



Health City

*Catalyzing the New  
Health Economy*

2019 Report to the City of Edmonton

# Table of Contents

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Message from the CEO .....	3
Attacking Priority Areas With Community Engagement .....	4
Health City Working Groups .....	4
Working Group Members .....	6
Driving Economic Activity & Global Markets .....	6
Cultivating Critical Mass .....	8
Strengthening The Health Community Through Strategic Partnerships and Initiatives .....	9
Canada-Chicago Mentoring Program (C2MP) .....	9
Multinationals Investing in Our Region .....	10
Using Artificial Intelligence to Drive Health Outcomes in Remote Communities .....	10
The Power of Over 100 Voices .....	11
Forging National Alliances to Scale Health City’s Message .....	12
Creating Community Capacity for Public Health Issues .....	12
Voices Behind Health City .....	13
Singular Voice - Multiple Mediums .....	14
Health City Operations and Team .....	20
Appendix A: 2020 Budget .....	21
Appendix B: Metrics .....	22

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# Message from the CEO

*Economic development in the health sector is inextricably linked with our healthcare challenges. In Canada, our health costs continue to rise and our outcomes are stagnant at best. We need a new approach that ties the health industry to healthcare, going beyond the traditional purchaser-vendor relationship that currently exists. We are in a healthcare crisis and we need all hands on deck.*

There are many innovators from industry who are looking at the big picture and are developing solutions to address our challenges. We need to embrace these innovators and include them as part of the team for health innovation. This will allow us to impact health transformation and more importantly, drive economic development. Health City's role is to help pave the way for this transformation.

2019 has been an eventful year for Health City. We launched some significant initiatives that: moved the needle on data; improved government/industry collaborations; and launched novel market opportunities in emerging sectors (such as augmented and virtual reality); as well as developed meaningful collaborations nationally and internationally, specifically, with the BC Digital supercluster and ECHAlliance.

One of the key areas of focus for Health City is data. We have made significant advancements on data from projects, government engagement, and new initiatives. Projects that Health City undertakes move the industry in a positive direction. Instead of liberating data to industry, Health City is advocating for the use of data within the health system to drive better health outcomes. When done jointly with industry innovators, we can also drive economic development.

The pharmaceutical industry is going through transformation. The outdated model of companies solely developing therapeutics to treat disease is rapidly becoming a non-sustainable business model, irrespective of the payer being private, public, or blended. Some forward-looking health companies are looking to move upstream and become prevention companies. To effectively do this, companies need to understand the drivers of diseases, particularly chronic disease, and this can be elucidated through access to social indicators of health. While not the only jurisdiction with this capacity, Alberta, with its large single health authority (largest in Canada) can analyze both health data and social indicators data to better understand, manage and most importantly, prevent disease.

The new health economy is driven by technology platforms such as artificial intelligence and machine learning, augmented and virtual reality, and blockchain and internet of things (IoT). If our region is to compete in these high-growth markets, then we need to focus on developing our global niche and own that space. Health City is actively developing these areas by leveraging our region's natural strengths. I want to thank our many supporters and collaborators that extend beyond 100 companies and organizations for their leadership in Health City this year and look forward to an impactful 2020.

**Reg Joseph**

# Attacking Priority Areas With Community Engagement

## Health City Working Groups

*The second iteration of the Health City working groups launched in February 2019, building off the contributions of the initial working groups and shifting focus to new priority areas identified by the local health innovation community.*

These hands-on working groups, made up of volunteer representatives from a variety of areas (e.g., government, industry, etc.) were brought together to identify and undertake short-term projects and plan for longer-term initiatives. The key focus is on persistent challenges in priority areas as identified by our stakeholders.

- Better access to markets: *Target to Market*
- Training and retaining talent: *Talent Works*
- Developing relevant funding models: *Financing for Impact*
- Leveraging capacity and partnerships in data, artificial intelligence and machine learning to drive health system innovation: *Powering Smart Decisions*

All four priority areas are aimed at delivering results that are viable steps towards solutions and, through their work, build collaborative strengths and cohesion in Edmonton's health innovation community.

The strength of the working group concept allows individuals within their respective organizations to leverage the skills, experience, and existing programs and bring them together to ensure immediate impact and results. Each working group has progressed through a series of planning discussions to ensure the short-term and long-term projects are in line with the Health City mandate.

*Health City is moving the needle on policy, collaborative projects and brand new initiatives not yet seen in the Canadian health sector.*

## Powering Smart Decisions

Although Alberta has a rich and unique dataset, it can be difficult for the SME/MNE community to readily access this data. Knowing the potential of data accessibility, this working group undertook a project to demonstrate the utility of creating a synthetic health data set for use by the SME/MNE community. Synthetic health datasets are generated from real datasets that contain actual patient information. Statistical methods are used to maintain the properties of the original dataset, yet importantly do not correspond to identifiable individuals from the original dataset (the dataset contains fictitious patient data). Thus, synthetic data derivatives are quantitatively identical to patient-derived datasets but still maintain patient confidentiality. Because synthetic data contains no protected health information, the datasets can be shared freely among investigators or those in industry, without raising patient privacy concerns or contravening the Alberta Health Information Act. The initial stages are expected to be completed in early 2020. The anticipated outcomes have the ability to lay the foundation for future scale and spread opportunities for data accessibility to the SME/MNE community.

## Target to Market

This working group identified the issue of commercialization and the time it takes to get a product to market locally. Through this discussion, it was clear that there are existing programs in Edmonton to assist with export opportunities but that they were more general than health. The working group partnered with EEDC and the Edmonton Chamber of Commerce to “healthify” the existing Trade Accelerator Program to make the content more relevant to health specific companies, with the aim of accelerating their ability to export to other markets. Leveraging the experience of the working group and pairing that with an existing offering to quickly create a valuable contribution to our local companies resulted in eleven companies completing the initial pilot program. To full view TAP announcement, [click here](#).

## Data is the New Oil

*“...connecting the tech industry with clinicians who work with valuable data is a unique challenge. Health City was the driver of connecting AltaML and Boehringer Ingelheim Canada to develop a tool that predicts how aging affects health.”*

*(“The next global AI hub will be built in the Canadian Prairies” Betakit<sup>1</sup>)*

*“The “Healthified” Trade Accelerator Program (TAP) offered by EEDC in collaboration with the Health City Target to Market Working Group provides invaluable tools, contacts, and mentorship to ensure that SMEs in the Health Tech sector are enabled to sell globally while working locally. Participation in the program will lead to tangible results with high impact for the local ecosystem as SMEs have access to external markets.”*

**Catalina Vasquez**  
Chief Operations Officer | Nanostics

<sup>1</sup> <https://betakit.com/ai-nation-alberta/>

## Health City Working Group Members



## Driving Economic Activity & Global Markets

*As the home to top-tier post-secondary institutions and world-class healthcare facilities, our region is built on a strong foundation of research. The industry is young and rapidly evolving, and areas such as digital health are emerging with global recognition. The health sector is undergoing a global transformation. We are seeing the emergence of technologies and platforms like Artificial Intelligence, Augmented & Virtual Reality, and Internet of Things that are becoming the next tools of innovation in the health sector. Edmonton-based companies have those strengths, disrupting systems and taking locally developed and validated solutions to global markets.*

## **Trade Accelerator Program (TAP)**

With companies increasingly looking to grow beyond Edmonton, Health City realized an opportunity to provide those in the health sector with a tailored version of the program. This program will address export challenges and issues, such as regulatory approval and reimbursements, unique to the health sector.

*“Business expansion through export is a vital component of achieving a prosperous and resilient economy and the Trade Accelerator Program is a tool that all Edmonton health companies with export potential can access. Partnering with Health City to deliver this cohort allows EEDC and our partners to focus on opportunities and challenges specific to the health sector and give the world more Edmonton.”*

**Derek Hudson**

Chief Executive Officer | Edmonton Economic Development Corporation (EEDC)

## **Valhalla Investor Mentorship**

Recognizing that generating investment capital is a crucial lifeline for a company to thrive, Health City and Valhalla Capital Inc. partnered to deliver investor mentorship to health and life sciences companies with health sector-specific expertise. The mentorship program combined closed-door sessions with a public forum where the mentors shared their observations and investment expertise and subsequently educated entrepreneurs and investors looking to thrive in the new health economy.

*“Our goal is to bring individual investors from major life sciences hubs across North America to meet with and advise Alberta companies to help them reach new heights and expand internationally. Our investors are there to help each company grow in some unique capacity, whether it’s looking for potential investment, introducing them to other investors or expertise in their network, or simply providing feedback to their pitch or strategy.”*

**Ryan Heit**

Co-Founder | Valhalla Capital Inc.

## Cultivating Critical Mass

*There are several accelerators and incubators in our region, as such there is no need for Health City to provide additional capacity in this regard. Health City is the place to cultivate ideas specifically targeted to build critical mass in key growth sub-sectors. Health City is looking to catalyze key initiatives that serve as "engines of growth" and offer support to many companies ready to scale.*

### **Enhanced Learning Incorporating eXtended Reality (ELIXR)**

The extended reality market is a key area of focus for Health City, whose mandate is to help pave the way for the transformation of our health economy. This will drive improved health outcomes and economic development for the region that can be scaled globally.

ELIXR has the ability to bring Edmonton-based post-secondary institutions together under one umbrella, building critical mass for such an important health subsector. Educators and practice experts will have the ability to create virtual and augmented reality simulations, training and learning experiences. Using agile strategies, content can be distributed collaboratively through ELIXR's network of publishers to ensure that high quality, extended reality learning experiences are made widely available to benefit students' and practicing professionals' continuing education and development.

Health City has been involved in not only the design but the official start-up of ELIXR, having the ability to connect ELIXR to companies and organizations in our network, as well as join projects with funding from all levels of government, multinationals from the medical device and pharmaceutical industry, and philanthropic organizations. Phase 2 of this will enable a marketplace for both Business-to-Business (B2B) and Business-to-Consumer (B2C) transactions that will serve as an economic driver in the months and years to come. To read the official ELIXR announcement, [click here](#).

### **Applied Pharmaceutical Innovation (API)**

API is a not-for-profit institution with an expert interdisciplinary team that works with a network of collaborating organizations. As a whole, API provides the expertise, services, and infrastructure of a pharmaceutical company by helping innovators launch their ideas into the real world, connect industry to the services they need for commercial success, and accelerate all aspects of the drug development process. Health City has connected API with senior companies, partners, elected government officials and trade networks in Silicon Valley and other jurisdictions. Since its launch out of the University of Alberta in 2018, API has attracted \$25 million in investments. API is currently co-located at the Health City offices.

# Strengthening the Health Community Through Strategic Partnerships and Initiatives

*By 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.*

## Canada-Chicago Mentoring Program (C2MP)

C2MP was formed as a partnership between the Canada Trade Commissioner Service and the Chicago Innovation Mentors at MATTER.health and delivers tailor-made mentoring focused on life sciences and healthcare innovators working in pharmaceuticals, health IT and medical devices to Canadian companies. The competitive application process saw the admission of three Edmonton-based companies (RUNWITHIT Synthetics, UMay Care and Health Gauge) in the 2019 6-month Program, emphasizing the strength of our region's med-tech companies. As an opportunity to celebrate these companies, but also create opportunities of collision with C2MP and other local innovators, Health City hosted a unique forum to showcase the Program as part of its 2019 Breakfast Series. The panel-centric breakfast hosted a participating C2MP mentor, our regional innovators excelling within the C2MP and the Canada Trade Commissioner Service. The anticipation is that more regional-based companies will apply to future C2MP cohorts, gain access to expertise from mentors in the Chicago area while excelling and growing their companies locally.

*"The Trade Commissioner Service at the Consulate General of Canada in Chicago has worked with Health City on several occasions and leveraged their great network of entrepreneurs in the health care and life sciences space to talk about global opportunities for Canadian companies. Most recently, Health City was instrumental in promoting the 6th edition of the Canada-Chicago Mentoring Program, a Canadian Technology Accelerator Pilot. Health City assisted with a program for Harald Steltzer, a mentor at Chicago-based MATTER and Point B/Chicago Innovation Mentors, and Co-Founder and CEO of NoMo Diagnostics Inc; and Laura Dalby, Consul and Trade Commissioner at the Consulate General of Canada in Chicago. The program included a full house at a Health City Breakfast Series. We look forward to seeing continued collaboration between Edmonton and the US Midwest thanks to great local partners. Thank you, Health City!"*

**Laura Dalby, CITP® | FIBP®**

Consul and Trade Commissioner (investment and innovation) Consulate General of Canada in Chicago Government of Canada

*“Health City facilitated our participation in Chicago Innovation Mentors’ MATTER.health program with the purpose to increase our connection with Chicago’s tech community. We value the leadership and work that Health City is doing through both the Breakfast Series and community events to strengthen and expand our community at a local level.”*

**Randy Duguay**  
CEO | Health Gauge

## Multinationals Investing in Our Region

Health City formed a collaborative partnership with Boehringer Ingelheim (Canada) Ltd. to drive innovation in the region with the anticipation of making inroads in improved patient outcomes. Boehringer Ingelheim has selected Edmonton as its first “smart city” and has invested \$200,000 for Phase I of its global smart city program. The goal to leverage artificial intelligence to examine data to better address health issues, including seniors’ health and chronic diseases, can be achieved by identifying collaboration opportunities between local companies and healthcare providers.

This partnership, while in its infancy, has already created multiple collaborations with local innovators in the private sector, including Okaki Health Intelligence and AltaML, as well as partnerships with the University of Alberta and SAGE Seniors’ Association. At the heart of these projects are the development of tools that can facilitate frontline providers to identify patients’ needs; customizing care pathways, allowing the clinician to focus on prevention.

## Using Artificial Intelligence to Drive Health Outcomes in Remote Communities

Remote and rural communities can be burdened with a lack of infrastructure and resources to ensure the delivery of adequate healthcare as compared to major centres. Equitable access to healthcare services is still a considerable barrier that must be addressed to meet the needs of these communities. Such barriers can lead to undiagnosed conditions that can result in long-term complications, straining an over-burdened acute care system.

With rapid advancements in technology, closing the gap to equitable access is becoming a real possibility with solutions being developed within our region. Medo.AI, an Edmonton-based start-up has developed such a technology; deploying in remote communities to aide in disease diagnosis and timely intervention. Through its partnership with Health City and the Westview Primary Care Network, Medo.AI is able to deploy ultrasonography in remote and rural communities to diagnose hip dysplasia in newly born infants. Harnessing the power of AI, the technology aims to better able diagnose hip dysplasia “in the field”, with the anticipation of leading to timely intervention for improved health outcomes.

## The Power of Over 100 Voices

Over the past year, Health City has developed a partnership with Deloitte to mobilize key stakeholders in the health community. During Singularity-U, Health City and Deloitte co-hosted an ideation session providing key players the opportunity to interact and participate in an engaging discussion on identifying key initiatives with the ability to transform and disrupt the current healthcare innovation community.

This initial ideation session provided a renewed sense of urgency around transforming the way we are collectively solving health problems. A follow-up session was conducted to further develop key priority areas of focus and provide the more than 100 Edmonton-based organizations with an interactive and inclusive channel to provide feedback, and to identify and define a set of action items around the identified strategic initiatives. Work will continue over the coming year to further develop and refine these key strategic initiatives.

*“For nearly a year, Deloitte has been working with Health City and several other stakeholders and influencers throughout the Alberta healthcare ecosystem to co-create a vision for a better healthcare system in our Province. The overall vision is to create an inclusive and collaborative health culture where community partners, industry and government work together to develop and implement patient-centric innovations. By focusing on the liberation of high-quality data, sustainable funding, commercialization and scale health companies we can achieve overall growth of a robust ecosystem in Alberta. Working with the Health City leadership team has been a pleasure. We look forward to continuing this incredible momentum into 2020 and beyond.”*

**Dalibor Petrovic**

Partner | Consulting, Deloitte Inc.

The power of the group has resulted in an opportunity for our region’s health sector to have a dialogue directly with the Government of Alberta. We are co-developing a plan that industry can own to move the sector forward. Two letters of requests for support have already been submitted to government: One to Minister Shandro and a second one to Associated Minister Hunter (Red Tape).

An industry/ministry roundtable was held on September 4, 2019 where it was decided to set up a strategy to drive a data initiative where access will be housed by a third-party custodian that would allow access for industry and other organizations. The second roundtable with the Ministry of Health, and representation from Alberta Health Services, is set to be held at the Alberta Legislature on January 13, 2020.

In addition, Health City has been asked to serve on the Ministry of Senior Advisory Committee.

## Forging National Alliances to Scale Health City's Message

The Canadian College of Health Leaders (CCHL) is a National membership-based organization that aims to develop, promote, advance and recognize excellence in health leadership. With local and provincial chapters across the country, CCHL offers a unique professional development platform through the Certified Health Executive (CHE) Program. As the only leadership designation in Canada for all health leaders, the CHE provides an opportunity for health-based professionals to leverage tools, content and processes from LEADS Domains to earn the CHE designation. As Health City endeavours to create meaningful and impactful partnerships that will strengthen the local ecosystem, collaboration with CCHL provides an additional avenue for professional development to the region's talent. The 2020 year will see a CCHL-themed breakfast as part of the Health City Breakfast Series, as well as other collaborative opportunities between the two organizations.

## Creating Community Capacity for Public Health Issues

The opioid crisis has indiscriminately affected individuals in many communities across the province and has translated into a real public health issue. From suburban metropolitans to isolated, rural communities, its impact has been staggering. The administration of intravenous (IV) naloxone as a remedy to combat opioid overdoses has presented itself as a significant opportunity to save lives but has been met with barriers, including its route of administration. To overcome this barrier, Adapt Pharma, an Ontario-based pharmaceutical company has developed Narcan™ nasal spray, a needle-free, ready-to-use, concentrated dose of naloxone.

In December 2016, Naloxone Nasal Spray (Narcan™) became a Schedule II drug allowing any patient or patient's agent in Ontario and Quebec, and individuals qualifying under the Non-Insured Health Benefits (NIHB) Program, the opportunity to obtain Narcan™ from a community pharmacist without a prescription. To date, British Columbians and Albertans must pay out of pocket for the Narcan™ Nasal Spray.

Health City, in partnership with Adapt Pharma and Edmonton-based pharmacy, Central Point Pharmacy, delivered Narcan™ Nasal Spray to a regional community qualifying under the NIHB Program as an opportunity to raise awareness about this life-saving technology. The long-term plan is to continue to provide Narcan™ Nasal Spray to more communities beyond those under the NIHB Program to combat the opioid crisis plaguing our province.

*"Partnership with Health City in this initiative provided an opportunity for the distribution of this life-saving technology to communities in our province affected by the opioid crisis."*

**Raj Manhas**  
Pharmacy Manager | Central Point Pharmacy

# Voices Behind Health City



## Singular Voice - Multiple Mediums

Fostering a community that supports Edmonton-based health companies focused on connection and education ensures Health City creates an environment for success. Industry partners, post-secondary institutions and media outlets have approached Health City to play a significant role to develop solutions and bring awareness to our challenges.

Events, simply put, bring people together. Health City has played a key role in bringing new events to Edmonton, namely SingularityU, while also reenergizing the Breakfast Series (formerly hosted by AHIA) with an international focus and extending reach into the broader innovation community in partnership with Avenue Magazine through The Innovation Event.

*“In March 2019, Western Economic Development Canada (WD) welcomed Ifor Ffowcs-Williams, world expert on economic cluster development, to western Canada. The objective of this initiative was to provide insight into how clusters in emerging economic areas can drive growth, and to hear about international examples of success. Alberta has strengths in the growing area of health data analytics and cluster development in this area may help grow the region’s capacity. Since Health City has been instrumental in bringing together a diverse group of community stakeholders in the healthcare and innovation space, WD viewed Health City as the ideal go-to organization to help share global knowledge and expertise to a broad range of health ecosystem players in Alberta.”*

Alberta Region Policy, Planning and External Relations, Western Economic Diversification Canada

Alberta Health Industry Association (Originally the Metro Edmonton Health Industries Association - MEHIA), established over 30 years ago, consists of senior companies in the health ecosystem; however, due to a variety of reasons, this group has not been engaged in the emerging health sector in Alberta. Earlier this year, AHIA merged with Health City and as a result of that merger, an industry advisory board was created to capture the wisdom of these Edmonton senior companies. These members represent successful companies that are selling products in our jurisdiction, as well as internationally, and could serve as mentors in the sector and advisors for initiatives related to Health City. Health City has incorporated the breakfast series from AHIA that now serves as a key meeting point for business people in the sector and academics focused in the health sector.

## Industry Advisory Board Members:



The breakfast series and other community events attracted over 600 innovators, entrepreneurs, and partner organizations on topics including: cluster-based economic development, health innovation, virtual health, Chicago/Canada Mentorship program (C2MP), virtual & augmented reality, and angel investment.

On February 1, 2019, Health City held a half-day **'Stakeholders and Bacon'** event for Edmonton area health innovation stakeholders that had two main objectives. First, to hear from others in Canada and from innovative jurisdictions from around the world about successes that are emblematic of the new health economy and would resonate with Edmonton's health innovation community. Second, to begin work on a new approach to drive the health innovation economy in our community, through the launch of four working groups.

*"It is imperative that we shift our economy to the sectors of the future."*

**Mayor Don Iveson**

## Session speakers included:

- Hosts – Mayor Don Iveson (HC sponsor); Jason Pincock (Health City Chair); Reg Joseph (Health City CEO);
- Luke Butterworth, Ravina Anand and Bryce Thomsen (Next36);
- Rob Henderson (BioTalent Canada) and Amy Roy Gratton (University of Alberta's Career Centre);
- Joanne Fedeyko (Connection Silicon Valley); Cory Janssen (AltaML); Reid Whitlock (Chronic Disease Innovation Centre);
- Randy Duguay (Health Gauge); Dornoosh Zonoobi (MEDO.ai) and Badeia Jawhari (Deloitte);
- Hakim Yadi (Northern Health Sciences Alliance, UK); and Brian O'Connor (European Connected Health Alliance, Ireland).

Health City, in partnership with Taproot Edmonton, was the founding sponsor of the **Health Innovation Roundup**, which currently has a little over 300 subscribers and boasts a growth rate of about 50% each month. Open rates sit about 40% (the industry average is 16%) and click rates of about 12% (the industry average is 3%). Beyond that, hundreds more read the roundup through social media and the Health City website. For more information on the Health Innovation Roundup, [click here](#).

*“The Health Innovation Roundup has become a must-read publication for anyone working in or interested in the health innovation sector in Edmonton. Each week the roundup saves readers time and keeps them informed about the latest head-lines and happenings. Having Health City as a founding sponsor of the Health Innovation Roundup made it possible for us to commit the time and resources required to get a publication like this off the ground. As a result, we’re able to have a positive impact on this important sector of our city’s economy by keeping everyone informed about what’s happening on a consistent basis.”*

**Mack Male**  
Founder | Taproot

Most recently, Health City partnered with Alberta Impact, an Edmonton-based online, in-studio, television format talk show to create a new series titled ‘Future of Health’. As we know, health continues to be disrupted with technological innovations that ultimately affect the delivery of care itself. As advancements are made, Albertans need to have a vehicle that keeps them informed on the changing landscape. This partnership was established to create a vehicle that does exactly that, inform and discuss disruptions that directly impact Albertans. The inaugural ‘Future of Health’ video was released on November 27, 2019 ([view here](#)).

*“Our goal is to dive deep into various industries and help educate the general public to facilitate more collaboration and investment opportunities in the province. This partnership allows Alberta Impact to explore the future of health and its impact on Albertans in an open format.”*

**Bryce Lambert**  
Founder & Host | Alberta Impact

Edmonton’s post-secondary institutions are renowned nationally and internationally in a number of key areas, including their strong curricula and program delivery models that aide in facilitating the transition from post-secondary education to employment. Leveraging new tools for program delivery not only enhances students’ ability to learn course material, but also acts as a competitive tool to attract prospective students. As part of the diverse program delivery occurring at Edmonton’s post-secondaries across multiple programs, augmented reality and virtual reality (AR/VR) has been utilized to enhance trainees’ learning experiences.

Recognizing these strengths and capabilities, Health City coordinated VR After Dark in partnership with Concordia University of Edmonton, MacEwan University, NAIT, NorQuest College and the University of Alberta - Faculty of Rehabilitation Medicine to demonstrate the realities and possibilities of virtual and augmented reality technology in our region. The open-to-public forum not only provided a platform of collaboration among the post-secondaries, but also an opportunity to showcase how AR/VR technologies are being utilized and developed locally. The coordination of this event was also a critical piece in catalyzing the ELIXR initiative spearheaded by Health City in partnership with the University of Alberta - Faculty of Rehabilitation Medicine.

What a few of the participating post-secondary institutions had to say about Health City's involvement in the creation of the event:

*"Concordia University of Edmonton was excited to be a part of VR After Dark, an event that showcased Edmonton's strengths in mixed reality-based technologies. This event was another demonstration of the collaborative nature of post-secondary institutions in Edmonton and the role Health City plays in bringing the community together."*

**Dr. Isha Katyal**

Manager | Centre for Innovation and Applied Research, Concordia University of Edmonton

*"Health City were wonderful partners in supporting the VR After Dark event at NorQuest College. They offered essential tools to help market the event, including their own vast network. They are an enthusiastic bunch who are passionate about uniting key players in the world of innovation. By doing so they are putting the spotlight on the amazing talent which ultimately strengthens the innovation ecosystem here in Edmonton."*

**Dustin Chan**

Manager | Projects & Innovations, NorQuest College



**1**  
**Artificial Intelligence  
 Improves Health  
 Outcomes**

*Mayor Don Iveson speaks to the value of Boehringer Ingelheim investment to Edmonton, its citizens and its economy.*

**2**  
**Future of Health**

*New partnership focused on discussing health disruptions that directly impact Albertans. The new series is scheduled to air in January 2020.*

**3**  
**Health City Sponsored  
 Valhalla BaseCamp  
 Pitch Night**

*Health & Life Science Companies from the 2-day Valhalla BaseCamp program apply what they learned about raising capital and pitch their companies to investors for feedback.*



**4**  
**Beyond Disruption  
 Podcast**

*At SingularityU Canada Summit 2019, Reg Joseph sits down with Cara Bedford of Disruption Magazine to discuss how our local community has the capability to react to the global disruption in the health sector. [Listen here.](#)*

**5**  
**Thoughts Leaders Talk  
 Innovation**

*Jason Pincock and Reg Joseph joined other thought leaders at the Avenue Magazine Innovation Event to speak about the strengths and challenges of innovation in our region.*

**6**  
**Industry Investment  
 Leverages Capabilities**

*Uli Broedl, Boehringer Ingelheim, announced a partnership with Health City and AltaML focused on detecting frailty in Alberta's aging population, improving patient care and quality of life.*

# Health City Operations and Team

*Health City is a Federally incorporated, not-for-profit organization; as such, we strive to operate in the most cost-effective manner possible. Comprised of a small core team of people, we work to leverage resources and expertise from our partners wherever possible. Many operational functions are outsourced to save on staffing costs; including, IT and website management, marketing and communications support, and legal and financial services.*

In January 2019, Health City moved to the innovation corridor in downtown Edmonton to co-locate with the Institute of Health Economics (IHE). With the increase in staff and visitors at 1200-10405 Jasper Avenue, IHE and Healthy City created a full-time reception/administrative support position that provides support to both organizations.

## Our Team:



**Reg Joseph**  
CEO



**Antonio Bruni**  
Director, Business  
Development



**Lisa Laferriere**  
Operations Manager



**Rebecca Keichinger**  
Executive Assistant



**Justin Pitt**  
Receptionist/  
Administrative Assistant

# Appendix A: 2020 Budget

## REVENUE

Grant	985,000
Service Agreements	32,166
Reimbursable Expenses	7,056
<b>Revenue Sub Total</b>	<b>1,024,222</b>

## EXPENSES

Salaries & Benefits	
<b>Salaries Sub Total</b>	<b>532,245</b>

### Business Development

Conference Registration	10,000
Conference Related Travel	20,000
Contractors / Consultants	111,726
Hosting / Events	9,000
Internships	9,875
Memberships & Subscriptions	8,000
Local Parking & Taxi / Uber	600
Professional Development	3,000
Sponsorship	15,000
Ticketed Events	2,000
Working Groups	1,800
<b>Business Development Sub Total</b>	<b>191,001</b>

### Marketing and Communications

Advertising	16,000
Contractors / Consultants	102,000
<b>Marketing &amp; Communications Sub Total</b>	<b>118,000</b>

### Operations

Board Expenses	749
Accounting, Legal, Bank Fees	23,000
Catering	800
Contractors / Consultants	1,000
Insurance	3,397
IT	6,000
Rent	134,208
Professional Development	1,500
Payroll Fees (ADP)	2,168
Technology	5,000
Telecommunications	2,760
General Office	2,394
<b>Operations Sub Total</b>	<b>182,976</b>

<b>Total Expenses</b>	<b>1,024,222</b>
<b>Forecasted Cash Balance</b>	<b>-0</b>

# Appendix B: 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)	9
1.2. Number of partnerships created or developed around health innovation	32
1.3. Number of new companies attracted to plug into or to re-engage the health ecosystem:	
1.3.1 Multinational Enterprises	20
1.3.2 Small to Medium Enterprises	41
1.3.3 Start-ups	44
1.3.4 Community stakeholders	78
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><b>ELIXR &amp; AR/VR</b></p> <p><i>As part of the diverse program delivery occurring at Edmonton's post-secondary institutions (PSIs) across multiple programs, augmented and virtual reality (AR/VR) has been utilized to enhance trainees' learning experiences. Recognizing these strengths and capabilities, Health City coordinated <b>VR After Dark</b> in partnership with Concordia University of Edmonton, MacEwan University, NAIT, NorQuest College and the University of Alberta - Faculty of Rehabilitation Medicine to demonstrate the realities and possibilities of AR/VR technology in our region. The coordination of this event was critical in catalyzing the <b>Enhanced Learning Incorporating eXtended Reality (ELIXR)</b> initiative spearheaded by Health City in partnership with the University of Alberta - Faculty of Rehabilitation Medicine. The initiative will aim to create a market place for AR/VR generated content from our region's PSIs.</i></p>	
<p><b>BI</b></p> <p><i>Health City has formed a strong partnership with multinational Boehringer-Ingelheim to create opportunities of co-creation with local innovators, leveraging artificial intelligence and machine learning for improved health outcomes. A number of initiatives are in preparation with faculty from the University of Alberta, Sage Seniors Association and AltaML to address issues around chronic disease, seniors' health and other diseases.</i></p>	
<p><b>Synthetic Data</b></p> <p><i>Synthetic data assets are quantitatively identical to patient-derived datasets yet cannot be linked to the individuals from whom the data were derived. Because synthetic data contains no protected health information, the datasets can be shared freely among investigators or those in industry, without raising patient privacy concerns or contravening the Alberta Health Information Act.</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	9
2.2. Number of internships and mentorship opportunities spearheaded	41
2.3. Dollars secured to fund talent opportunities	\$2,200
2.4. Number of new employees created in industry, equated to Health City support	3

## 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)	3
3.2. Examples of policy related work that has advanced the development and growth of the health innovation continuum.  <i>Health City is co-developing an industry-driven plan to move the sector forward. We have submitted letters to the Ministry on behalf of Edmonton's health innovation community with the support of over 50 stakeholders from across the health spectrum. On October 7, 2019, a ministry/industry roundtable was held and it was agreed that a strategy would be developed to drive a data initiative whereby consideration of a third party custodian be implemented to house and provide access management for industry and other organizations.</i>  <i>Health City was recently invited by Minister Pon to serve on the Seniors Advisory Committee.</i>	

## 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	\$2,275,000
4.1.2 Provincial government	\$2,000,009
4.1.3 Industry	\$291,715
4.1.4 Other organizations	\$14,000

## GOAL 5

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

Goal	Metric
5.1. Number of Edmonton Health City social media interactions	
<p><i>Health City currently has 1241 Twitter followers and 226 LinkedIn followers. A third party social media audit was conducted earlier this year to identify gaps and provide recommendations to improve on Health City's social media presence. As a result, a new LinkedIn profile was developed in early July. See Table 1 below for Twitter data and Table 2 for LinkedIn data.</i></p>	
5.2. Number of speaking engagements to build awareness and Edmonton's brand	16
5.3. Describe examples of how Health City is known as the unified voice and convergence point for the health innovation	
<p><i>In 2019, Health City hosted 7 different community events that attracted over 600 innovators, entrepreneurial, researchers and partner organizations on topics including; cluster-based economic development, health innovation, virtual health, the Canada/Chicago Mentorship Program (C2MP), virtual &amp; augmented reality, and angel investment.</i></p> <p><i>Health City is the founding sponsor of the Health Innovation Roundup, a weekly online publication that currently has over 300 subscribers. Open rates are ~ 40% (the industry average is 16%) and click rates of ~ 12% (the industry average is 3%). Beyond that, hundreds more read the roundup through social media and the Health City website.</i></p> <p><i>Most recently, Health City announced a partnership with Alberta Impact, an Edmonton-based, online in-studio, television format talk show titled "Future of Health". Health continues to be disrupted with technological innovations that ultimately affect the delivery of care itself. As advancements are made, Albertans need to have a vehicle that keeps them informed on the changing landscape. This partnership was established to create a vehicle that does exactly that, inform and discuss disruptions that directly impact Albertans. Filming starts December 2019 with the first of 10 planned episodes scheduled to air in January 2020.</i></p>	

**Table 1: Twitter**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
<b>Impressions</b>	21K	34.9K	36.4K	27.9K	47.4K	60.2K	31.9K	40.9K	31.5K	48.8K	44.4K
<b>Engagement Rate</b>	0.70%	1.40%	1.30%	1.10%	1.50%	1.00%	1.20%	1.20%	0.90%	1.40%	1.60%
<b>Follower Increase</b>	40	42	43	35	53	45	56	30	23	42	37
<b>Clicks</b>	34 <i>(avg 1.1 per day)</i>	72 <i>(avg 2.57 per day)</i>	100 <i>(avg 3.23 per day)</i>	69 <i>(avg 2.3 per day)</i>	228 <i>(avg 7.35 per day)</i>	49 <i>(avg 1.63 per day)</i>	155 <i>(avg 5 per day)</i>	85 <i>(avg 2.83 per day)</i>	40 <i>(avg 1.33 per day)</i>	136 <i>(avg 4.39 per day)</i>	132 <i>(avg 5.28 per day)</i>
<b>Number of Posts</b>	6	2	22	21	31	30	16	28	27	45	40

**Table 2: LinkedIn**

	Jul	Aug	Sept	Oct	Nov
<b>Impressions</b>	1,404	4,569	2,618	4,530	8,204
<b>Engagement Rate</b>	4.40%	6.24%	5.43%	6.33%	7.39%
<b>Follower Increase</b>	63	51	16	34	45
<b>Clicks</b>	155 <i>(avg 5 per day)</i>	38 <i>(avg 1.2 per day)</i>	197 <i>(avg 6.57 per day)</i>	105 <i>(avg 3.39 per day)</i>	459 <i>(avg 18.36 per day)</i>
<b>Number of Posts</b>	16	32	17	26	22