



# RESEARCH Today

## MODEL SCHOOLS PAEDIATRIC HEALTH INITIATIVE:

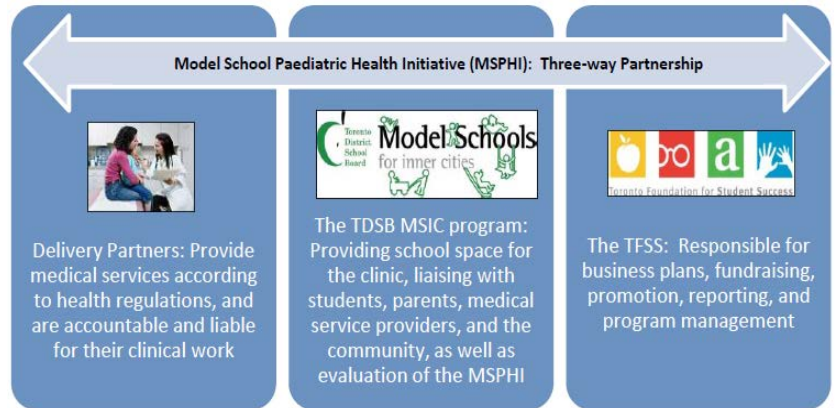
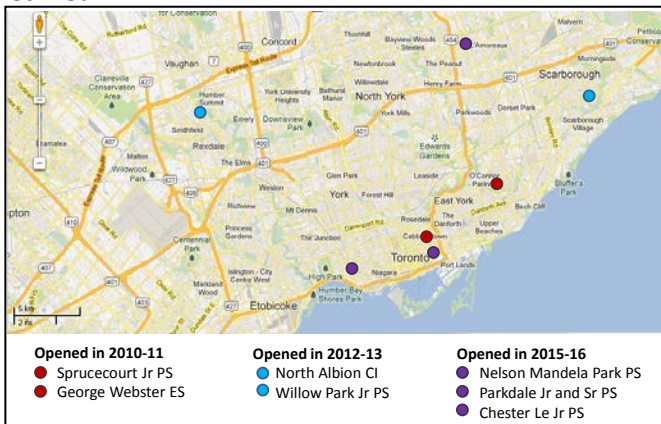
### An Integrated Initiative to Ensure Equity in Health and Education for Inner-city Students

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#### About the program

The Model Schools for Paediatric Health Initiative (MSPHI) is an innovative, integrated, education-health partnership that provides health care to students in priority neighbourhoods. A three-way partnership was forged between the TDSB's Model Schools for Inner Cities (MSIC) program, local health agencies, and the Toronto Foundation for Student Success<sup>1</sup>. Under this partnership, comprehensive medical services including assessment, diagnosis, management, and follow-up care are provided. The intent is to eliminate health gaps and accessibility barriers to health care in low-income communities so that the holistic health needs of inner-city students can be met and their educational trajectories can be improved.

This initiative was piloted in the Fall of 2010 with the opening of its first two in-school health clinics in MSIC elementary schools. The following two years witnessed the expansion of the MSPHI by a few more schools in different parts of Toronto, one of which was located in a secondary school. In 2015-16, three additional in-school health clinics were established. These clinics operate independently under either a hospital-based or community health centre (CHC)-based model. For both models, clinic co-ordinators bridged educators, medical professionals, students, and families to facilitate usage of the clinic, as well as to ensure the in-school health clinics operated effectively, resources were used efficiently, and MSPHI goals were realized.



#### About the research

Since 2011, with the financial support of the Ministry of Education, the TDSB's Research and Information Services Department conducted four phases of evaluation to understand the short and long-term impacts of the MSPHI on the multidimensional health and well-being of students and families in local school communities, as well as its cost-effectiveness and conditions for success and sustainability. The focus of the latest (Phase IV) evaluation is to provide a summative examination of the MSPHI as a whole and its evolution over the years.

Both quantitative and qualitative data collections were employed throughout the four phases of evaluation. For the quantitative data, MSPHI databases and the TDSB's Student Census were leveraged. Regarding qualitative data collection, each successive phase involved larger and more diverse stakeholder focus groups, which included health care providers, clinic co-ordinators, health agency staff, MSPHI central staff, TDSB senior staff, school administrators, teachers, parents, caregivers, as well as elementary and secondary school students.

<sup>1</sup>The Toronto Foundation for Student Success (TFSS) is the arm's length charitable foundation of the TDSB which leveraged funds for this initiative, secured commitments for the medical staffing, and in collaboration with the school board, oversaw all the operational requirements.

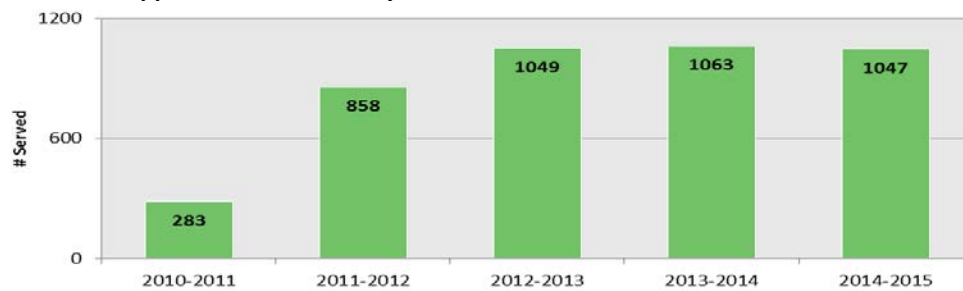
## About the findings

Research has found that despite the existence of a universal health system in Ontario, multiple accessibility barriers to health care do occur in inner-city communities (see table). Since the implementation of the MSPHI, there have been progressive increases in the total number of inner-city students and appointments served, whereby all clinics under study were operating to its full capacity (see chart below). Under the MSPHI health care model, many students without health insurance (uninsured - e.g., refugees or newcomers,  $N = 251$ ) or without an associated health care provider (unattached,  $N = 468$ ) were also served.

### Accessibility Barriers to Health Care in Inner-city Communities

Tangible Barriers	Intangible Barriers
<ul style="list-style-type: none"> <li>• Financial</li> <li>• Geography</li> <li>• Time</li> <li>• Uninsured or unattached health care</li> </ul>	<ul style="list-style-type: none"> <li>• Language</li> <li>• Psychological</li> <li>• Confidentiality</li> <li>• Cultural and family dynamics</li> <li>• Awareness and understanding</li> <li>• Negative experience with health care services</li> </ul>

Appointments Served by TDSB's MSPHI Clinics between 2010 and 2015



## Added Values

This unique health-education partnership has been able to yield important added values over regular health care avenues to address the often unattended health needs of inner-city students. The MSPHI mitigated many tangible and intangible barriers to medical services faced by these students and their families, ensuring more equitable access to health care. Interviews with stakeholders also revealed that another important added value was the timeliness of care; students obtained more immediate medical attention. In particular, wait times for developmental assessments were notably expedited owing to the intra- and inter-sectoral partnership between the MSPHI clinic staff, their health agencies, and the school staff – all of which afforded the early identification, developmental assessment, diagnosis, and appropriate educational modifications within the same academic year – a process which would normally take 2 to 3 years.

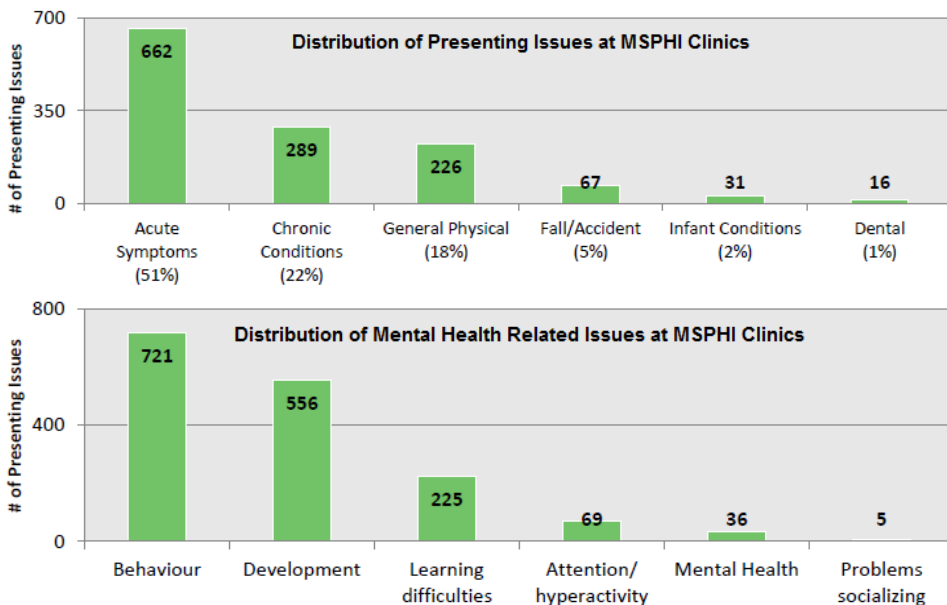


*Breaking down silos, having multidisciplinary teams, looking at a more holistic view of education and health and mental health and well-being [...] ends up kind of giving us the opportunity to really assess the family from multiple angles, and I think that's where the added value is. (Paediatrician)*

Furthermore, compared to regular health care practices, focus group participants believed that the MSPHI could provide more focused, holistic, primary health care to the paediatric population. This was fostered by the MSPHI health care partners in terms of sensitivity to student issues, the adoption of “peeling the onion” approach to health care, continuum of health care services, as well as the education-health partnership which facilitated sharing of educational information with MSPHI medical professionals.

## Impact on Students

Apparently, the direct beneficiaries of the MSPHI were the students. Interviews with stakeholders indicated that students' physical health related issues ranging from acute symptoms (e.g., flu, lice, first aid, fever) to chronic conditions (e.g., vision issues, asthma, diabetes) were diagnosed and addressed. Over time, these in-school health clinics also witnessed a steady shift from addressing mainly physical health issues to mental health concerns related to developmental, behavioural, and psychological health. With the provision of immediate, accessible and comprehensive health care, these issues were formally identified and diagnosed, which in turn initiated appropriate intervention in a timely manner.



Aside from improving the health and well-being of student patients, the MSPHI was associated with reduced absenteeism, greater attentiveness to learning, and improved school performance. Students also became more informed of their health status and the services and programs available through the existing health care system. The MSPHI served as an information hub and gateway to promoting health advocacy skills and medical autonomy, especially for secondary school students. Indeed, stakeholders agreed that the mere presence of in-school health clinics created an awareness and priority for holistic care, thereby reducing mental health stigma among students.

*[The health clinic] basically helps me overcome the depression and gave me many options to heal [...] I'm feeling good [...] Compared from November last year till now [June], I feel like a totally different person. (Student)*

## Ripple Effects on Schools

The MSPHI also generated positive ripple effects on schools. Stakeholder groups testified that the in-school health clinics built capacity among school staff to better understand, recognize, and handle students' health concerns. As a result, teachers adapted their teaching strategies and learning environments. Upon request, MSPHI health care professionals supported educators and students through their participation at School Support Team meetings.

The MSPHI was also instrumental in supplementing the roles of TDSB Professional Support Services (e.g., school psychologists, social workers, counsellors, etc.) by helping to bridge the gap for timely mental health support for students in need and fostering a well-rounded support system for students to thrive.

## Ripple Effects on Families

According to focus group participants, benefits of the in-school health clinics extended to families as well. The MSPHI helped raise parents and caregivers' awareness, knowledge, and understanding of the health concerns their children were experiencing. This built capacity among family members. Interviews revealed that they became more engaged in learning about and leveraging support services in the community. Parents and caregivers were eager to support and share their knowledge and experience with community members.

Different stakeholder groups also observed that the in-school health clinics reduced the burden placed on families and provided relief by making health care accessible and comprehensive. Improved family dynamics was an additional benefit. MSPHI staff fostered positive parenting skills (e.g., effective communication and interaction with children) among parents and caregivers. Consequently, parents and caregivers found themselves being more able to support and engage their children at home.

*I am treating him differently now. I am controlling my anger. I am talking to him more. I am praising [him] more. So I did see changes at home when I started to act differently, after I got to know what's going on with him and that he has ADHD. (Parent)*

## Cost-effectiveness

Solid qualitative data gathered from multiple stakeholder groups over the four years of evaluation indicate, unequivocally, that returns on investment from the MSPHI are favourable, especially for high priority communities. From a health care perspective, the cost-benefit of the MSPHI can be attributed to relatively minimal financial investment required to establish and sustain the clinic, the high efficacy and efficiency of the paediatric care offered, and the immediate and long-term cost savings to the provincial health care system owing to the “upstream approach” of the MSPHI.

From an educational perspective, the MSPHI has helped to reduce short- and long-term educational costs by identifying the prevalence of developmental, behavioural and/or psychological health needs of elementary and secondary school students early on, making appropriate educational modifications, and appropriately allocating necessary services and human resources.

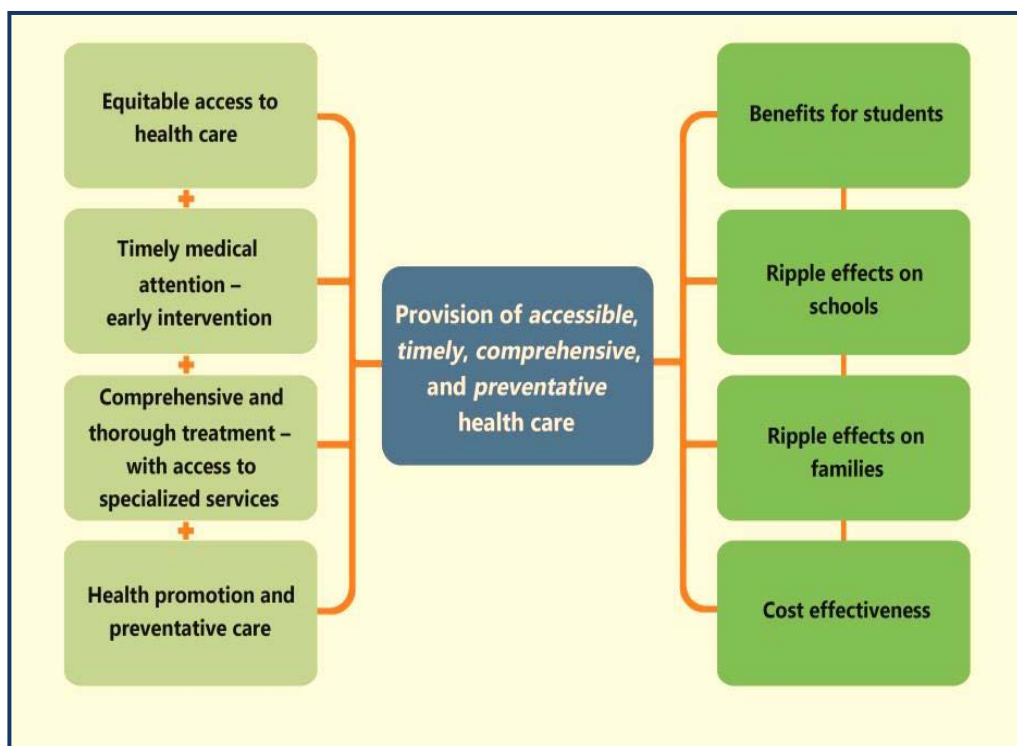
Lastly, from a societal perspective, initiatives such as the MSPHI improve educational and social outcomes of students in high-needs communities. Previous research (Jones et al., 2015; Karoly et al., 2005) has found that reducing inequities in health care access has been associated with higher graduation rates from high school and college, higher income earnings, lower rates of welfare dependency, and lower rates of delinquency.

## Conclusion

Research evidence from this multi-phase evaluation shows that breaking the silos between health and education works, at least at the local school level, for the betterment of students’ well-being and learning. This is particularly the case for inner-city students who often face adverse determinants of health along with accessibility barriers to medical services. As an innovative, integrative approach, the MSPHI was able to offer more accessible, timely, thorough, and holistic health care support for students from underserved communities, who might have otherwise slipped through the existing medical service cracks affecting both their health and educational trajectories.

This document is an abridged version of the Phase IV Summative Evaluation which can be accessed at [www.tdsb.on.ca/research/Research/Publications/SystemStudies](http://www.tdsb.on.ca/research/Research/Publications/SystemStudies)

## Added Values and Impacts of MSPHI



## Conditions for Success

In-depth discussions with stakeholders have upheld that the success and sustainability of the MSPHI are heavily contingent on several conditions:

1. **Availability of suitable school sites** in priority neighbourhoods where school space can be converted to a simple health care clinic.
2. **Availability of health care partners**, such as a CHC or nearby hospital, which can sustain an ongoing provision of health care professionals, as well as medical equipment and supplies.
3. **Support from school administrators and staff** in promoting in-school clinics to host and feeder schools, referring students to the clinics, and inviting MSPHI health care staff to School Support Team meetings.
4. **Clinic co-ordinators as a bridge for success** of clinic operations, liaising and facilitating effective communications among stakeholders, ensuring efficient and full usage of the clinic, and conducting outreach and promotion efforts to the community.
5. **Central co-ordination and research support** for overseeing financial and operation requirements of the clinics and regular evaluation to inform and shape this initiative respectively.
6. **Sustainable funding and support** from the government and community partners to cover start-up costs of a new clinic and the remuneration of clinic co-ordinators to ensure effectiveness and sustainability.