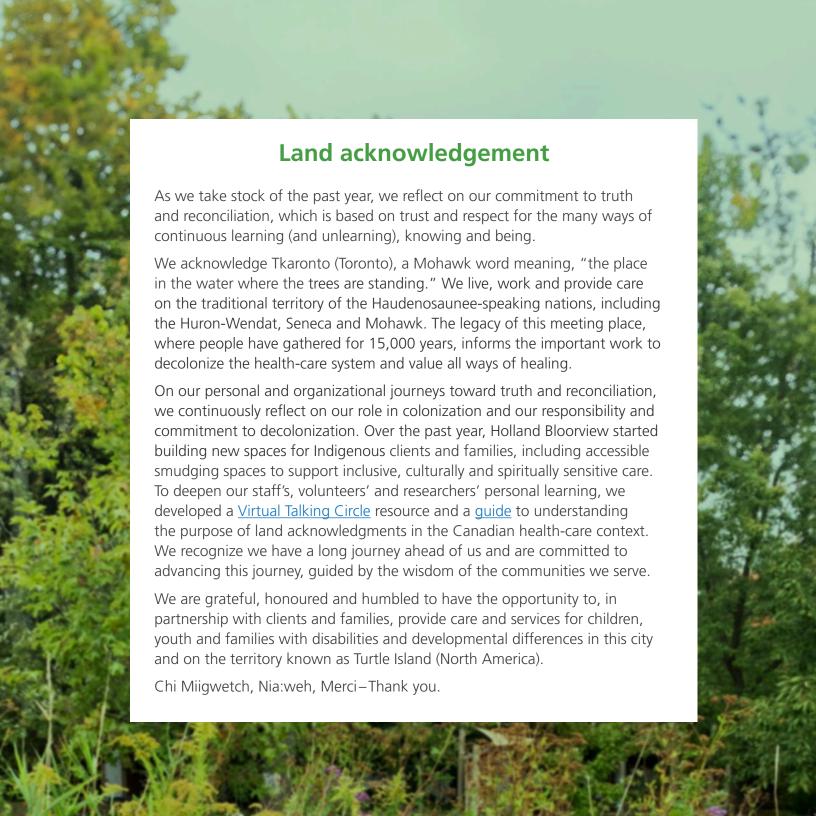
**Impact Report 2024-2025** 

# The future of kids' health:

precision, equity, innovation









# **Letter from our leaders**

We are on the precipice of a new era at Holland Bloorview Kids Rehabilitation Hospital. With 125 years of care and innovation as our bedrock, we are building a bright future for kids' health.

Over the past year, teams across the hospital have harnessed the power of data and AI to advance precision, equity and innovation, ensuring we meet the complex and evolving needs of the children, youth and families with disabilities and developmental differences.

As part of our commitment in the <u>HB2030</u> strategic plan to continually improve and innovate through care, teaching and research, we are building a strong foundation for clinicians, researchers and learners to use cutting-edge technologies, advanced data analytics and co-design – all with the goal to create new solutions to personalize health care in real time.

This year, we launched three health-equity initiatives to better understand the unique social needs of the clients and families we serve and foster a healthy workforce that advances our inclusive, diverse, equitable, accessible and anti-racist environment.

We have also joined forces with KidSights, the first of many new data partnerships where we will bring together clinical and system-level data, from coast-to-coast-to-coast and beyond. These data partnerships will speed up the discovery process, improving and personalizing outcomes for children and youth with disabilities, developmental differences and rare genetic conditions. We are continuing to train the next generation of pediatric clinicians, including addressing Canada's acute shortage of developmental pediatricians with our subspecialty program in partnership with the University of Toronto.

With guidance and direction from our <u>executive leadership team</u> and <u>board of directors</u>, and thanks to continued trust and investment from our government, research partners and donors, we are beginning the long and difficult journey of right-sizing the pediatric health-care system, ensuring all children have access to the right care, at the right time, in the right place.

Although there is much work to be done, the future is bright with our world-class team of leaders, frontline clinicians, researchers and learners leading the way in precision, equity and innovation. Together we will continue to advance a future of personalized pediatric health care that is inclusive for all.



Julia Hanigsberg President and CEO, Holland Bloorview Kids Rehabilitation Hospital



Catherine Roche
Catherine Roche
Chair, Board of Directors,
Holland Bloorview Kids
Rehabilitation Hospital

# Who we are

#### The team



197 24 physicians



810 volunteers

contributed
41,072
volunteer hours

## Family and youth leadership

80 family leaders

contributed 3,170+

**29** Family Advisory Council members

30 Youth Advisory Council members



#### Research



46 scientists/investigators



167 research trainees

**3** Canada Research Chairs

5 hospital-university endowed chairs

**231** peer-reviewed papers published

1 1 research labs/centres

invited international talks, keynotes or lectures

2nd



in researcher and hospital intensity across the top 40 small-tier Canadian research hospitals

# Who we serve

**Teaching** 



**70** medicine

**170** nursing

**79** 

research

206 other clinical

other clinical and non-clinical placements **Clinical care** 



**Ages of clients** 

0-4 years	20%
5-9 years	29%
10-14 years	23%
15 - 19 years	19%
19+ years	8%

**464** inpatient visits



39 days

average length of inpatient stay

excluding long-stay clients, respite care and sleep studies

**64,555** outpatient visits

1,600+ clients accessing inclusion programs



Top languages spoken by families (excluding English)

Spanish, Arabic, Mandarin Chinese, Tamil, Dari

**3.5%** of clients required interpreter services



# Personalizing health

The number of children and youth in Ontario with disabilities and developmental differences requiring vital pediatric care is increasing – a trend reflected at Holland Bloorview, where demand for programs and services continues to grow.

Holland Bloorview is meeting this increasing demand through innovative, data-informed care, precision health and research – including using

Al to predict medication outcomes, partnering with a clinical trials network to advance discoveries in rare disease, tailoring autism assessments and understanding the underlying biology of neurodevelopmental conditions.

# **Tailoring assessments**

According to a <u>2019 Canadian health survey on children and youth</u>, one in 50 Canadian children and youth are diagnosed with autism and the demand for autism diagnostic services keeps increasing.

As one of five autism diagnostic hubs in Ontario, Holland Bloorview has among the lowest wait times in the province for an assessment. What's more, the autism clinical services team is triaging clients to the appropriate care pathway that takes into consideration clients' clinical, medical and psychosocial complexities. This approach maximizes resources and ensures each client has access to the right interdisciplinary team to meet their diagnostic needs.



clients triaged by new clinical pathways for autism assessments

Amira [left] shares a moment with her sister, Aaliyah [right]. The teen talked about her autism journey in a video series on autistic youth and their experiences, including assessments.

# Advancing precision health

Dr. Evdokia Anagnostou, vice president of research, and her team at the <u>Province of Ontario Neurodevelopmental Disorders</u> (POND) Network are using data and medical records to develop personalized medication models for neurodiverse children and teens. Moreover, advanced analytics like AI and machine learning are helping improve health systems faster.



To truly enable precision-health benefits for kids and youth with disabilities, it is not always the diagnostic labels that will help us understand what service one may mostly benefit from, despite the organization of our health-care sector, but their individual characteristics, such as brain-and-body biology, individual and family experiences, needs and preferences.

- Dr. Evdokia Anagnostou, vice president, research and director, Bloorview Research Institute

Dr. Anagnostou's research team also joined an elite group of health-care organizations to lead Canada's largest genomic data set focused on childhood brain conditions, thanks to a \$12 million federal investment through Genome Canada.

Dr. Evdokia Anagnostou, vice president, research speaks with Jayden, a POND study participant, before his research MRI scan.





Dr. Darcy Fehlings, senior clinician scientist, assesses Kionna in the hypertonia clinic with mom, Racquel.

# Unlocking the genetic code

Cerebral palsy (CP) is the most common childhood-onset physical disability that affects children's motor skills development. However, the genetic contributors to CP have remained largely unknown until now – and can unlock the key to precision medicine.

In a recent large-scale Canadian <u>genomics study</u>, Holland Bloorview, SickKids and McGill University Health Centre researchers found that one in 10 children have a genetic variant connected to CP.

"Many of the children we see have genetic variations associated with their cerebral palsy," says Dr. Darcy Fehlings, who is a cofirst author of the study. "This opportunity for precision medicine is important to accurately assess etiology across all children with

cerebral palsy, improve family counselling and choose medical and rehabilitation interventions best suited for the child."

The study is part of CP-NET, a research-based initiative led by Dr. Fehlings that is designed to improve the care of CP from prevention to treatment.

Whole-genome sequencing of 327 children with cerebral palsy



# The right meds at the right time

Learn how a research team, led by Dr. Azadeh Kushki, senior scientist, and Dr. Danielle Baribeau, clinician scientist and child and adolescent psychiatrist, is exploring how Al can be used to pinpoint the right medication for neurodivergent children and youth at the right time.









# Advancing health equity

This year, Holland Bloorview took bold steps in advancing health equity and fostering an inclusive, diverse, accessible, equitable and anti-racist environment. We launched three major sociodemographic data (SDD) collection initiatives— for staff, job applicants and clients and families.

Collecting and analyzing this data is an essential step to better understand and support the unique needs of clients and families we serve and to foster a diverse, inclusive workforce that truly reflects the communities we serve. This data will help us design targeted interventions to improve care, promote equity and reduce disparities in safety event occurrences and transitions to adult care.



Holland Bloorview clients and staff.

38%

of clients and caregivers are living below the poverty line

60%

of clients and caregivers are from racialized groups

Over 58% of families report at least one unmet social need and 21% say their needs require urgent attention

of families experience material deprivation

# Understanding the unique needs of those we serve

In 2024, we implemented We ask because we care, to collect sociodemographic data from clients and families. Additionally, we advanced our social needs screening tool to identify challenges like food insecurity, housing and health-care costs.

The results of these surveys demonstrate that we serve a disproportionately high number of marginalized and vulnerable clients and families.

Although early in this journey, we are learning valuable insights that will help create a more inclusive and responsive system for our community."

> - Joanne Maxwell, vice president, experience, transformation and social accountability

The data underscores the complex needs of our clients and families, guiding us to create more inclusive, equitable and responsive care systems. Holland Bloorview is responding to some of these complex social needs through our online Family Navigation Hub and CommunityCONNECT, designed to help families access vital information and services related to social needs. And programs like Employment Pathways are using the data to better support youth with disabilities, while also identifying gaps in service and opportunities for culturally responsive programming. With the increased availability of this data, we are looking forward to advancing our knowledge and insights to further co-design data-driven, socially accountable care.

# **Building an inclusive workplace**

To build a more inclusive workplace, we began collecting sociodemographic data from job applicants and staff in 2024. With a 53 per cent staff response rate, we're beginning to use this data to tailor initiatives related to workplace inclusion, diversity, equity and anti-racism and foster a culture of belonging. By comparing our data to local and national census data, we are able to build and support a team that represents the communities we serve.

In 2024-2025, with support from our Inclusion, Diversity, Equity, Accessibility and Anti-Racism (IDEAA) office, two new employee resource groups (ERGs) were established: the Black Employee Resource Group and the Disability Employee Resource Group. These groups complement our existing ERGs—the Jewish Employee Resource Group and the 2SLGBTQ+ Employee Resource Group. These groups provide safe, supportive spaces for connection and peer support.

In addition to informing inclusive environments, we are using our data to evolve amenities for

> staff, including the installation of adaptive equipment in our staff gym to support

accessibility.

Patricia Bowler, manager, occupational health, and Holly Noon, a communicative disorders assistant demonstrate a new accessible plinth table in staff gym.



A group of staff promoting the annual Capes for Kids fundraising campaign.



48% of staff identify as racialized

12% of staff identify as 2SLGBTQ+

Holland Bloorview
employs a greater
proportion of staff who
identify as Jewish,
Muslim, Hindu or
Buddhist compared to
the population of
Canada



# **Advancing health** equity

Understanding the sociodemographic profiles of our clients and their care teams is key to creating a diverse, inclusive environment that reflects and supports the communities we serve. Learn how nurse practitioner Vera Nenadovic uses this data to enhance health-care experiences and equity for clients, while spiritual care facilitator Ruveyda Durmus draws on staff data to support the hospital's diverse cultural and spiritual needs.







# **Working towards Truth and** Reconciliation

As part of Holland Bloorview's commitment to actioning recommendations set out in the <u>Truth and</u> Reconciliation Commission of Canada's report, we are committed to providing holistic and culturally safe care for clients and families. To deepen staff members' learning, Holland Bloorview's IDEAA team created several resources this year including a land acknowledgment resource guide specific to the Canadian health-care context and incorporating considerations of Indigenous anti-racism and health inequities in its annual anti-racism education series. The hospital also introduced a new smudging policy to support the cultural practice of smudging for Indigenous employees, clients and families.

While we've made meaningful progress, we know this

is just the beginning. Our commitment to truth and reconciliation is ongoing, rooted in transparency, accountability and continuous learning.

A smudging ceremony kit including an abalone shell, cedar bundles, a birch bark basket to hold tobacco and a sweetgrass braid.

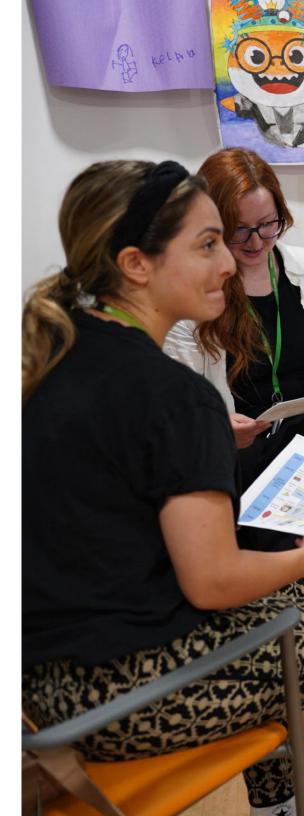


# Leading with a world-class team

A world-class team starts with highly-specialized, dedicated and compassionate professionals working in lockstep to achieve Holland Bloorview's singular vision—the most meaningful and healthy futures for all children, youth and families. It continues with a team who isn't afraid to dream, innovate and dare—big.

As the needs of children and youth with disabilities and developmental differences evolve, Holland Bloorview has evolved with them. In the past decade, the number of clinicians on the team has grown by nearly 40 per cent. This includes the addition of specialized health disciplines —behavioural analysts and technicians, clinical pharmacists and a family therapist, among others.

**38%** growth in the number of clinicians at Holland Bloorview over the past decade







Samuel Barsky, digital technology specialist, orthotics and prosthetics and Elaine Ouellette, team lead and certified prosthetist.

# **Staff-led innovation**

In 2024-2025, Holland Bloorview invested \$1 million in staff-led initiatives driven by a shared desire to bring cutting-edge technology and research from the lab to the clinic faster – and to ensure that clinicians and clients alike have access to the industry-leading equipment they need to support the rehabilitation journey.



One example? In 2024, a clinician-researcher team recognized an opportunity to use 3D technology to create a made-at-Holland Bloorview solution for designing and fabricating prosthetic covers for clients' prosthetic devices. This fully digital process, currently in the research phase, will help avoid lengthy delays and the added costs of outsourcing this important part of a client's prosthetic device. This project was made possible by the <a href="INSPIRE">INSPIRE</a> Grant, funded by the Holland Bloorview Foundation.

# Building national capacity to improve the future

Learn how a team at Holland Bloorview is tackling long wait times for autism diagnoses across Canada – delays that can cause children to miss key developmental milestones. Led by Dr. Melanie Penner, developmental pediatrician and senior clinician scientist at the Bloorview Research Institute, the **ECHO Autism and ECHO AuDIO** initiatives engage nearly 600 community-based clinicians nationwide each year to build stronger connections, improve early diagnosis and support the development of integrated community care and tailored local strategies.









# Training developmental pediatricians from coast-to-coast and beyond

Addressing an acute shortage of developmental pediatricians is a key priority for the Holland Bloorview team, which is home to the largest developmental pediatrician training program in Canada. The two-year subspecialty program, offered through the University of Toronto, has trained more than 60 residents and fellows from across Canada and countries around the world with a goal of scaling up a pipeline of highlyspecialized physicians. In winter 2025, with support from The Slaight Family Foundation, the training program expanded, doubling its capacity to train developmental pediatricians to support the developmental health and wellbeing of some of the country's—and the world's—most medically- and developmentally-complex children and youth.



# Our holistic, client- and family-centred approach in the program is unique (across Canada)."

- Dr. Angelina Orsino, program director and developmental pediatrician

developmental pediatricians per 100,000 children and youth with disabilities

\$800,000

amount of donor funding in 2024-2025 for teaching and learning initiatives

# Investing in access and innovation

Sustained investment in pediatric disability care is driving innovation and improving access to personalized care and services for Ontario families, enabling Holland Bloorview to see more children and reduce waitlists by up to 43 per cent across several programs. And equally as important, these investments are making measurable differences in the experience and outcomes of children and youth-children in our Extensive Needs Service have seen fewer ER visits, hospitalizations and school absences. With the right care and supports, kids with complex needs can thrive.

# Flipping the script on avoidant and restrictive eating

Children with avoidant/restrictive food intake disorder (ARFID) often face fragmented care. Thanks to new provincial funding, Holland Bloorview launched Ontario's first Neurodevelopmental Disorders Restrictive Eating Clinic. Since summer 2023, the outpatient clinic's multidisciplinary team has helped 43 children avoid hospitalization through ongoing, integrated care. The goal is to scale this model across the province to meet growing needs.

**Holland Bloorview** has received

\$24.1 million

in new funding that resulted in increased access to care and services

**Extensive Needs** Service clients seen in 2024-2025 at Holland Bloorview and our local partner sites

> outpatient visits from 2023-2024



**66** The clinic has been life-changing for our family. We thought we were responsible for our kids 'picky eating' habits. We need more clinics like Holland Bloorview's that look at the whole child."

- Rob and Gurpreet Valeri, parents to five-year-old twins, one of whom is Max (pictured on the right)





Shannon Crossman, artist and program coordinator, engaging in art therapy with clients.

# Philanthropy fuels possibility

In 2024-2025, Holland Bloorview's loyal community of donors funded inclusive programs in music, arts, employment as well as specialized training programs for health-care providers. A transformative \$30 million gift from The Slaight Family Foundation, announced in December 2024, launched a national partnership of 11 organizations to improve life for people with disabilities. This initiative will expand supports; spread and scale research innovations; and address ableism in schools, workplaces and communities across Canada – at a time when inclusion is urgently needed.



# A research boost in concussion care

Dr. Kylie Mallory is leading research on concussion care for children with neurodevelopmental disorders, a critical yet overlooked area. As Canada's only 2024 ENRICH Post-Doctoral Clinician Researcher Salary Award recipient, she represents the future of pediatric disability research and innovation.









Rehan plays with <u>Bootle Blast</u>, a movement tracking video game for home-based motor therapy – a Bloorview Research Institute innovation.

# Play, progress and personalized rehab – right from home

Provincial and federal investments in research are advancing precision health. In 2024-2025, the Bloorview Research Institute secured \$8.9 million in external funding – \$1.5 million more than the previous year. Dr. Elaine Biddiss received a \$1.2 million Canadian Institutes of Health Research grant to advance the functionality of personalized, video game-based therapies for children with motor challenges. In Canada, 1 in 66 children have trouble with movement and could benefit from motor therapy, yet access remains limited. Dr. Biddiss' team is developing engaging digital tools, like therapy video games, that children can use at home. The project will validate different motion-capture tools, identify key data that's useful for families and clinicians and test them in homes and clinics to enhance digital therapy – improving access and outcomes for families nationwide.



awarded for BRI products and innovations between 2020-2025



\$8.9 million
in external funding in 2024-2025



# **Highlights**

## **Advancing pediatric innovation**

In February 2024, Holland Bloorview joined KidSights, a data consortium created to address and close the innovation gap in pediatric health. As its first Canadian member, we are accelerating the development of personalized therapies and interventions to improve outcomes for children and youth with disabilities and developmental differences.



# **Commitment to sustainability**

In the Toronto Academic Health Science Network's first Climate and Sustainability Report, Holland Bloorview received top marks for its efforts in organizational capacity, procurement and preparation for climate shocks. This is a

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testament to the hospital's commitment to sustainability as part of its strategic plan to reduce our carbon footprint.



# **Expanding access to inclusive** health resources

Families from marginalized communities have long struggled to gain access to culturally appropriate and accessible health information that is evidence-based.



Recognizing this gap in the disability community, Holland Bloorview is partnering with Our Kids' Health, a wide-ranging community dedicated to providing trusted, culturally relevant health resources to families in Spanish, Arabic and Mandarin among other languages.

# **Embracing the power of AI**

Holland Bloorview is embracing AI tools to reduce administrative burden and create efficiencies across the hospital. In 2024, we used AI-based technologies including AI Physician Scribe for



Co-Pilot to enhance productivity and streamline tasks. In addition, teams are exploring how Al can be used for predictive and population-based analytics to better understand the needs of the clients we serve and our inpatient occupancy, admission and discharge patterns.

# **Awards**

# Investing in youth

At Holland Bloorview, we believe that everyone who wants to work deserves to. That's why the hospital partnered with the Ontario Disability Employment Network to release a joint report that reinforces the case for investing in early employment programs for youth with disabilities.

The report shows that workplaces that include employees with disabilities are more profitable, more productive and retain top talent.



# Shaping the future of teaching and learning

Nearly 100 staff, family leaders and students took part in a day of meaningful education insights, connections and learning at the Teaching and Learning Institute's 14th annual Teaching and Learning Day in April.

The event featured keynote speakers, interactive workshops and awards to recognize and celebrate teaching excellence





Dr. Danielle Baribeau Academic Scholar Award University of Toronto



**Dr. Darcy Fehlings** Lifetime Achievement Award American Academy for Cerebral Palsy and Developmental Medicine



**Dr. Melanie Penner Emerging Research Leadership Award** University of Toronto



**Lorraine Thomas Innovation and Impact** Award for EDI Excellence Children's Healthcare Canada













# **Newsmakers**

# <u>Turning thoughts</u> <u>into actions</u>

The Globe and Mail spotlighted the EmpowerBCI initiative, supported by the \$30 million gift from The Slaight Family Foundation.



# **Paralympic hopeful**

Para athlete and Holland Bloorview client Kebba, who, alongside his longtime prosthetist Neil Ready, shared the labour of love involved in creating his highly customized running prosthesis with local media outlets.



# No piece of cake

Holland Bloorview's advocacy campaign, *No Piece of Cake*, made a big media splash last fall to raise awareness of the difficulties youth with disabilities and developmental differences often face when transitioning to the adult health-care system.



# Match made in health care

Staff members,
Elizabeth Dunphy
and William
Goessaert share with
media how they met
at the hospital during
the pandemic and married

last summer. They recreated their "I do" moment at Holland Bloorview, which was featured in media outlets including *People*.

## **Full-circle moment**

Famed Canadian violinist and former prosthetic client Adrian
Anantawan returned to Holland Bloorview to join the Bloorview Research Institute in celebrating its 20th anniversary at its annual research symposium.



**Holland Bloorview in the news!** 

660+

total media hits

269 million total media impressions













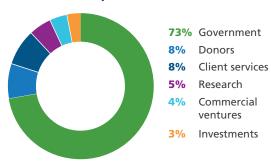




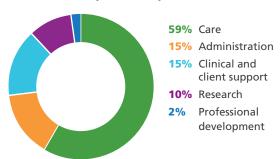
# **Financials**

#### **Holland Bloorview Hospital**

#### Where do hospital funds come from?



#### How do we spend hospital funds?



#### **Holland Bloorview Foundation**

#### Where do foundation funds come from?



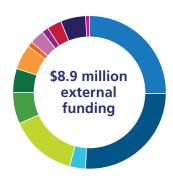
#### How do we grant foundation funds?



View Holland Bloorview's and the foundation's full 2024-2025 financial statements on our website.

## Bloorview Research Institute

Where do research funds come from?



- 25.5% Tricouncil
- **25.3%** Provincial
- 3.4% Subgrants collaboration
- 14.1% Donations
- 6.8% Indirect
- 4.9% Scientist awards
- 5.3% Federal

- 1.2% International
- 2.9% Industry
- 1.5% Other peer reviewed
- 2.9% Studentship
- 5.3% National Association/ Foundation
- 0.8% Royalties/other revenue

# Holland Blcorview

Kids Rehabilitation Hospital

A TEACHING HOSPITAL

FULLY AFFILIATED WITH

TORONTO A TEACHING HOSPITAL



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The web and PDF versions of the impact report are accessible for screen readers and other accessible technologies.

