data Sharing in Social Services & Health to Improve Care

There are strong ties between social services and health, with many opportunities for health innovation around social services organizations.

Continuing our exploration of the importance of access to health data to inform decisionmaking and improve care, Health Cities brought together a not-for-profit data-sharing roundtable, comprised of social services organizations throughout Edmonton. The purpose of this high-level conversation was to learn more about the issues these organizations run into when it comes to data. A Data Collaboration Working Group has been established to explore data coordination and standardization amongst these entities.



Our companies require access to data in order to improve care delivery and scale. Health Cities is also working with Alberta based companies DynaLIFE and Health Gauge (a participant of our Pre-HaTCH program), as well as Canadian company Telemed, and Alberta Health to explore opportunities to use data in collaboration with industry.



Health Cities Operations and Team

Operating as a Federally incorporated not-for-profit organization since 2018, Health Cities continues to be committed to cost-effective day-to-day operations. Our inclusive, collaborative team is comprised of professionals with decades of experience in the health and business sectors.

Our Team:



Reg Joseph CEO



Lisa Laferriere Director, Business Operations



Cassandra Rasko Manager, Stakeholder Coordinator, Business Engagement



Justin Pitt Operations



Rebecca Keichinger **Executive Assistant**

Our Board of Directors:



Jason Pincock -**Board Chair** CEO, DynaLIFEDx



Randy Yatscoff -Vice Chair





Mel Wong - Director Dianne Balon - Director Vice President of Government, Alberta Blue Cross



Jim Saunderson -Director

Information regarding the Health Cities Steering Committee is available on the Health Cities website.



2022 Budget

REVENUE

	Total Revenue	1 731 500
Other		1,500
Service Agreements		45,000
Industry		700,000
Grant		985,000

EXPENSES

Salaries & Benefits

Salaries Sub Total		641,149
Employer Cost & Benefits Sub Total		32,664
	Total Salaries & Benefits	673,813

Business Development

Conference Registration		6,000
Conference Related Travel		12,000
Contractors / Consultants		90,000
Hosting / Events		2,500
Internships		7,000
Memberships & Subscriptions		5,000
Meeting Related Travel		3,000
Professional Development		1,500
Sponsorship		12,000
Ticketed Events		1,500
	Business Development Sub Total	140,500

Marketing and Communications

	Marketing & Communications Sub Total	121,800
Contractors / Consultants		70,000
Advertising		51,800

Operations

Board Expenses		600
Accounting, Legal, Bank Fees		26,000
Contractors / Consultants		500
Insurance		2,500
IT & Telecommunications		9,000
Rent		115,000
Professional Development		1,250
Technology		8,000
General Office		2,537
	Operations Sub Total	165,387

Projects

Project Expenses	630,000
Total Expenses	1,731,500
Forecasted Cash Balance	-0



2021 Metrics

GOAL 1

Foster a health innovation ecosystem that provides an unparalleled environment for success for health innovation

Goal	Metric
1.1. Number of innovation projects/initiatives that either drive diversification, health adoption, or supports regional Small to Medium Enterprises getting products to market (attributed by Health Cities support)	16
1.2. Number of partnerships created or developed around health innovation	89
1.3. Number of new companies attracted to plug into or to re-engage the health ecosystem:	
1.3.1 Multinational Enterprises	17
1.3.2 Small to Medium Enterprises	52
1.3.3 Start-ups	34
1.3.4 Community stakeholders	69

1.4. Examples of projects related to artificial intelligence, machine learning, augmented or virtual reality and blockchain and internet-of-things (IOT) that have been translated into drivers of industry growth (attributed by Health Cities support).

Remote Monitoring for Chronic Care

In March 2021, Health Cities announced the Alberta Central Zone PCN Home Health Monitoring Project, a collaboration between Alberta Health Services (AHS), Alberta Central Zone Primary Care Networks (PCNs) Boehringer Ingelheim (Canada) Ltd., TELUS Health, Alberta Innovates, Health Cities and the Government of Alberta (the Ministry of Seniors and Housing). The initiative uses teams of PCN nurses and physicians to remotely monitor and care for patients with chronic health conditions, minimizing risk of exposure to COVID-19 while easing stress on the health system.

Health Cities, along with our partners on the project, published an article in the peer-reviewed medical journal, Healthcare Management Forum, discussing the project, its results, and insights. The publication of this paper is critical because our ability to drive policy and culture change in provincial health systems depends on the data that validates how these platforms promote better health outcomes. This piece also promotes insights to drive scale-up testing environments for regional companies.

By demonstrating the viability of home health monitoring, we are driving adoption, scale and economic diversification. Partners are currently in discussions with the Ministry of Health and the Ministry of Seniors & Housing to expand use of this technology beyond its initial purpose.

Helpful Home Virtual Roundtable

Evidence has shown that technology can play a meaningful role in helping older adults remain safe, independent, and connected to their communities. With the decreasing ratio of caregivers, and care spaces to care recipients in supporting older adults, aging at home is a priority for everyone involved.

Hosted by Health Cities, Best Buy Canada, and the Brenda Strafford Foundation, key stakeholders participated in a Helpful Home Virtual Roundtable discussion to help develop a framework that can be used as a model for a helpful home in Alberta. Representatives from various sectors that have an interest in seniors and aging in place participated, including government, industry, service providers and patient groups. Outcomes of the session included identified barriers, required partners, and actions to support aging at home with technology.

Digital Health Integration Readiness Platform

A collaboration from Brightsquid Secure Communications Corp and Health Cities, with funding from Western Economic Diversification Canada, successfully launched a platform to increase support for innovation companies on the path to commercialization in Canada. Health technology companies entering the Alberta market must be prepared to integrate with acute care systems, as well as primary care systems. Health system integration requires substantial knowledge of privacy and security regulations, which creates a significant barrier to many small and medium enterprises. To address these obstacles, Health Cities and Brightsquid created the Digital Health Integration Readiness Platform (Pre-HaTCH). The initiative includes a four-week curriculum that prepares companies for the regulatory requirements for health system integration and leverages Brightsquid's health technology accelerator program, HaTCH.

Brightsquid's HaTCH program enables companies to be integrated into the TELUS Health Exchange to connect directly into TELUS Health EMRs, solving one of the largest hurdles facing digital health companies. The Digital Health Integration Readiness Platform (Pre-HaTCH) ensures the participating companies are prepared to enter the HaTCH program and are capable of maintaining integration long term. In 2021, 17 companies completed the program and learned to identify specific risks and build regulatory systems using best practices. Because the curriculum included global security regulations, participating companies are prepared to scale to other jurisdictions, establishing the opportunity for job creation and economic growth in Alberta.

The Digital Health Integration Readiness Platform is an important step for the success of health companies in the province and will allow companies starting out and growing in Alberta to remain in the province throughout all stages, driving economic development for the region.

GOAL 2 Edmonton becomes a destination of choice for health innovators, leaders, entrepreneurs, and researchers.

Goal	Metric
2.1. Number of student group events coordinated/developed/organized	6
2.2. Number of internships and mentorship opportunities spearheaded	61
2.3. Dollars secured to fund talent opportunities	\$4,166
2.4. Number of new employees created in industry, equated to Health Cities support	8



GOAL 3

Create a policy environment that accelerates the development and growth of the health innovation continuum, from discovery to commercialization and application.

Goal	Metric
3.1. Number of health innovation companies and organizations have accessed local health data (attributed to Health Cities)	8

3.2. Examples of policy related work that has advanced the development and growth of the health innovation continuum.

Collaborating to Improve Data Access

Health Cities continues to drive the conversation around the importance of health data in data informed decision making. The conversation around data, specifically health data, is a complex topic with many stakeholders involved. Throughout 2021, we continued our work on driving a consensus on synthetic data.

In September, Health Cities brought together members of government, Alberta Health Services, Alberta Innovates, University of Alberta, Institute of Health Economics and the Office of the Information and Privacy Commissioner with the goal of developing a methodology that would allow health information custodians to create, use and appropriately disclose synthetic data. This workshop introduced participants to the concept of synthetic data and provided background on our work in this area so far.

This workshop is a critical step (the first of its kind in Canada) in moving novel data platforms into health systems to drive better data information decision making in health. A white paper will be published to further report on the project and spread awareness of the many applications of data in health.

Additionally, Health Cities and the Institute of Health Economics (IHE) welcomed Merck Canada as an industry partner on our Synthetic Data Project. Merck Canada joined existing partners Alberta Innovates and the University of Alberta. Merck's participation supports the acceleration of research in the field of synthetic data use with the goal of helping improve health outcomes for Canadians. The involvement of a multinational company like Merck will help validate synthetic data and its various uses, which can then be leveraged by regional companies.

Health Cities also brought together a not-for-profit data-sharing roundtable, including four agencies. The purpose of this high- level conversation was to learn more about the issues these organizations run into when it comes to data. By establishing the ability to freely access and share health datasets, while preserving patient privacy, we will drive improved health outcomes and economic growth. By eliminating barriers to information sharing, we attract the attention of multinational corporations to our region.



GOAL 4

Accelerate access to finance, capital, and institutional investment whilst removing financial barriers to growth.

Goal	Metric
4.1. Amount of funds attracted to the ecosystem, attributed by Health Cities support:	
4.1.1 Federal government	\$200,000
4.1.2 Provincial government	\$1,200,000
4.1.3 Industry	\$728,000
4.1.4 Other organizations	\$161,000

GOAL 5

Solidify Edmonton's reputation as a leading health innovation ecosystem.

Goal	Metric
5.1. Number of Health Cities social media interactions	See Tables 1 & 2
5.2. Number of speaking engagements to build awareness and Edmonton's brand	31

5.3. Describe examples of how Health Cities is known as the unified voice and convergence point for the health innovation

Synthetic Data Summit

In partnership with Replica Analytics, Health Cities presented at the first annual Synthetic Data Summit, a virtual summit attended by over 200 people. Speakers from Replica Analytics, University of Alberta, Merck, Johnson & Johnson, Novartis and the Bill and Melinda Gates Foundation shared their insight on synthetic data and how it enables academia and the life sciences industry to use health data in research as well as product development and launch efforts.

Companies Growing Companies

Health Cities, in partnership with Invest Alberta, launched a new virtual series highlighting Alberta assets which help companies find market success, in Canada and beyond. The overall goal of the series was to create a critical mass, where companies can plug into assets available in the province, and the network of assets available in Alberta are widely known and utilized.

Through this series, we are supporting economic growth in the province by financing assets that are platforms, with which many companies can succeed. This model will not only help local companies but attract foreign direct investments to the region.

The first three sessions saw the participation of companies from a variety of industries. More than 40 people attended these live events in November, with the series planned to continue in 2022.

Panels & Speaking Engagements

Health Cities has participated in more than 30 speaking engagements and panels throughout 2021. Our expertise remains in demand as we advocate for policy change and showcase the ability we have here in Canada to innovate, scale and commercialize.



Table 1: Twitter

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov*
Impressions	31.4K	28.6K	50.3K	62.8K	63.5K	48.6K	54K	42.2K	31.1K	30.3K	46.8K	23.2K
Engagement Rate	1.50%	1.60%	1.30%	1.70%	1.20%	1.10%	1.10%	1.10%	1.50%	2.00%	1.80%	2.80%
New Followers	10	10	12	32	19	12	17	13	6	7	11	13
Clicks	51	54	44	168	80	119	87	86	129	111	53	53
Number of Posts	50	42	37	74	47	47	53	38	45	44	43	40
Total Number of Followers	1586	1596	1608	1640	1659	1671	1688	1699	1705	1712	1723	1736

Table 2: LinkedIn

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov*
Impressions	5.2K	7.5K	5.3K	9.2K	9.9K	8.5K	7.8K	8.9K	6.5K	10.3K	11.1K	34.6K
Engagement Rate	3.77%	7.13%	4.48%	5.33%	5.70%	5.55%	4.73%	4.87%	5.04%	5.21%	5.22%	4.50%
New Followers	19	19	34	40	47	48	45	29	14	53	51	24
Clicks	103	372	170	313	319	247	195	267	192	387	380	480
Number of Posts	27	25	28	45	35	41	41	28	31	30	36	40
Total Number of Followers	1076	1095	1129	1167	1214	1262	1307	1336	1345	1401	1450	1471

^{*}Full analytics for this month are not yet available, only partial calculation is shown.

