

Health City

*Scaling the New
Health Economy*

2020 Report to the City of Edmonton

Table of Contents

Message from the CEO	3
Power of Community and Industry	4
Partnerships with PCNs	4
Remote-Based Diagnostic Imaging	4
Home Health Monitoring	5
Virtual Care	6
Transformational Projects	6
The Power of Data	6
Recently Launched Health City Projects	8
Working Groups	9
Community Outreach & Media	9
What's Next	11
Health City Operations and Team	13
2021 Budget	14
2020 Metrics	15
Appendix A: Synthetic Data White Paper	
Appendix B: 2020 Health City Press Releases	
Appendix C: 2020 Central Zone MLA Conversations	
Appendix D: Health City Publication	

Message from the CEO

This year has been a year of execution for Health City. When we officially launched in 2018, we had a bold plan of transforming the health sector through innovation and this year we have demonstrated the art of the possible. With strong support from our partners, we have developed catalytic projects in the areas of virtual care, remote diagnostic imaging, home health monitoring and data for health. We successfully demonstrated a novel mechanism to enable safe use of health data by the community, students, and industry through the implementation of synthetic data. This has put Edmonton on the map nationally and is driving the conversation of how to leverage our data assets to drive our post pandemic recovery, place our ourselves firmly in the new health economy and drive job growth.

The unique challenges and needs of the health system during our pandemic response have opened opportunities to deploy these platforms in live health care settings, allowing us to validate the impact they will have on delivering care as well as growing regional companies and attracting companies from other jurisdictions to partner with us to demonstrate and scale these projects. These projects have also opened the opportunity to create collaborations with several emerging companies and enable a constructive dialogue with the ministries of Jobs, Economy, and Innovation, Health and Service Alberta along with a number of MLAs who are now champions and understand the power of the health sector in Alberta's recovery.

Our key goal for 2021 is to take the initiatives that we delivered on this year and scale them in ways that will tangibly transform health care and drive economic growth in our region. We want to sincerely thank all our collaborators, supporters and most of all, our innovative companies breaking new ground in many fields this year that will set us on a trajectory of economic prosperity.

Reg Joseph

Power of Community and Industry

Partnerships with PCNs

Global transformation in the health sector has [targeted non-acute services focused on prevention and effective management of chronic diseases](#) as opposed to episodic or urgent care. We believe this is particularly poignant for health care in Canada where, as a nation providing access to a relatively small population over a vast geography, this is one of our key challenges.

To address this hurdle, Health City has focused primarily on community-based care organizations such as Primary Care Networks (PCNs). Our approach has been to work with PCNs and other community-based organizations to address identified problems with innovative approaches while leveraging regional industry talent and solutions. The opportunity is then created for companies in our region to test and validate solutions here in Alberta and then export them globally.

With PCNs, the challenge most often brought forward is increasing clinicians' reach to patients. Three projects that we have initiated this year focus on remote-based diagnostic imaging, home health care monitoring and virtual care. With these projects, the technology platforms we have deployed will enable regional companies to test and validate their solutions here in Alberta.

Remote-Based Diagnostic Imaging

[Health City's collaboration with WestView PCN, Alberta Innovates and Edmonton-based MEDO.ai](#), winner of the "Engineering of the Future" award from Falling Walls Venture 2019, serves to address a challenge in providing access to remote imaging for early screening while creating opportunities for other Alberta companies to trial and validate solutions in our health system. Data collected from our system will enable these companies to secure regulatory approval as well as the solution's cost-effectiveness vital to penetrating markets in the rest of Canada and globally.

The project specifically focuses on screening children with hip dysplasia (medical term for a hip socket that does not fully cover the ball portion of the upper thighbone) using ultrasound. The innovative technology is provided by MEDO.ai and their artificial intelligence which can apply to basic ultrasound known as Automated Real-time Intelligent Assistant (ARIA). This technology, when paired with a hand-held ultrasound device, enables use in the field by untrained individuals (with only an hour's worth of training) and eliminates the need to travel to a diagnostic imaging center.

"We consider ourselves incredibly fortunate to have had the support of Alberta Innovates and Health City as we've founded and grown MEDO to the exciting state that we're currently at. Not only have they provided ongoing advice and mentorship, but they've invested financially at numerous times to support our ambitious commercialization and research efforts. We have accomplished a lot, but feel like we are only beginning, and look forward to our ongoing relationship. "

David Quail

Vice President of Technology | MEDO.ai

By creating a clinical pathway for any imaging method (e.g. x-ray, CT scan, ultrasound) and for any disease, this opens the opportunity to explore a variety of diagnostics solutions for multiple applications - tapping into different companies throughout the region to validate and scale many solutions for global export.

This project has already seen success including securing regulatory clearance and additional funds to broaden the trial. [MEDO.ai recently secured U.S. Food and Drug Administration](#) (FDA) 510(k) clearance for its solution. Though MEDO.ai is now actively exploring export to the United States, the company plans to develop their next three products here in Edmonton – believing that validating and testing locally is their best option. The current project partnership with Health City, WestView PCN and MEDO.ai has also resulted in successfully securing funding from Alberta Innovates' Accelerating Innovation into Care (AICE) program.

Home Health Monitoring

Patients living with multiple complex chronic conditions are at greatest risk of having adverse outcomes from COVID-19 infection. As the need for alternative care delivery models increases, health care organizations continue to look for ways to deliver comprehensive care remotely.

Health City has partnered with the Central Zone PCN (which includes 13 PCNs and covers a population of almost 500,000), along with Boehringer Ingelheim and Telus Health to provide [Home Health Monitoring \(HHM\)](#) for chronic disease patients.

“Boehringer Ingelheim's collaboration with Health City & Central Zone PCN highlights our dedication to delivering innovative solutions that serve current and future health care needs. The Central Zone PCN Home Health Monitoring Project will not only improve outcomes for those most at risk in primary care, but also provide significant benefits to the health care system, such as reducing hospitalizations and overall health care costs.”

Andrea Sambati

President and CEO | Boehringer Ingelheim (Canada) Ltd

[This project](#) provides patients an HHM kit to regularly record their own health data, while primary care nurses monitor the HHM system for alerts and follow up with patients by telephone as needed. This enables patients to upload, view and trend their daily biometric results, such as temperature and blood pressure, and interact with their clinicians from home. HHM dashboards allow for primary care providers to care more effectively for large numbers of patients at one time.

A unique feature of this project is the concept of “Bring Your Own Device”, which creates opportunities for many companies to test, validate and trial their own HHM for a variety of chronic conditions.

The next phase of this project will expand the trial to more patients. This expansion will provide us the ability to measure outcomes, positive impacts, and costs to the

health system for procurement purposes. From an economic development perspective, we have created a mechanism for a variety of regional companies to test and validate their HHM solutions in a live setting while receiving immediate feedback from clinicians and patients.

Virtual Care

Seniors living in care facilities are a complex population, often with many health challenges combined, are at an especially high risk of infection during the COVID-19 pandemic. Many of these residents live in rural areas where access to health care services is limited and over 15,000 of these residents depend on the care of specialty pharmacy services. To address these risks, Health City brought together specialty pharmacy care provider CareRx and pharmaceutical company Boehringer Ingelheim to implement virtual care services for this population. These services aim to improve the safety and quality of care (while decreasing delays and reactive medicine) for this group.

With [this project](#), we are evaluating two different innovations. One is virtual care – enabling patients to access care while limiting their exposure. The second is using the expanded scope of pharmacists to serve as the first point of contact for primary care – allowing us to explore alternative paths of care delivery.

In terms of economic development, this collaboration has also attracted the participation of one of the fastest growing Canadian companies, CloudMD. This project is an example which showcases that by working with Canadian companies like CloudMD to scale, companies can better position themselves for global export.

“Virtual care platforms are expected to increase connectivity with residents and create more opportunities to provide timely, preventative care to those residents that need it the most.”

Ryan Stempfle

Vice President and General Manager
(Western Canada) | CareRx

Transformational Partnerships

Through bridging non-traditional partnerships and deconstructing silos, Health City can achieve its mandate to diversify our economy, drive policy adoption and provide support to regional health-based companies.

The Power of Data

One area that has often been discussed is the strength we have in our region around artificial intelligence and machine learning. Coupled with the power of the data within the largest health authority in Canada (covering a genetically diverse population of 4.4 million), this has been an unrealized opportunity. Health City has targeted this opportunity by launching a new approach for handling data privacy as well as deploying practical industry-driven projects using our local machine learning from both the University of Alberta and an Alberta-based SME.

Synthetic Data

One of the key focuses emerging from the Health City Working Groups is better access to health data. Balancing the need for access to high quality data while maintaining personal health data privacy is a key challenge. An approach known as *synthetic data*, the first of its kind in Canada, was explored and deployed here in Alberta to help address data access. This novel approach has the potential to put Edmonton on the map nationally.

“Remarkably, I was somewhat shocked to observe the research results could be replicated with a fairly high level of precision within synthetic data. These synthetic datasets will be extremely beneficial for researchers to share data across jurisdictions. They will also allow academics and students easier access to health data and support more efficient training of the next generation of health data scientists.”

Dr. Dean Eurich
Professor | University of Alberta

[This project](#) is a collaboration of multiple organizations, including the Institute of Health Economics (IHE), Health City, Replica Analytics, University of Alberta and Alberta Innovates. The approach focuses on developing a synthetic dataset that can be utilized directly by students, community researchers and industry. This approach also eliminates patient privacy concerns or contravening the Alberta Health Information Act, as synthetic data contains no real patient health information.

The first phase focused on validating synthetic data in an academic setting. A white paper outlining this project has been included in Appendix A. The results were positive both in terms of privacy and being reflective of the

original database. The project also attracted the participation of the Office of the Information and Privacy Commissioner of Alberta.

Once validated, the goal will be to share datasets without requiring ethics approval making synthetic data sets available to innovators, academic institutions, philanthropic organizations, or industry while still preserving patient privacy. Health City’s involvement in this initiative demonstrates that by creating further opportunities for health innovation in Alberta, we can also drive opportunities for economic development in the province and beyond.

Machine Learning

Chronic conditions can be complex to manage and are one of the largest costs to Alberta’s health care system. These conditions require consistent care management and can be burdensome for the patient as well as the health care system. This project focuses on utilizing and leveraging our province’s existing strength in machine learning, to improve patient and health system outcomes, reduce costs and transform health care.

“In the 12 years since founding OKAKI, it is not an exaggeration to say that I have not worked with any organization able to catalyze projects and partnerships as effectively as Health City. Health City continues to create connections, open doors and advocate for AB health technology companies. They have definitely helped us move our ideas and innovations forward.”

Salim Samanani
Founder & Medical Director | OKAKI

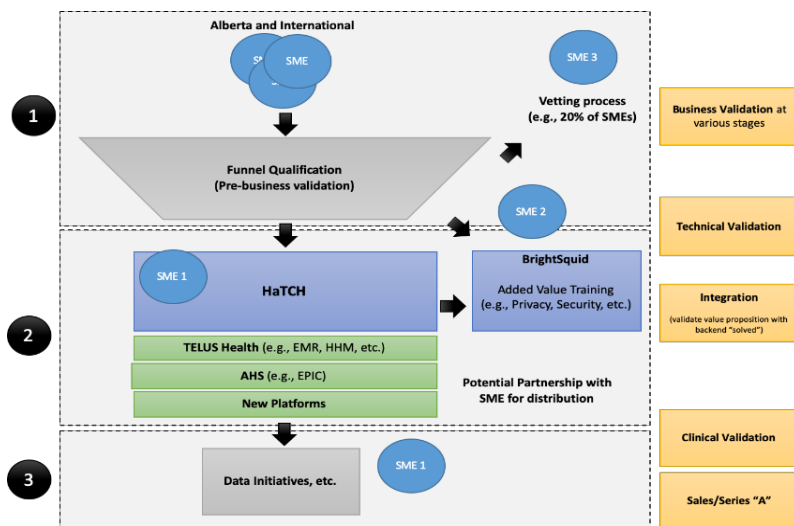
Through Health City’s collaboration with Boehringer Ingelheim and Alberta-based OKAKI Health Intelligence Inc., this project aims to apply machine learning to Alberta clinical and administrative health data in order to predict the readmission risk within 30 days after discharge from a heart failure

hospitalization. We also can compare the performance of the machine learning models to that of other published predictive models. This pilot project hopes to demonstrate how the potential application of machine learning to population health administrative data can be used to develop predictive models for use in health care throughout Canada.

Funding has been secured and planning has begun for Phase II of the project, which will see partnerships with community-based physicians to validate the model's utility in heart failure prediction and intervention. This approach can be expanded to a variety of indications and uses, contributing to the economic development here in Alberta.

Recently Launched Health City Projects

Increasing Accessibility – HaTCH



Health City was recently approved for funding for the HaTCH Project, a collaboration with Western Economic Diversification, Telus, Alberta Health Services and regional SME BrightSquid. One of the most time-consuming and costly pieces for digital health startups is getting connected to the Alberta Health Services information technology backbone which is estimated to up to take 5 years and cost \$5 million. This is an investment that SMEs are unable to bear, especially because their focus needs to be on their product features not backend

integration. The HaTCH system will provide a platform for these companies to plug-in to existing technologies with much of the security, quality and robustness simplified already addressed. This can decrease the length of this process to 6 months and the costs down to \$100,000, allowing these companies to accelerate their testing and validation in our health system.

Mentorship Opportunities – TEC Edmonton/PRIMED

There are handful of established health companies that are well-positioned to provide coaching and guidance to emerging companies in our community. Just over a year ago, Health City engaged these companies by merging with the Alberta Health Industry Association (AHIA) board and our board established them to serve as Health City's Industry Advisory Committee. We believe that the best mentors to SMEs are successful companies. We have established a collaboration with one company from this group, PRIMED, and TEC Edmonton to create direct one on one coaching opportunities.

Industry Coach: Medical Devices

POWERED BY:



Working Groups

Health City's working groups have helped guide targeted projects led by our organization – the use of synthetic data being just one example. One of the goals of the working groups was to open opportunities for other organizations to organically drive initiatives and projects in our sector to “rise all tides”.

We recently highlighted some of these initiatives in a virtual event co-hosted with Deloitte leveraging a collaboration that we kicked off when SingularityU Canada held its conference in Edmonton back in spring 2019. Besides the Health City driven projects, there were also projects such as the [Amii/Roche National Artificial Intelligence Centre of Excellence](#) and the University of Alberta Health Accelerator, along with many others.

We believe we have achieved our goal in developing a community that self-starts innovative initiatives and is driving economic development in the health sector in unique ways. We no longer feel the need to continue with a formal working group structure but will continue to “plug in” and catalyze collaborative and initiatives where relevant. We see the working groups evolving into a celebration of health innovation as more companies, organizations and groups bring new innovations in health to the market.

Community Outreach & Media

Despite the challenges of the pandemic, Health City has continued to use our voice to create and participate in innovative discussions throughout 2020.

Future of Health



In 2020, Health City released 10 episodes as part of our Future of Health series. Collectively, the videos have amassed over 12,000 views and impressions on YouTube. Topics ranging from virtual care to vaccine development were featured and showcase Health City's scope and influence in our region. 12 local innovative health companies were showcased as part of this series.

Health City Talks

Health City has been able to pivot during the pandemic by providing virtual opportunities for companies, academic institutions, philanthropic organizations, and innovators to connect and share their innovative stories. The Health City Talks series showcased 18 different local companies, highlighting Edmonton's strength in virtual care, philanthropic organizations, and community outreach over five different discussions, moderated by Taproot Edmonton.



1. **Health City Talks: Virtual Care** featuring Maple, Shoppers Drug Mart, and Brightsquid.
2. **Health City Talks: Virtual Care – Episode 2** featuring Canadian Medical Association, Alberta Medical Association, and Brightsquid.
3. **Health City Talks: Philanthropic Organizations** featuring University Hospital Foundation, Calgary Health Trust, Stollery Children's Hospital, and Alberta Children's Hospital Foundation.
4. **Health City Talks: Why Alberta** featuring New West Networks, Forest Devices, RRP, and Protix.
5. **Health City Talks: Citizen Care Pods, Parts I & II** featuring Citizen Care Pods, PCL Construction, Carpenters' District Council of Ontario, and ConnectUs Global.

Panels & Speaking Engagements

The Health City team has spoken and participated in more than 20 panels and webinars during 2020. Highlights include judging the i4 Launchpad Pitch Competition and representing Health City at the *CityAge: The Data Effect* as a panelist.



Media Coverage

Health City's voice and expertise has been showcased in numerous publications and media throughout 2020, including:

- National Post, Canadian Innovation Special Interest Feature – [Innovation Could Be the Solution to Canada's Growing Health Care Crisis](#)
- Modern Luxuria Magazine – [Disrupting Healthcare](#)
- Canadian Healthcare Technology – [Alberta rural patients trial new home health technology](#)
- Edmonton Journal – ['Information in front of us:' Home-based health monitoring trial for rural patients](#)
- Global News – [Virtual Care in Long Term Care Facilities](#)
- Canadian Healthcare Technology – [Tele-pharmacy project launched for LTC residents](#)

Health City put out 4 press releases in 2020. For more information, view Appendix B.

MLA's GOA Conversations

Emanating from the Central Zone project, Health City met with MLAs from jurisdictions in the Central Zone in 2020 (with many conversations coming in 2021). Please see Appendix C for all MLAs we have met with.

Podcasts & Publications

- Podcasts
 - [Alberta Impact with Bryce Lambert: Fixing Healthcare in Alberta and across Canada](#)
 - [Healthcare Management Forum Podcast: Transforming health and driving economic development](#)
- Publication – Healthcare Management Forum
 - Health City - Transforming health and driving economic development - Appendix D

What's Next

Throughout 2020, Health City's community and PCN approach has allowed us to forge new opportunities through new care pathways. In 2021, we will continue to expand on these pathways while working to join health transformation with economic development.

WD Cluster & Funding

Alongside BioAlberta, Health City is working to create a cluster around health analytics diagnostics, which will be the first of its kind. With the support of Western Economic Diversification Canada (WD), the cluster will become an investment platform for WD and a place of intervention in the health space.

The focus of the cluster is to invest in platforms that enable companies to rapidly accelerate their product development towards real-world use.

The Power of 5G & Internet of Things – Edmonton Global & Beaumont

5G is the next generation of wireless access that will drive a significant shift in how many of our wireless tools will be used in the future. The health sector will be a benefactor of 5G implementation. Health

City has partnered with Edmonton Global on their 5G initiative that will provide guidance and lead key initiatives for the health sector.

The city of Beaumont is also involved in the above initiative and are positioning Beaumont to be a 10G community. Health City has executed a Memorandum of Understanding with Beaumont to explore opportunities for high-availability networks to develop next generation health applications while demonstrating their value in Beaumont.

Post-Secondary Institutions – GRPC, MacEwan, NorQuest

Workforce training and readiness will be a key factor in fueling our economic growth. Many of Alberta's smaller universities and colleges have taken a proactive approach to augmenting training and providing additional "out of classroom" experiences to enhance learning in our rapidly changing economy.

Health City is partnering with many institutions including MacEwan University, Grand Prairie Regional College (GRPC), NorQuest College and others to explore initiatives and projects that will meet Health City's mandate while providing their students extra-curricular training opportunities.

Health City Operations and Team

Formed as a Federally incorporated not-for-profit organization in 2018, Health City continues to focus on cost-effective ways to conduct day-to-day operations. Our team includes a small group of highly skilled professionals with health care and business backgrounds. We leverage local contractors and companies to provide additional support and expertise as needed.

Our Team:



Reg Joseph
CEO



Antonio Bruni
Director, Business
Development



Lisa Laferriere
Director, Business
Operations



Rebecca Keichinger
Executive Assistant



Justin Pitt
Administrative Assistant

Our Board of Directors:



Jason Pincock –
Board Chair
CEO, DynaLIFEDx



Randy Yatscoff –
Vice Chair



Mel Wong - Director
President & CEO,
BioAlberta



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



Jim Sauderson -
Director

Information regarding the [Health City Steering Committee](#) is available on the Health City website.

2021 Budget

REVENUE

Grant	985,000
Industry *	330,000
Service Agreements	45,000
Other	2,500
Total Revenue	1,362,500

EXPENSES

Salaries & Benefits

Salaries Sub Total	633,147
Employer Cost & Benefits Sub Total	31,666
Total Salaries & Benefits	664,813

Business Development

Conference Registration	5,000
Conference Related Travel	10,000
Contractors / Consultants	80,000
Hosting / Events	2,500
Internships	7,000
Memberships & Subscriptions	5,000
Meeting Related Travel	3,000
Professional Development	1,500
Sponsorship	7,500
Ticketed Events	1,500
Business Development Sub Total	123,000

Marketing and Communications

Advertising	41,800
Contractors / Consultants	60,000
Marketing & Communications Sub Total	101,800

Operations

Board Expenses	600
Accounting, Legal, Bank Fees	30,000
Contractors / Consultants	500
Insurance	2,500
IT & Telecommunications	9,000
Rent	105,000
Professional Development	1,250
Technology	8,000
General Office	2,537
Operations Sub Total	159,387

Projects

Project Expenses	313,500
------------------	---------

Total Expenses 1,362,500

Forecasted Cash Balance -0

*Only includes amounts from signed agreements – additional funds expected but not forecasted

2020 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 City support)	10
1.2. Number of partnerships created or developed around health innovation	18
1.3. Number of new companies attracted to plug into or to re-engage the health ecosystem:	
1.3.1 Multinational Enterprises	9
1.3.2 Small to Medium Enterprises	11
1.3.3 Start-ups	27
1.3.4 Community stakeholders	23
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 City support).	
<p>Synthetic Data</p> <p><i>In collaboration with the Institute of Health Economics (IHE) and Alberta Innovates, this Health City project focuses on developing a synthetic dataset that can be utilized by small and medium-sized enterprises (SMEs) and multinational enterprises (MNEs) for their own purposes, with direct access to the dataset. Because synthetic data contains no real patient health information, the datasets have the potential to be shared freely without raising patient privacy concerns or contravening the Alberta Health Information Act. This novel technology is the first of its kind in Canada and puts Edmonton on the map nationally.</i></p>	
<p>Remote Diagnostic Imaging</p> <p><i>Health City's collaboration with Edmonton's own MEDO.ai serves to address a challenge in providing access to diagnostic capabilities for early screening problems while creating opportunities for other Alberta companies to do the same. The project, a collaboration with MEDO.ai and WestView PCN, specifically focuses on addressing early testing for pediatric hip dysplasia using ultrasound aided by Automated Real-time Intelligent Assistant (ARIA), but the opportunity is much broader. By creating a clinical pathway for any modality and for any indication this opens the opportunity to explore a variety of diagnostics solutions for multiple applications - tapping into different companies to validate and scale each.</i></p>	
<p>Machine Learning</p> <p><i>Through Health City's collaboration with Boehringer Ingelheim (BI) and OKAKI Health Intelligence Inc. (OKAKI), this project aims to apply machine learning to Alberta clinical and administrative health data to predict the readmission risk within 30 days after discharge from a heart failure hospitalization, as well as compare the performance of the machine learning models to that of other published predictive models. This pilot project also hopes to demonstrate how the potential application of machine learning to population health administrative data can be used to develop predictive models for use in health care throughout Canada.</i></p>	

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	2
2.2. Number of internships and mentorship opportunities spearheaded	15
2.3. Dollars secured to fund talent opportunities	\$6,825
2.4. Number of new employees created in industry, equated to Health City support	7

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 City)	5
<p>3.2. Examples of policy related work that has advanced the development and growth of the health innovation continuum.</p> <p><i>Health City's model of driving health transformation and economic development is gaining traction at all levels of government. In addition to a Government of Alberta and Industry Roundtable held in early 2020, we met with 11 local MLAs, 5 of which are Ministers. Provincially, our message around the health economy being a driver of growth in Alberta has been well-received and championed by these MLAs.</i></p> <p>Provincial Health Cluster</p> <p><i>Western Economic Development Canada (WD), via leadership from Justin Riemer (Assistant Deputy Minister), has launched an initiative to develop an economic cluster in Alberta around health analytics and diagnostics. These subsectors were identified in a consultant's report as areas of strength and high growth in Alberta. The goal is for industry and government to work together to build platforms that enable industry to scale as opposed to funding individual company projects. Through this initiative, Health City has secured an investment from WD to implement a platform that enables companies to "plug into" the Telus Electronic Medical Record (EMR) backbone (Telus is the largest EMR vendor in Alberta) quickly and cost effectively to rapidly trial novel digital health applications; saving individual start-ups up to \$5 million dollars and years of effort in backend security and integration work to connect with Alberta Health Services information systems.</i></p> <p>Data with OIPC</p> <p><i>One provincial strength for Alberta that is often boasted about is data. The power of having Canada's largest health authority (Alberta Health Services) serving over 4.4 million people with broad genetic diversity, is a gold mine in terms of driving better health outcomes and economic development for our region. The challenge, however, is privacy of personal health information. Many approaches including "data de-identification" while interesting, have not been</i></p>	

able to adequately address privacy concerns. Health City and partners, including the University of Alberta, the Institute of Health Economics, Alberta Innovates and others, have successfully completed a pilot using a technique known as synthetic data. Synthetic data has been demonstrated to be the most effective approach thus far in terms of protecting personal health data while maintaining analytics utility. This pilot project has been reviewed and validated by the Office of the Information and Privacy Commissioner of Alberta (OIPC). In fact, the OIPC has joined the project team for the next project which will trial an industry driven (multinational company) project in Alberta. This is unique for Canada and positions Edmonton as a leader and can serve as a model for Canada in the field of health data.

AHS Trial Process

One challenge in Alberta (actually, in Canada overall) is the inability for companies to trial and validate novel solutions in our health systems. These trials are critical for companies to secure regulatory approvals and more importantly, to generate data on product utility and cost-effectiveness from the health system that companies leverage when exporting these solutions to other regions in Canada or globally. The issue is that most health systems in Canada connect such trials directly with procurement. Canadian health procurement of innovation is outdated and risk averse (here is an article on this from a mentor of mine – this is reference for the readers of this email only and is not for reporting purposes). The preference is often for products and solutions provided by large established companies (usually multinational) with data from other jurisdictions outside of Canada. From a global perspective, the health sector in Alberta for any given product is relatively small and while being able to sell in Alberta would be desirable, the true value for Alberta companies is the ability to rapidly validate a particular solution to prove its market value proposition and use that data to penetrate broader markets. Based on projects that Health City has worked on trialing novel solutions such as remote based diagnostic imaging in community-based organizations e.g. Primary Care Networks (PCNs), we believe this approach can and should be scaled to acute care. Health City approached the Ministers of Health and Jobs Economy & Innovation (JEI) with a challenge to figure out a mechanism to achieve rapid validation trials in Alberta as a platform to scale regional companies. Health City received a positive response from both ministries and a joint ministry meeting with Health City has been set for December 1, 2020. Developing a solution to rapidly validate innovations in Alberta's health system, will position Alberta as a leader in Canada and will likely serve as a model for the rest of the nation.

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 City support:	
4.1.1 Federal government	\$155,000
4.1.2 Provincial government	\$520,000
4.1.3 Industry	\$17,026,000
4.1.4 Other organizations	\$293,500

GOAL 5

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

Goal	Metric
5.1. Number of Edmonton Health City social media interactions <i>In 2020, Health City saw a 24.7% increase in Twitter followers (1241 in 2019 to 1548 in 2020). After launching a new LinkedIn page in July 2019, we have climbed to a respectable 1034 followers.</i>	
5.2. Number of speaking engagements to build awareness and Edmonton's brand	24
5.3. Describe examples of how Health City is known as the unified voice and convergence point for the health innovation <i>Despite the challenges of a worldwide pandemic, Health City has continued to use our voice to create and participate in innovative discussions in 2020.</i> <i>We released 10 episodes in our Future of Health series which collectively amassed over 12,000 views and impressions. Topics ranging from Virtual Care to vaccine development were featured and more than 12 local innovative health companies were showcased in this limited series.</i> <i>In April 2020, the first Episode of Health City Talks was released. This series of virtual panel discussions covers topics that highlight our region's strength in Virtual Care, Philanthropic Organizations and Community Outreach. To-date, 5 episodes featuring 18 different Alberta companies have been released and has attracted a combined total of 573 viewers. Filming will continue into 2021.</i> <i>In addition to our virtual online work, Health City has participated in more than 20 panels and webinars throughout the year. We have also been featured in several publications including National Post, Canadian Innovation Special Interest Feature, Global News, Canadian Healthcare Technology, and Edmonton's own Modern Luxuria magazine.</i>	

Table 1: Twitter

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
Impressions	38.6K	34.7K	41.3K	61.3K	63.3K	50.3K	38.7K	39K	39.9K	41.7K	38.5K	35.6K
Engagement Rate	1.10%	1.40%	1.30%	1.10%	1.40%	1.50%	1.90%	2.50%	1.70%	1.70%	1.70%	1.50%
Follower Increase	18	27	46	48	35	20	27	22	23	20	11	29
Clicks	122 (avg 4 per day)	85 (avg 3 per day)	78 (avg 3 per day)	97 (avg 3 per day)	185 (avg 6 per day)	181 (avg 6 per day)	89 (avg 3 per day)	241 (avg 8 per day)	102 (avg 3 per day)	61 (avg 2 per day)	59 (avg 2 per day)	60 (avg 2 per day)
Number of Posts	34	25	36	56	48	46	45	53	60	71	52	57

Table 2: LinkedIn

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
Impressions	10.8K	7.9K	10.1K	16K	6.9K	8.3K	8.2K	11.6K	9.4K	5.5K	7.8K	6.6K
Engagement Rate	5.90%	6.10%	6.50%	5.60%	5.70%	5.80%	9.80%	5.70%	5.40%	6.60%	5.46%	4.67%
Follower Increase	68	78	131	139	101	81	54	59	30	34	30	26
Clicks	438 (avg 14 per day)	279 (avg 9 per day)	365 (avg 12 per day)	579 (avg 18 per day)	243 (avg 8.1 per day)	307 (avg 9.9 per day)	254 (avg 8.5 per day)	414 (avg 13.4 per day)	294 (avg 9.5 per day)	336 (avg 11.2 per day)	230 (avg 7 per day)	193 (avg 6 per day)
Number of Posts	26	20	28	35	38	35	37	39	39	43	33	32