PENDER VENTURES

Canadian Health Tech Funding Report & Market Map

2022: Year in Review

PENDER VENTURES

We are tech investors with a passion for healthcare

Pender Ventures is a thesis-driven venture capital investor focused on B2B software and health tech startups at the inflection point between commercialization and scale.

As hands-on, high-conviction investors, Pender Ventures' diverse team leverages decades of experience to add operational and strategic value to its portfolio companies. Learn more at: https://www.penderventures.com/

Authors:
Meryeme Lahmami
Felicia Liu-Fei

With the help of generous contributors listed in page 18

Summary Of Findings

Funding and deal volume: Venture funding for health tech companies in 2022 is down 30%, wiping out the abnormally high levels of investments since the second half of 2020. In total, $672M in investments, across 168 deals, closed with an average deal size of $4M. Despite the investment recalibration, the Canadian health tech sector has been resilient in comparison to other verticals in its overall market performance.

Provincial distributions: After a record-breaking year in 2021 where the gap between top provinces Quebec, BC and Ontario was negligible, the gaps in funding levels widened again in 2022 with both BC and Quebec falling behind with 11% and 9% of total venture funding in 2022, respectively. On the other hand, Alberta went up in ranking and came in second, comprising 16% of Canadian health tech venture funding last year.

Growth categories: Two categories saw the most growth in the last year: patient engagement, communication and care management. Patients want to be more involved and engaged in their care journey and the shift to value-based care is emphasizing patient satisfaction. Workflow optimization and automation is a focus for healthcare systems in a context where staff shortages and financial viability are top of mind.

Major themes: The top four themes of the year that will chart the course for 2023 include: analytics and big data, telemedicine and cross-continuum care, personalized medicine and patient centric-care, and staffing shortage across the board.

Exit activity: There were 20 M&A transactions in 2022 and collectively, the disclosed deals were valued at $190M. Telus Health and Well Health were the most active acquirers as they participated in over 50% of all disclosed deals. Financial institutions such as RBC – which acquired MDBilling last year – have also shown a keenness to enter the health tech space.

Canadian Health Tech Market Sector Glossary

Our Health Technology Definition

Technology-empowered healthcare products and services comprise of a broad spectrum of uses, from applications in patient record management to FDA-approved medical devices. These technologies share the goal of enabling a higher quality of care, improving the convenience to patients and/ or increasing efficiency for providers. Our current scope excludes biotechnology products.

Mobile Health

Patient-driven technology aiming to personalize health monitoring and make health improvement convenient

Personal Health Tracking

Hardware and software tools + platforms helping consumers self-monitor health concerns

Patient Self-Care

Provider-independent applications delivering insights to diagnostics and treatment

Screening and Diagnostics

Software and hardware products used for physician-patient clinical interactions

Medical Devices

Technology-enabled physical devices with the goal of improving diagnostic and treatment capabilities

Computer-Aided Clinical Decision Support

Software solutions to treat medical conditions, prescribed by healthcare providers

Virtual Care

Digital distribution of and access to health services by virtually enhancing/ facilitating care from healthcare professionals

Care Management

Systems to manage organization-wide operations and manage internal workflow, such as patient data management, compliance, billing and HR

Research Tooling

Software and hardware contributing to the optimization of healthcare research and development

Patient Engagement

Software and services to attract, retain and manage patients through streamlined communication

Health Technology In Canada: 2022 In A Nutshell

$672M

In total venture funding in 2022

28%

Decrease in early-stage funding amount (Pre-Seed, Seed, Series A)

16%

Of all 2022 health tech funding went to Alberta-based companies (vs 7% in 2021)

2

Mega-rounds* in 2022, 50% less than in 2021

34%

Decrease in later-stage funding (Series B+)

70%

Decrease in exits** from 2021 levels

* Mega-rounds are defined as $50M+ deals

** M&A and IPO

Source: Pitchbook Database

Patients

Patient Self-Care

VRapeutic
TIMSLE
tréxō robotics
molecular you
air
REHABTRONICS
ADDvocacy
Spinaline by SACRAL SOLUTIONS
NECK TRONICS Inc.
umay start with u
UpBeing
ORA
Novus Health
DIVETHRU
VIRTUALIEF
insightWell
Swiftsure
cerebra
Raft Digital Therapeutics
PARADOS
SCYIBL
Qcard

Mobile Health

Personal Health Tracking

SCANBO
stepscan
MEMOTEXT
neurovine
tenera
TRUE ANGLE
AMP Health
Qanik DX
KOGNITIV SPARK
ORPYX

Screening and Diagnostics

TORUS
illumiSonics
MIMOSA Diagnostics
RETINALOGIK
NURA Medical
synaptive
ARTERIAL ASSESSMENTS
CUBRESA
Breathe BioMedical
HEALTHTECH CONNEX

Medical Devices

DAXSONICS
FluidAI
Regained Inc.
Alentic
VESALIUS CARDIOVASCULAR
Vena Medical
Optina
circle CARDIOVASCULAR IMAGING
SpinaFX
sonoscope
zilia
THORASYS
ADAPTIIV
TeleMag

Computer-Aided Decision Support

autoscribe
MedicalCytometrix
NEUROLYTIXS
Talio
MedCurrent
ClaroNav
NeuroBlu
COSM MEDICAL
METAOPTIMA
SPARROW ACOUSTICS
GRANVILLE BIOMEDICAL
Alēthea
NZ technologies
Realize MEDICAL
PharmAssess
snapdx
DESTINE HEALTH
ViTAA
oraQ
densitas
VOXNEURO
CIRCLE

Life Sciences

MOC Biotechnologies Inc.
Evidence Partners
deep genomics
MIMS
NIMBLE SCIENCE
DRUGBANK
lumiio
VoxCell BioInnovation
DNASTACK
heal mary
cedience
LYDIA.ai
BioBox
pulse infoframe

Research Tooling

VARIATIONAL AI
BIOTIC
ParticipAid
montrium
MODELIS
papercurve
Chemical Computing Group
axiom real-time metrics
GANDEEVA THERAPEUTICS
Zamplo
Sciteline
CYCLICA
QUANTIFIED CITIZEN
ODAIA
INCUVERS

Providers

Patient Engagement

LIME
SKIP THE WAITING ROOM
cliniconex
owlpractice
Kayan+
intiveo
caribou
HYPERCARE
LifeWIRE
360 MEDLINK
technovation
gojitech
Doctr
careteam
unumhealth
MedAtlas
RECALLMAX
Clinia
SeamlessMD
Electric Puppets
Claris Health
Ayogo
MEDFAR SOLUTIONS CLINIQUES

Virtual Care

psymood
lumeca
aditum health
EVERYDAY HEROES KIDS
YOUR DOCTORS ONLINE
TinyEYE Therapy Services
Carel
Collogh Cares
Speakbox
HALEO Clinic
UPHEALTH
PHOENIX
PHYXABLE
nuralogix
pocketpills
BreatheSuite
XCO
felix
cbi HEALTH
COGNITO
Rocket Doctor
Tuktu
panogrampharmacy
celestra health systems
PurposeMed
awake labs
KixCare
eShift
Gotcare
oro

Payors

Care Management

VINCI LABS
Wisedocs
embodia
HOW HEALTH OUTCOMES WORLDWIDE
RamSoft
Health Chain
QiiQ HEALTHCARE INC.
KLYK Dental Software
Starling
Semantic Health
PointClickCare
Intelerad
aya
Fullscript
CORTICO
Logibec
Shift POSTS
INSIDEDESK
METADIGITAL
MEDSTACK
panogrampharmacy
PHENOTIPS
headversity
PHEMI
VERTO
METRICAID+
MEDEXA
Lotus
INTERFACEWARE
Cyno
eCHART HEALTHCARE
Dentem
League
Phelix

Canadian Health Tech Thrives In A Slow Funding Year

2022 was marked by a slowdown in the investment pace. Private health tech investments fell below 2020 levels with 32% fewer dollars invested than in 2021 across 168 transactions, 5% less than in 2021.

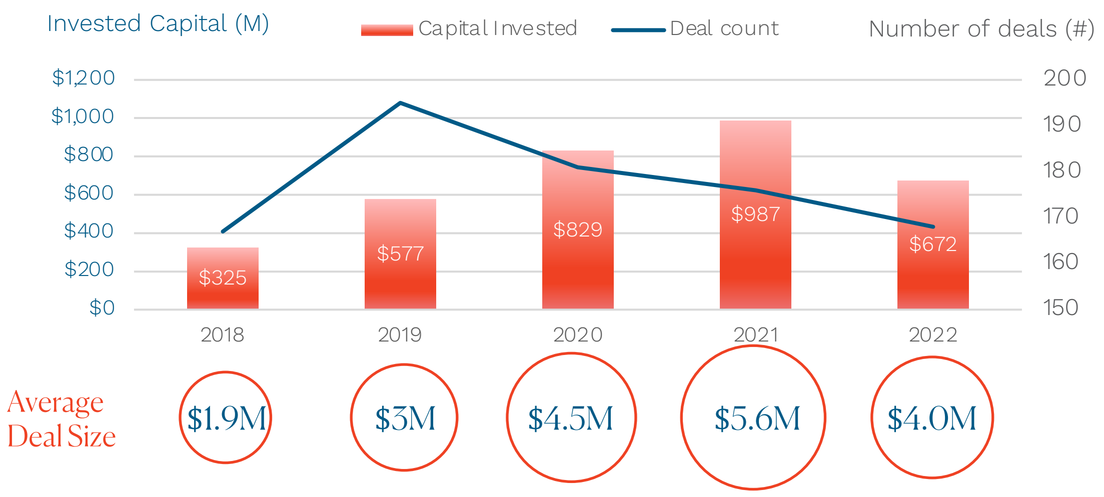
Although there were fewer deals in 2022 than in 2019, Canadian health tech companies raised more capital on average per deal, with average deal size reaching ~$4M, 30% more than in 2019.

Despite 2022 being a slow year, health tech showed signs of resilience. Compared to sectors like HRTech (78%), Fintech (57%), Life Sciences (47%), EdTech (52%), health tech saw a less dramatic funding slowdown.

The distribution of capital has shifted and is more concentrated in later stage companies, indicating a mature health tech industry. While this is encouraging, a deeper look at the data reveals that deal volume for early-stage companies remained largely flat YoY between 2019 and 2022, though investment dollars increased slightly over that period until 2022.

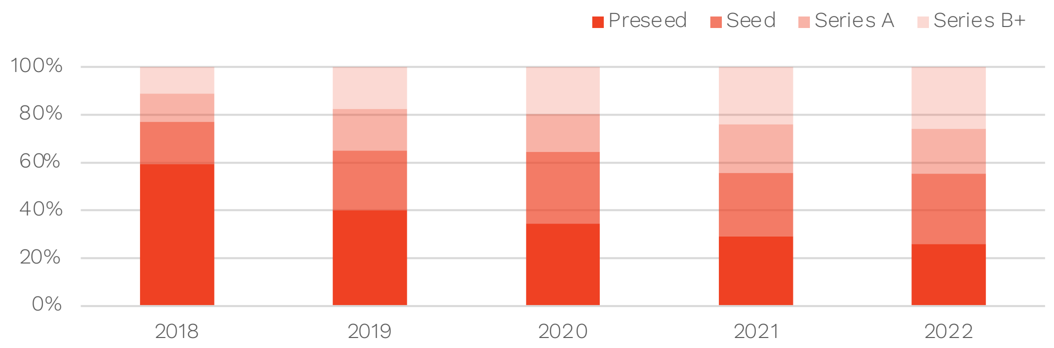
Canadian Health Tech VC Investment Overview

| Source: Pitchbook Database



Deal distribution 2018 - 2022

| Source: Pitchbook Database



Female Founders In Health Tech Exceed Industry Average, But Still Far From Achieving Equity

Overall Percentage of Female Founders

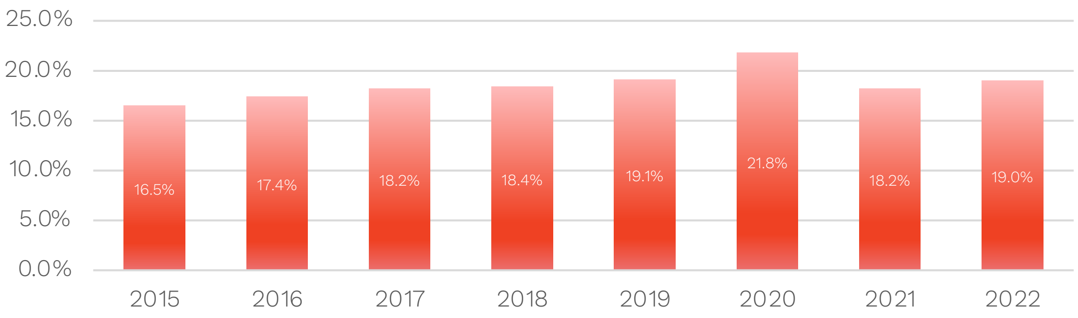
| Source: Pitchbook Database

20% Health Tech

15% Whole Industry

Percentage of Female Founders Per Year

| Source: Pitchbook Database



Note: Pitchbook data doesn't support other diversity data and is limited to VC-backed companies

While there are more female founders in health tech compared to the general population of founders, vast improvements still need to be made to achieve equity.

Within healthcare technology, the number of female founders has not meaningfully changed in the last five years.

Notable Female-Founded Companies

| Source: Pitchbook Database

Company	Female Founder
Jane Software	Alison Taylor – Co-Founder, co-CEO
Interaxon	Ariel Garten – Co-Founder, Board Director
Maple	Roxana Zaman – Co-Founder, COO
TinyEYE Therapy Services	Marnee Brick – Co-Founder, President
Swift Medical	Sheila Wang – Co-Founder, Chief Medical Officer

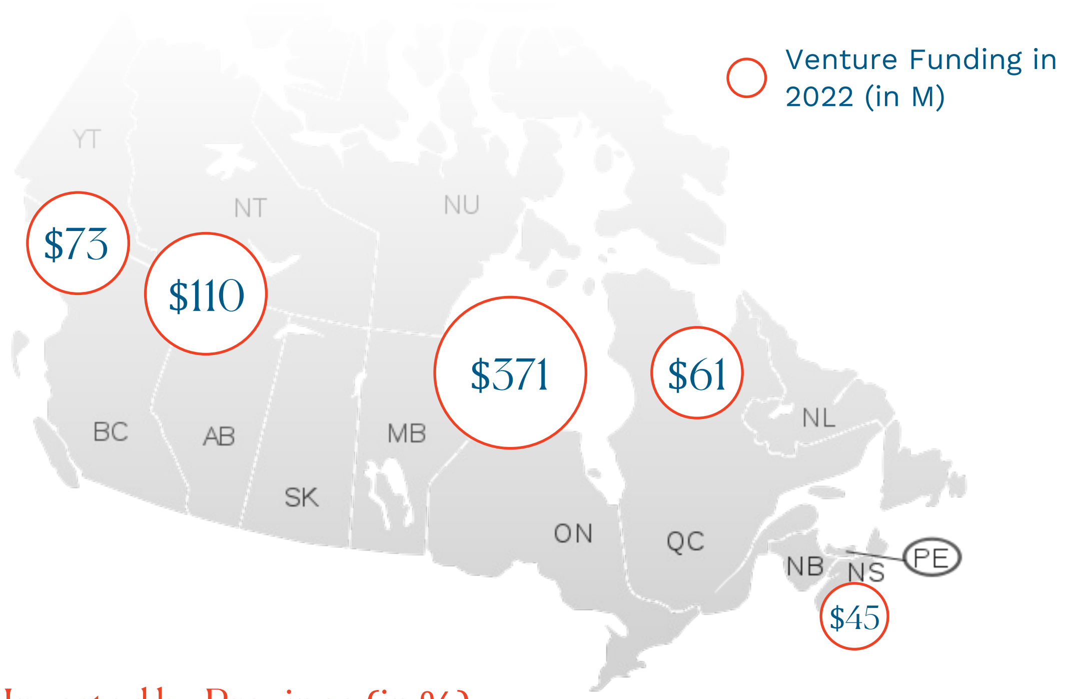
Alberta And Nova Scotia Emerge Within The Canadian Market

Alberta thrived in a slow year

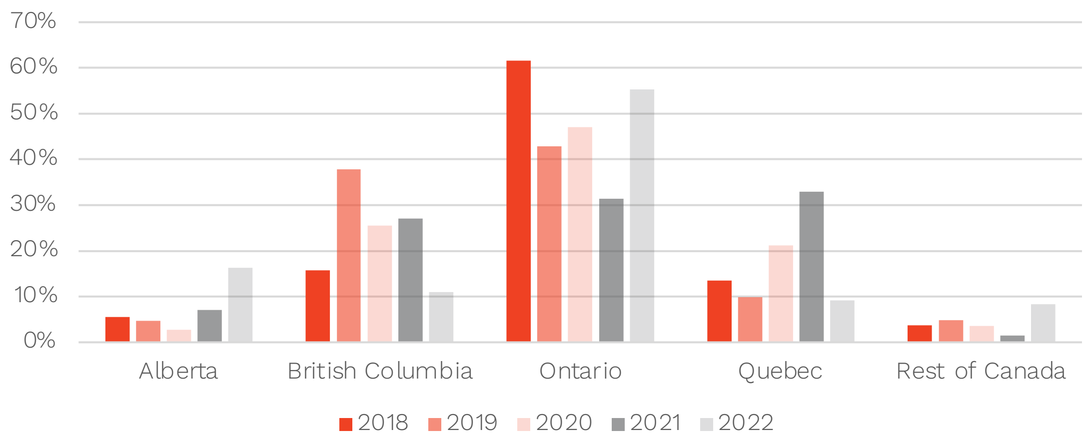
For the first time, Alberta made it to the top three provinces for health tech investments and came in second, after Ontario. As expected, Ontario continued to solidify its status as a mecca of health tech, while Quebec and BC investments significantly contracted in 2022. Quebec is trailing behind and made up 9% of total health tech funding amount in 2022, below its 2018 levels. BC maintained a healthy number of deals in health tech, but registered lower capital invested overall, making up 11% of the total health tech investment amount in 2022.

Emerging market: Nova Scotia

Nova Scotia leads the country in companies by population, with 2.7 currently backed companies founded/ 100,000 people. Its health tech companies received $45M in funding in 2022, ~5x the investments in 2021. Correspondingly, there are immense positive outlooks for Nova Scotia within health tech innovation. According to CBC, the Nova Scotia Health Authority CEO places a strong emphasis on technology to improve patient access to healthcare in the whole province, which will cultivate an environment for new innovations within the health tech field to improve patient outcomes.



Capital Invested by Province (in %)



While Still Few In Number, $50M+ Financings Are Slowly Increasing

The three largest deals of 2022 made up 45% of all venture and growth health tech funding.

The emergence of a few large players (e.g. PointClickCare, League, Circle Cardiovascular Imaging) largely catalyzed the increased presence of $50M+ rounds in Canada.

Excludes Debt but includes Growth Equity deals

| Source: Pitchbook Database (in M)

2018

League	$52
Soundbite Medical	$34
Opencare	$23
Fully Managed	$22
MedAvali	$22

2019

Lungpacer	$173
Synaptive	$100
League	$53
Dialogue	$40
Canary Medical	$35

2020

MedAvail	$110
Synaptive	$105
AlayaCare	$100
Maple	$75
Deep Genomics	$52

2021

AlayaCare	$225
Deep Genomics	$225
Kardium	$146
Autonomous ID	$62
Swift Medical	$44

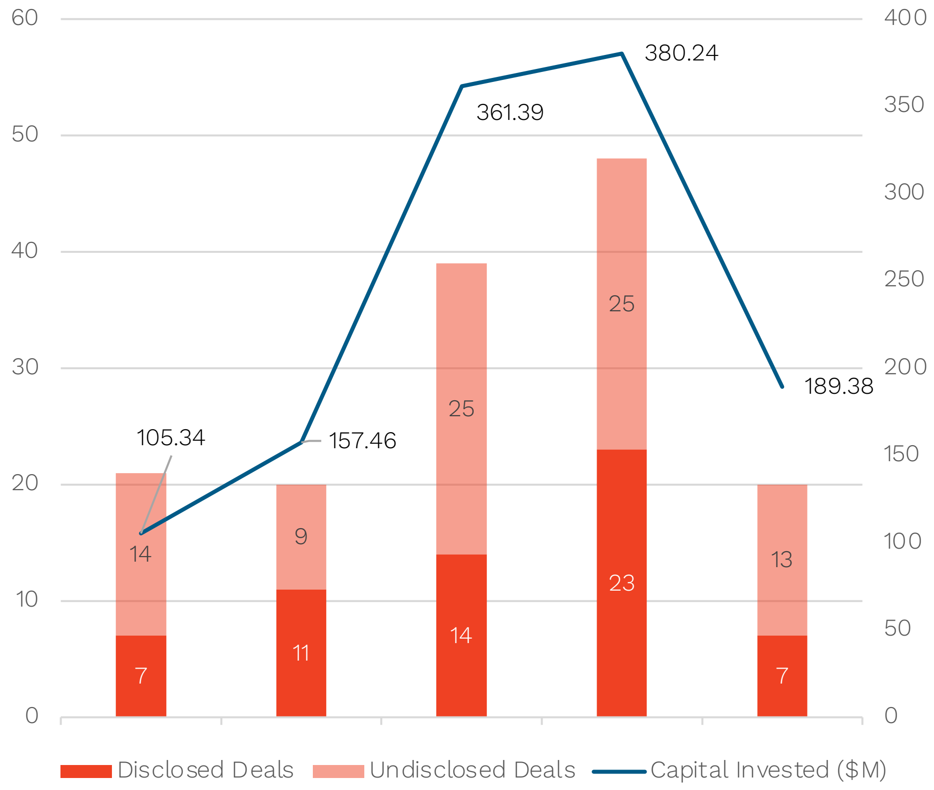
2022

Circle Cardiovascular Imaging	$213
League	$120
BenchSci	$62
BoomerangeFX	$25
LungPacer	$25

Telus Health, WELL Health, CloudMD Lead M&A Market

M&A Venture Funding and Deal Count

| Source: Pitchbook Database



	Top Disclosed Deals			Undisclosed Deals	
Year	Company	Acquirer	Amount (M)	Company	Acquirer
	Medisys Health Group	Telus Health	$84	DXA	Dialogue
	Symbility Solutions (Health)	Telus Health	$16	EMCision	Boston Scientific
2018	Clinical Blockchain Data Services	CT Developers	$10	Evinance Innovation	Varian Medical Systems
	Acumyn	Elekta	$10		
	Treat	VitalHub	$8		
	GenePOC	Meridian Bioscience	$161	Akira Health	Telus Health
	KAI Innovations	WELL Health	$18	Telemed Diagnostic Management	Pluribus Technologies
2019	QxMD	WebMD Health	$10	Dymaxium	Xcenda
	Juno EMR	CloudMD Software & Services	$6		
	Oculys	VitalHub	$5		
	EQ Care	Telus Health	$328	Input Health	Telus Health
	Client Outlook	Mach7 Technologies	$40	Health Myself	Pomelo Health
2020	Insig Health/ Tia Health	WELL Health	$38	Reacts	Philips
	Novus Health	Carebook	$20		
	iMD Health	CloudMD Software & Services	$10		
	7D Surgical	Seaspine Holdings	120.64	Pomelo Health	Telus Health
	Oncidium	CloudMD Software & Services	$80	Open Health Software Solutions	WELL Health
2021	Babylon Health	Telus Health	$65	Alliance Pharmacy Group	Telus Health
	CognisantMD	WELL Health	$31		
	Intrahealth	WELL Health	$20		
	Fully Managed	Telus Health	$130	Neurescence	Bruker
	MindBeacon	CloudMD Software & Services	$82	MDBilling	RBC
2022	Vigil Health Solutions	Assa Abloy	$12	UbiSim	Labster
	Juno EMR	WELL Health	$6		
	Genesis Integration	Flexity Solutions	$5		

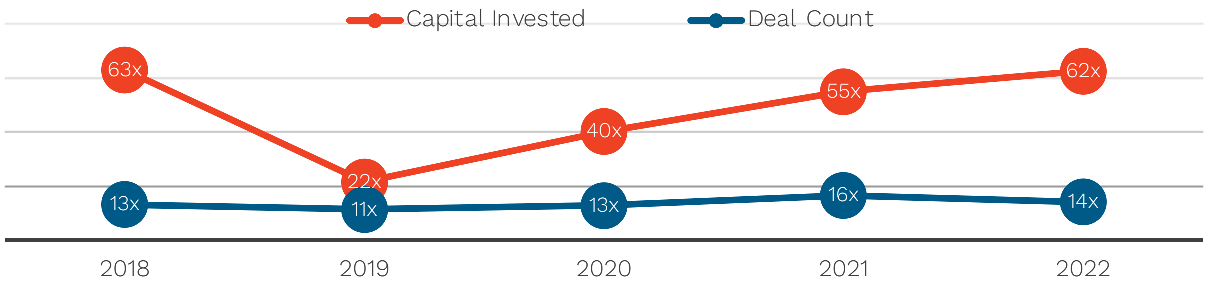
Source: Pitchbook Database

WELL Health, Telus Health and CloudMD are lead acquirers within the health tech M&A space, making up over 50% of the annual top disclosed deals. Telus Health leads in deals and capital invested, while WELL Health and CloudMD have partaken in smaller deals. The democratization of healthcare paved the way for non-healthcare players to enter the space, namely RBC, with its acquisition of MDBilling

The Canadian Health Tech Matures In Stage, Though A Large Funding Gap Between US And Canada Persists

Ratios of deal count and Venture Funding: US vs Canada

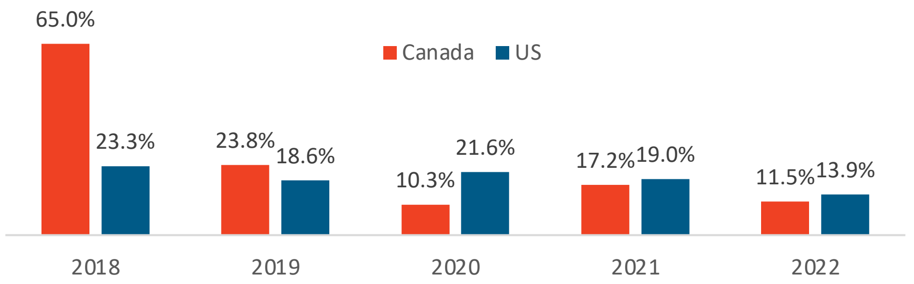
| Source: Pitchbook Database



- Though the difference between the US and Canada deal count in 2022 was 14x, the amount of capital invested in US-based companies was 62x more than that invested in Canadian companies.
- US health tech companies raise significantly more capital on average than their counterparts in Canada, pushing Canadian entrepreneurs to be more capital efficient and do more with less.
- Although the abundance of grants, lower wages and tax incentives in Canada may be partially filling the gap, private capital in Canada remains disproportionally lower considering the US is only 9x the population and 12x the GDP of Canada

Proportion of Early-Stage Venture Funding (% of total funding)

| Source: Pitchbook Database



- The distribution of capital in Canadian health tech has shifted over the years. The majority of venture funding is now concentrated within later stage companies, indicating a maturing health tech ecosystem in Canada.
- The US focuses on growing investments in both late and early stages, as ratios oscillate around 20% of a growing asset-class.
- A continued decline in early-stage investments – of both deal count and capital - may hurt the health tech innovation pipeline in Canada.

The Canadian Healthcare System Continues To Face Challenges With No End In Sight For Canada's Healthcare Crisis

2022 continued to be a difficult year for the Canadian healthcare system as massive backlogs in services, staff burnout and long wait times continued to plague providers across the country;

- While Canada is home to innovation with global potential and impact, it continues to have difficulty pulling innovation into the system to benefit Canadians. Siloed, lengthy, price-driven procurement processes are pushing Canadian innovators to turn to other international markets, particularly the US, to scale.
- Canada remains one of the biggest spenders on healthcare within the OECD countries, forking out $331 billion last year alone. Canadian Institute for Health Information (CIHI) has projected this number will increase in the coming years and could eventually reach 12.2% of Canada's GDP.
- Sharpened by the pandemic, Canada is facing an unprecedented shortage of healthcare professionals, with the supply of doctors now below the OECD average and peers.
- Canada continues to operate 14 disparate provincial (10), territorial (3) and federal (1) healthcare systems, making it one of the most fragmented and inefficient healthcare systems amongst its peers. A 2021 Commonwealth Fund report ranked Canada 10th out of 11 countries based on access to care, care process, administrative efficiency, equity and health care outcomes.

$331B

Total Canadian Healthcare Spending in 2022

2.8

Doctors per 1,000 people. 3.4 is OECD average

$8,563

Spent per person on healthcare

13 + 1

Separate healthcare systems

| Source: National Health Expenditure Trends, CIHI

Key Trends Lie Within Data, Patients And Accessibility

Source: Internal – collaborator insights

Top 25 words of interviewees

Patient-Centric Care

Precision medicine and the shift to value-based care are driving the personalization of healthcare. Patients are taking more control of their own health and want to be involved in their care journey. Changing workflows can lead to better patient-centered care, but hospital leadership teams, clinicians and staff need to all be involved for transformations to be successful.

Cross-Continuum Care

More healthcare organizations are shifting from a purely episodic care mindset to a care continuum strategy. This requires a more holistic, long-term approach to treatment and seamless coordination between payers and providers. Facilitating this requires new modes of meeting the patient when and where is convenient for them, while ensuring limited gaps or delays in care.

Decentralized Data

Data outside the healthcare system will be larger than within the system. As CIOs continue to modernize their organizations, we expect a focus on data interoperability and analytics to deliver strategic value. The challenge remains to balance the fine line between privacy, security and data openness. Investments in cybersecurity and cyber resilience capabilities will increase in parallel.

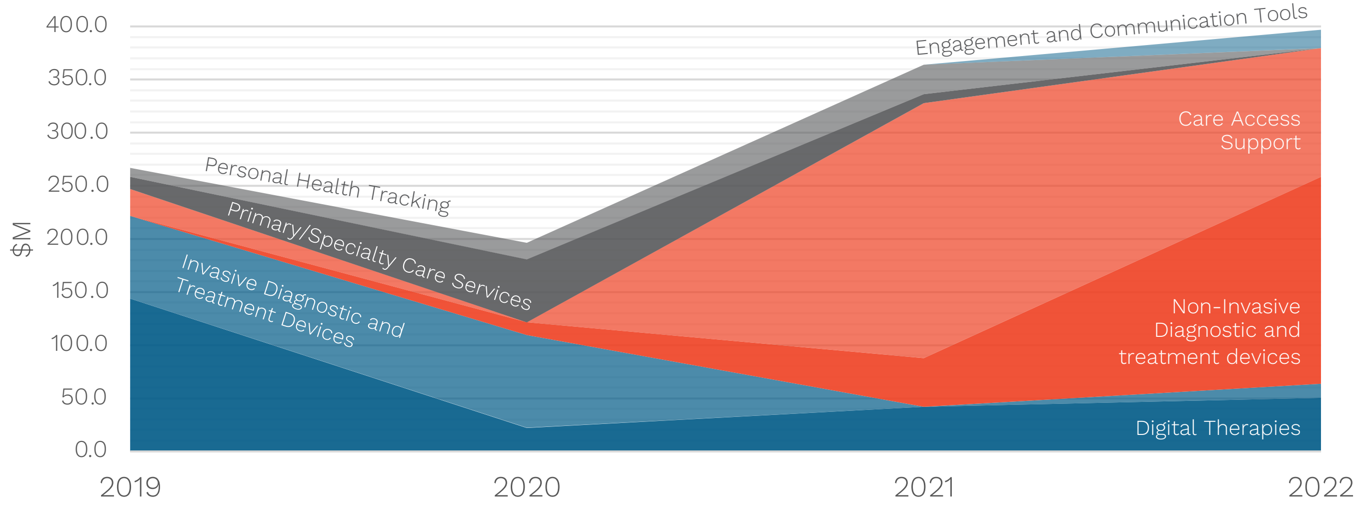
Staffing Shortage

Staffing issues and burnout continued to plague the healthcare industry in 2022. In 2023, hospital operators are expected to make greater investments in technology that can increase provider capacity and streamline workflows while improving patient access.

Personal Tracking Tapered Off In 2022 While Patient-Centric Care Came Into Focus

Top 5 Sectors Per Year ($M)

| Source: Pitchbook Database



Top 5 Segments Per Year

	2019	2020	2021	2022
01	Digital Therapies	Invasive Diagnostic and Treatment Devices	Care Access Support	Non-Invasive Diagnostic and Treatment Devices
02	Invasive Diagnostic and Treatment Devices	Primary/Specialty Care Services	Non-Invasive Diagnostic and Treatment Devices	Care Access Support
03	Care Access Support	Digital Therapies	Digital Therapies	Digital Therapies
04	Primary/Specialty Care Services	Personal Health Tracking	Personal Health Tracking	Engagement and Communication Tools
05	Personal Health Tracking	Non-Invasive Diagnostic and treatment devices	Primary/Specialty Care Services	Invasive Diagnostic and Treatment Devices

Personal health tracking tapered off in 2022 as the market is mature and saturated.

Patient experience and engagement will become table stakes, and this has led to the rise of engagement and communication tools as a top sector in 2022.

Invasive devices decline in funding as non-invasive devices climb to the top of the market.

In-clinic care declined following the COVID-19 pandemic, leaving investments flowing to virtual and remote care.

Example of Patient Centric Care Companies:

SeamlessMD
PocketHealth
HYPERCARE
Kayan+
EMERGCONNECT

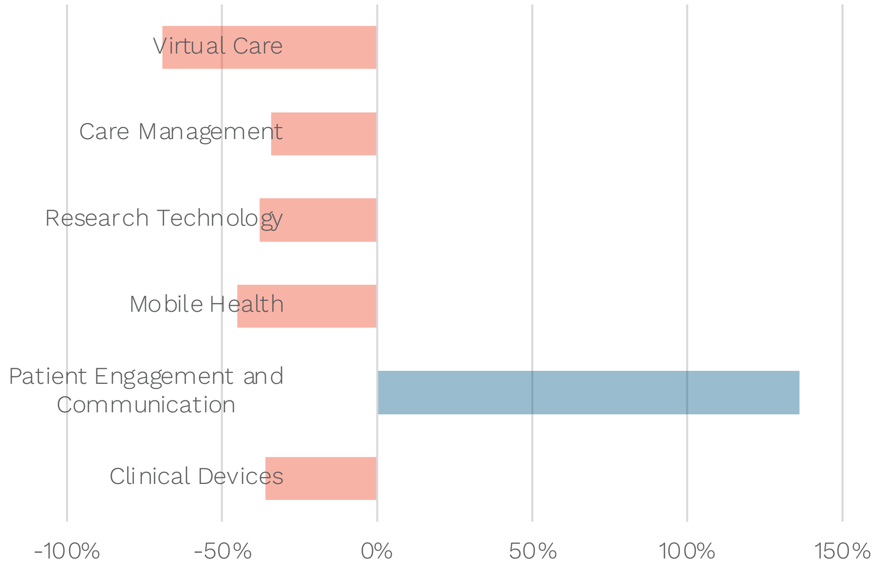
Patient Engagement And Care Management: Breakout Categories To Watch

Despite a slow year, patient engagement and communication was the fastest growing category of 2022, fuelled by deals in both established companies and new entrants. With the rise of value-based and cross-continuum care, patient engagement and communication is just getting started.

Health insurers and hospital administrators continue to face significant administrative cost pressures and are investing in technology designed to improve operational efficiency. In the last four years, these increased demands have led to rapid growth for companies operating in the care management space.

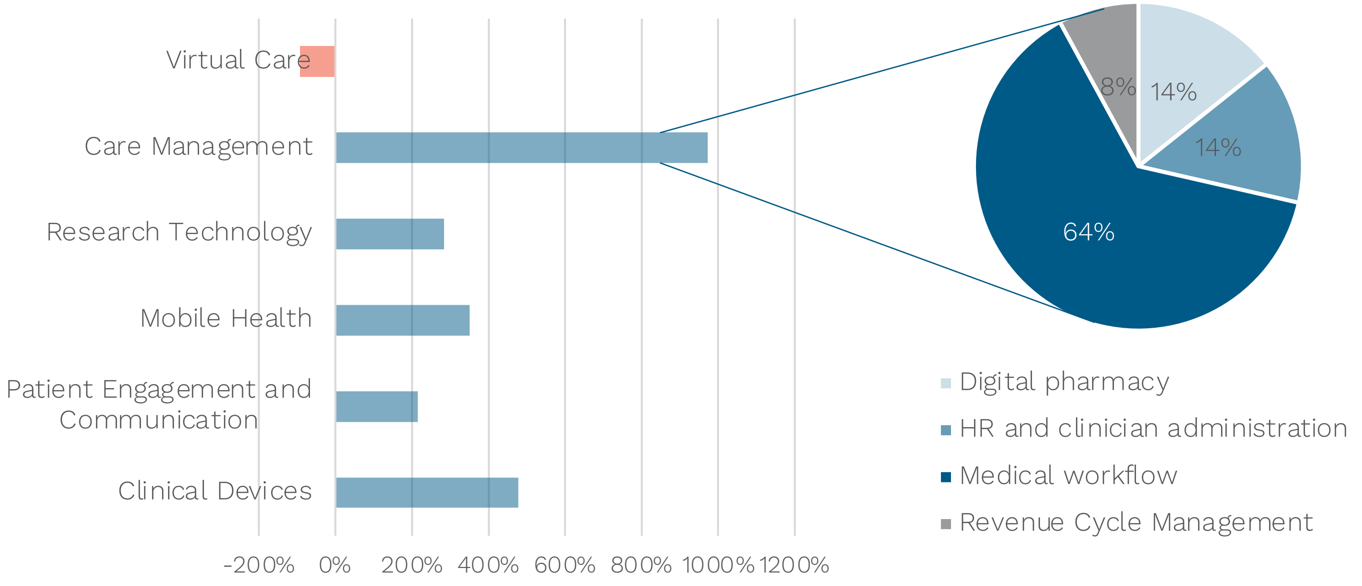
Health Tech Funding Categories 2021-2022 (in %)

| Source: Pitchbook Database



Health Tech Funding Categories 2018 – 2022 (in %)

| Source: Pitchbook Database



Continued Shift Towards Virtual Care

Technologies enabling cross-continuum care are here to stay

Healthcare is no longer confined to the walls of a hospital. Today, healthcare needs to be agile, nimble and present wherever the patient is; at a hospital, ambulatory care clinic or at home.

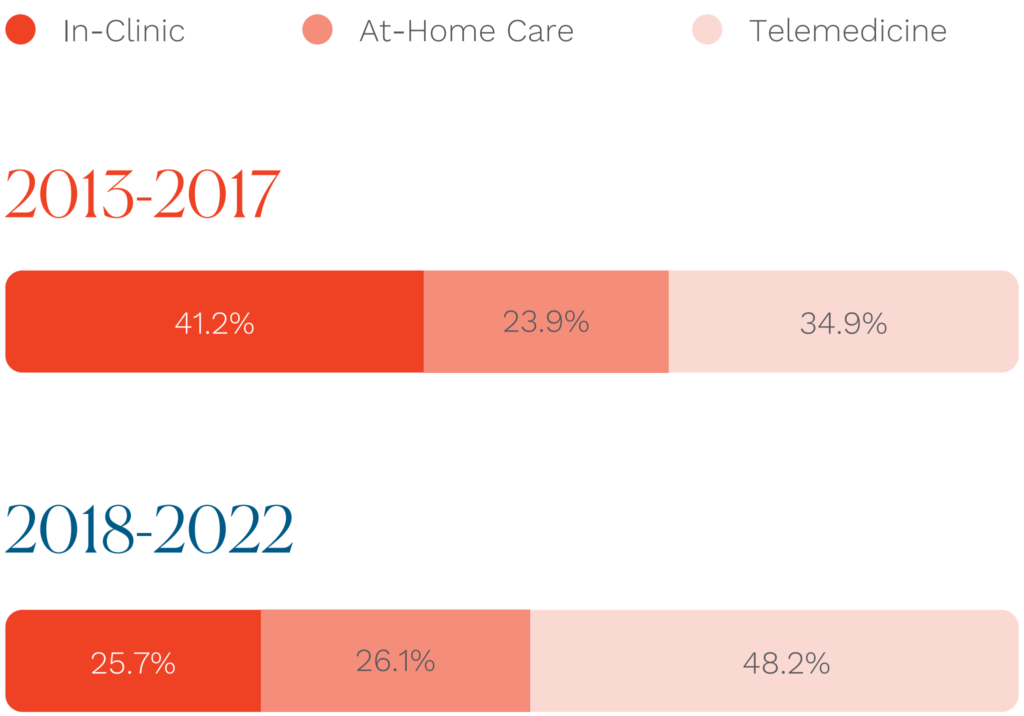
Business model transformation will continue throughout the new year, and will include dual systems of care, site of care shifts and virtual care product lines.

Companies of Virtual Care Companies:

aditum health — technology for accessible healthcare
Claris Healthcare
maple
dayamed
icentia™

Care Administration Type Funding (% of total)

| Source: Pitchbook Database



Staff Shortages Will Drive Technology Adoption

- In 2021, hospital CEOs ranked personnel shortages as their top concern, and this issue continues to plague healthcare industries in both Canada and the US.
- Overcoming staffing shortages will be top of mind for healthcare operators in 2023. Hospital administrators are expected to increase investment in technology that will improve and reform workforce structures, eliminate staff burden and burnout and create new opportunities for upskilling.
- Virtual nurses will support bedside nurses and help with non-hands-on care, education, admission and discharge processes. Supported by shift scheduling and asynchronous telehealth technologies, hybrid nursing will help reduce the burden on bedside nurses and improve staff satisfaction.
- All-in-one and specialty-specific software to streamline workflows and digital front door technology are examples of technologies that will eliminate manual labor and improve operating efficiency.

Examples of Care Management Companies:

Andgo caribou Gotcare medme AlayaCare

After months of overcrowding, Quebec ERs brace for the worst following holiday season

Emergency room in Alert Bay, B.C., closed for more than 2 weeks over holidays

For B.C. patient, last-minute surgery cancellation raises fears of cancer spread

Nursing Is in Crisis: Staff Shortages Put Patients at Risk

Parents left scrambling as staff shortages close birth units

Report Methodology and Acknowledgements

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- Kettlebeck Ventures
- Nimbus Synergies
- Nura Medical
- Retinalogik
- Scanbo
- Seamless MD
- Whitecap Ventures
- Zamplo

Methodology and Notes:

- All data has been extracted from PitchBook Database, dated January 5, 2023. Data may be incomplete and is limited to VC-backed companies
- Geography: Company locations are based on main HQ location only
- Mislabeled companies outside of our health tech definition were manually excluded from our search.
- The number of deals in the report include transactions with both disclosed and undisclosed amounts
- All dollar amounts in CAD

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