

**AGENDA**  
**MIDDLESEX-LONDON BOARD OF HEALTH**

399 RIDOUT STREET NORTH  
SIDE ENTRANCE, (RECESSED DOOR)  
Board of Health Boardroom

Thursday, 7:00 p.m.  
2016 September 15

**MISSION - MIDDLESEX-LONDON HEALTH UNIT**

The mission of the Middlesex-London Health Unit is to promote and  
protect the health of our community.

**MEMBERS OF THE BOARD OF HEALTH**

Ms. Patricia Fulton  
**Mr. Jesse Helmer (Chair)**  
Dr. Trevor Hunter  
Mr. Marcel Meyer  
Mr. Ian Peer  
Ms. Nancy Poole  
Mr. Kurtis Smith  
**Ms. Joanne Vanderheyden (Vice-Chair)**

**SECRETARY-TREASURER**

Dr. Christopher Mackie

**DISCLOSURE OF CONFLICTS OF INTEREST**

**APPROVAL OF AGENDA**

**APPROVAL OF MINUTES**

July 21, 2016 Board of Health meeting

**DELEGATIONS**

7:05 – 7:15 p.m.      Ms. Trish Fulton, Chair, Finance and Facilities Committee (FFC) re: Item #1 -  
Finance and Facilities Committee Meeting September 1, 2016 (Report No. 050-16).

**Receive:** September 1, 2016 Finance and Facilities Committee draft minutes

Item #	Report Name and Number	Link to Additional Information	Delegation	Recommendation	Information	Brief Overview
<b>Committee Reports</b>						
1	Finance and Facilities Committee Meeting September 1, 2016  (Report No. 050-16)	Receive: September 1 Draft FFC Minutes	x	x		To receive minutes and consider recommendations from the September 1 FFC meeting.
<b>Delegations and Recommendation Reports</b>						
2	Persons Who Inject Drugs in Middlesex-London: Follow up  (Report No. 051-16)	Appendix A		x		To receive an update on the status of resource allocation to address the emerging public health emergency in persons who inject drugs.
<b>Information Reports</b>						
3	Sexual Health Services: An Update  (Report No. 052-16)	Appendix A Appendix B Appendix C			x	To provide an update on recommendations from the Sexual Health Program Review that are currently being implemented.
4	Health Unit Governance Structures  (Report No. 053-16)				x	To provide a summary of a recent article on how budgets and programs may be influenced by health unit governance structures.
5	Vaccine Preventable Diseases Standard Compliance 2016-2017 and Program Changes  (Report No. 056-16)				x	To provide a summary of Vaccine Preventable Disease program changes.
6	Introduction of Video Direct Observation Therapy (vDOT)  (Report No. 057-16)				x	To provide a summary of how Video Direct Observation Therapy will enable staff to connect with clients in a secure, private, convenient and cost-effective manner.
7	Medical Officer of Health Activity Report: – September  (Report No. 054-16)				x	To provide an update on the activities of the MOH for September.

## OTHER BUSINESS

### Next meetings:

- Next Finance and Facilities Committee Meeting: Thursday October 6, 2016 @ 9:00 a.m.
- Next Board of Health Meeting: to be confirmed

## CORRESPONDENCE

- a) Date: 15 June 2016 (Received 23 June 2016)  
Topic: Food Insecurity  
From: Simcoe Muskoka District Health Unit  
To: The Honourable Kathleen Wynne

***Background:***

There is a recognized link between poverty and food insecurity. With the cost of the Nutritious Food Basket rising considerably, the Simcoe Muskoka District Health Unit has endorsed the position of urging the provincial and federal governments to prioritize and investigate a basic income guarantee as expressed by the Ontario Society of Nutrition Professionals in Public Health.

The MLHU endorsed the recommendations from the OSNPPH at the September 2015 Board of Health Meeting.

***Recommendation:***

Receive.

- b) Date: 29 June 2016  
Topic: Basic Income Guarantee  
From: Haliburton Kawartha Pine Ridge District Health Unit  
To: All Health Units

***Background:***

See item (a).

***Recommendation:***

Receive.

- c) Date: 23 June 2016 (Received 4 July 2016)  
Topic: Proposed Domestic and Sexual Violence Workplace Leave Accommodation and Training Act  
From: Windsor-Essex County Health Unit  
To: The Honourable Peggy Sattler

***Background:***

The Windsor-Essex County Board of Health expressed support for MLHU and Toronto Public Health letters re: the proposed Domestic and Sexual Violence Workplace Leave, Accommodation and Training Act (Bill 177).

The MLHU endorsed Bill 177 at the April Board of Health meeting.

***Recommendation:***

Receive.

- d) Date: 1 June 2016 (Received 5 July 2016)  
Topic: Proposed Introduction of Cannabis Legislation in Canada  
From: Wellington-Dufferin-Guelph Public Health  
To: The Right Honourable Justin Trudeau

***Background:***

The federal government plans to introduce legislation that would legalize cannabis in Spring 2017. Wellington-Dufferin-Guelph Public Health (WDGPH) passed a motion recommending that the federal government: 1) adopt a public health approach to cannabis legalization, 2) allow time to develop and build capacity around a policy that includes strict regulation, 3) establish baseline data and use and

related health and societal outcomes, and 4) develop evidence-based prevention and harm reduction messaging.

The MLHU endorsed recommendations from staff to proceed with similar recommendations made by WDGPH at the January 2016 Board of Health meeting.

***Recommendation:***

Receive.

- e) Date: 19 July 2016  
Topic: Highlights from the June 2016 Accountability Committee Meeting  
From: Accountability Committee for Standards Modernization  
To: All Health Units

**Background:**

The Organizational Governance Committee has been renamed to the Accountability Committee with the goal of articulating an accountability framework for the public health sector and to recommend tools and processes to the Executive Steering Committee.

***Recommendation:***

Receive.

- f) Date: July 21 2016  
Topic: Ban on Outdoor Wood Burning  
From: Michael Luce  
To: Dr. Christopher Mackie, Board of Health members

***Background:***

Open air burning regulations in London and Middlesex County restrict outdoor wood to specific conditions. This letter requests Health Unit support for an all-out ban in urban areas. Multiple items of email correspondence expressing concern over outdoor wood burning have been received from Mr. Luce on this topic, all of which are available on request.

Exposure to wood smoke can pose a health risk at high levels, but the health impact and burden of disease from outdoor fire pits across the population of Middlesex and London is low, and those who are at risk generally have recourse to protection from bylaws.

***Recommendation:***

Receive

- g) Date: 14 July 2016 (Received 21 July 2016)  
Topic: Patients First Discussion Paper  
From: Bev MacDougall, Warden and chair of the County of Lambton Board of Health  
To: The Honourable Dr. Eric Hoskins

**Background:**

The County of Lambton Board of Health supports the recommendations outlined by the Association of Local Public Health Agencies (alPHA). The five recommendations included:

1. Funding and Accountability – Provincial Public Health Funding and Accountability Agreements must continue to be negotiated directed between local boards of health and the MOHLTC.
2. Independent Voice of Board of Health – Board of health must be maintained as defined in the Health Protection and Promotion Act, directly accountable to the Minister of Health.
3. Integration of Local Population and Public health Planning with Other Health Services – The Ontario Public Health Standards and Organizational Standards, as required, should be modified to

require boards of health to align their work and ensure that population and public health priorities inform LHIN health planning, funding and delivery.

4. Process for Determining Roles – The roles of boards of health, LHINS, and others must be determined through a transparent, inclusive and deliberate process informed by evidence.
5. Geographic Boundaries – LHIN boundaries should be re-configured to align with municipal, local public health, education and social service boundaries.

The MLHU endorsed alPha's response at the April Board of Health meeting.

***Recommendation:***

Receive.

- h) Date: 14 July 2016 (Received 21 July 2016)  
Topic: Grey Bruce Health Unit Brief in Response to Patients First Discussion Paper  
From: Bev MacDougall, Warden and chair of the County of Lambton Board of Health  
To: Linda Stewart, Executive Director, Association of Local Public Health Agencies (alPha)

**Background:**

See item (h) above.

***Recommendation:***

Receive.

- i) Date: 14 July 2016 (Received 21 July 2016)  
Topic: A Public Health Approach to the Legalization of Cannabis in Canada  
From: Bev MacDougall, Warden and chair of the County of Lambton Board of Health  
To: The Right Honourable Justin Trudeau

**Background:**

See item (d) above.

***Recommendation:***

Receive.

- j) Date: 29 July 2016  
Topic: Highlights #3 from the June Executive Steering Committee Meeting for Standards Modernization  
From: Standards Modernization Executive Steering Committee  
To: All Health Units

**Background:**

The Executive Steering Committee convenes with the goal of strengthening and enhancing accountability and transparency within the public health system. The update focused on how public health can play a role in integrated health system decision-making and planning and addressing Indigenous community needs and equity in the Ontario Public Health Standards,

**Recommendation:**

Receive.

- k) Date: 2016 August 25  
Topic: M-47 Petition - Porn as a Public Health Issue  
From: Megan Walker, Executive Director, London Abused Women's Centre  
To: Dr. Christopher Mackie, Medical Officer of Health, and MLHU Board of Health

**Background:**

The London Abused Women's Centre has been working with Peace River MP Arnold Viersen on a motion before the House of Commons. The motion is as follows:

"That the Standing Committee on Health be instructed to examine the public health effects of the ease of access and viewing of online violent and degrading sexually explicit on children, women and men, recognizing and respecting the provincial and territorial jurisdictions in this regard, and that the said Committee report its findings to the House no later than July 2017."

***Recommendation:***

Endorse.

**CONFIDENTIAL**

The Board of Health will move in camera to discuss matters regarding a proposed or pending acquisition of land by the Middlesex-London Board of Health.

**ADJOURNMENT**



**PUBLIC SESSION – MINUTES**  
**MIDDLESEX-LONDON BOARD OF HEALTH**

399 Ridout Street, London  
Middlesex-London Board of Health Boardroom  
Thursday, July 21, 2016 7:00 p.m.

---

**MEMBERS PRESENT:**      **Mr. Jesse Helmer**      (Chair)  
Mr. Trevor Hunter  
Ms. Trish Fulton  
Mr. Ian Peer  
Ms. Nancy Poole  
Mr. Kurtis Smith  
**Ms. Joanne Vanderheyden**      (Vice-Chair)

**REGRETS:**      Mr. Marcel Meyer

**OTHERS PRESENT:**      Dr. Christopher Mackie, Medical Officer of Health & CEO  
Ms. Elizabeth Milne, Executive Assistant to the Board of Health & Communications (Recorder)  
Ms. Muriel Abbott, Public Health Nurse  
Ms. Mary Lou Albanese, Manager, Child Health  
Mr. Jordan Banninga, Manager, Strategic Projects  
Ms. Rhonda Brittan, Manager, Healthy Communities & Injury Prevention  
Ms. Laura Di Cesare, Director, Corporate Services  
Dr. Gayane Hovhannisyan, Associate Medical Officer of Health  
Ms. Heather Lokko, Manager, Healthy Start  
Mr. Chimere Okoronkwo, Manager, Oral Health  
Mr. David Pavletic, Manager, Food Safety and Healthy Environments  
Ms. Jennifer Proulx, Manager, Nurse Family Partnership  
Mr. Alex Tynml, Online Communications Coordinator  
Mr. Stephen Turner, Director, Environmental Health and Infectious Diseases  
Ms. Suzanne Vandervoort, Director, Healthy Living

Chair Helmer called the meeting to order at 7:00 p.m.

**DISCLOSURES OF CONFLICT(S) OF INTEREST**

Chair Helmer inquired if there were any disclosures of conflict(s) of interest. None were declared.

**APPROVAL OF AGENDA**

It was moved by Ms. Fulton seconded by Ms. Vanderheyden *that the **AGENDA** for the July 21, 2016 Board of Health meeting be approved.*

Carried

**APPROVAL OF MINUTES**

It was moved by Mr. Peer, seconded by Mr. Smith, *that the **MINUTES** for the June 16, 2016 Board of Health meeting be approved.*

Carried

## **COMMITTEE REPORTS**

### **1) Finance and Facilities Committee Meeting July 7<sup>th</sup> (Report No. 045-16)**

Ms. Fulton provided a summary and context to the recommendations from the July 7, 2016 Finance and Facilities Committee (FFC) meeting.

#### **Proposed 2016 PBMA Process, Criteria & Weighting (Report No. 023-16FFC)**

Ms. Fulton noted that no changes were recommended to the PBMA criteria for 2017.

It was moved by Ms. Fulton seconded by Mr. Peer, *that the Board of Health approve the 2017 PBMA criteria and weighting proposed in Appendix A to Report No. 023-16FFC.*

Carried

It was moved by Ms. Fulton, seconded by Mr. Smith, *that the Board of Health receive the Draft July 7<sup>th</sup> Finance and Facilities Committee meeting MINUTES.*

Carried

### **2) Governance Committee Meeting – July 21, 2016, 6:00 p.m. (Verbal update, July 21, 2016)**

Mr. Hunter summarized and provided context to each of the recommendations from the July 21, 2016 Governance Committee (GC) meeting.

#### **Board of Health Development Session (Report No. 013-16GC)**

Mr. Hunter noted that staff are aiming to book development training in October.

It was moved by Mr. Hunter seconded by Ms. Vanderheyden, *that the Board of Health approve the scheduling of a Board development session in the Fall, as recommended by the Governance Committee.*

Carried

#### **2015-2020 Strategic Plan Update (Report No. 014-16GC)**

It was moved by Mr. Hunter, seconded by Mr. Peer *that the Board of Health receive the Strategic Plan Update and approve the addition of a strategic objective for Program Excellence, as recommended by the Governance Committee.*

Carried

#### **Nomination and Appointment Process Update (Report No. 015-16GC)**

Discussion ensued about the following items:

- Communication about current Board vacancies on a broader scale
- The advertising of Board position opportunities through various community agencies.

It was moved by Mr. Hunter seconded by Mr. Smith, *that the Board of Health:*

- 1) *complete the updated diversity survey,*
- 2) *approve the forwarding of the anonymized results of the survey to the Ministry of Health and Long-Term Care for their consideration during the public appointments process and to other appointing bodies as appropriate; and*
- 3) *direct staff to promote Board of Health position opportunities and,*
- 4) *provide direction to staff regarding the promotion of Board of Health position opportunities, as recommended by the Governance Committee.*

Carried



Mr. Hunter flagged the Governance Committee membership complement and requested that a Provincial representative be appointed to the Governance Committee for an interim period.

Mr. Peer put his name forward to fill the Provincial vacancy on the Governance Committee for the interim, until full Board of Health member complement is achieved.

It was moved by Mr. Helmer, seconded by Ms. Vanderheyden *that the Board of Health appoint Mr. Ian Peer to sit as the Provincial representative on the Governance Committee on an interim basis.*

Carried

### **Review of 2016 Governance Committee Meeting Dates (Report No. 016-16GC)**

Mr. Hunter reviewed the date of the next Governance Committee meeting, which will be held on November 17, 2016 at 5:30 p.m.

It was moved by Mr. Hunter, seconded by Mr. Peer, *that the Board of Health receive the April 21, 2016 Governance Committee meeting MINUTES.*

Carried

## **DELEGATION AND RECOMMENDATION REPORTS**

### **3) Middlesex London Community Drug and Alcohol Strategy (Report No. 046-16)**

Ms. Rhonda Brittan and Ms. Muriel Abbott introduced this report, outlined current work, next steps and answered questions.

Discussion ensued about the following items:

- The timeline for recommendations going forward and the urgency in seeing action items implemented as soon as possible.
- The London Community Addiction Response Strategy, the lack of a medical detox centres in Middlesex-London and mechanisms that could be used to ensure accountability.
- Enforcement and management of drug use including other drug strategies that have been considered.
- The financial impact this work may have on the Health Unit.

It was moved by Mr. Hunter, seconded by Mr. Peer *that the Board of Health receive Report No. 046-16 re "Middlesex London Community Drug & Alcohol Strategy" for information.*

Carried

## **INFORMATION REPORTS**

### **4) Residential Home Care Standards (Report No. 047-16)**

Dr. Mackie introduced and provided context to this report, advising that there would be manageable impacts on staff.

Mr. David Pavletic, Manager, Food Safety and Healthy Environments attended to answer questions.

Discussion ensued about group homes in the County and the potential displacement of residents that might occur due to new licensing requirements.

It was moved by Ms. Fulton, seconded by Mr. Hunter, *that the Board of Health receive Report No. 047-16 re "Residential Care Home Standards" for information.*

Carried

### **5) Summary Information Report for July 2016 (Report No. 048-16)**

Ms. Heather Lokko added that York Region Public Health will be joining the MLHU in the Nurse-Family Partnership project, replacing Ottawa Public Health.

It was moved by Mr. Peer, seconded by Mr. Smith, *that the Board of Health receive Report No. 048-16 Summary Information Report for July 2016 for information.*

Carried

**6) Medical Officer of Health Activity Report – July (Report No. 049-16)**

It was moved by Mr. Peer seconded by Mr. Smith, *that the Board of Health receive Report No.049-16 re: Medical Officer of Health Activity Report – July for information.*

Carried

Dr. Mackie added a note to his activity report which included attending the City's Community and Protective Services Committee meeting on Tuesday, July 19, where he presented the Health Unit's 2015-2020 Strategic Plan and spoke about sugar sweetened beverages.

Chair Helmer recognized that it was Ms. Nancy Poole's last meeting and Dr. Mackie added that it has been an honor to work with Ms. Poole in her role as Board of Health member.

**CORRESPONDENCE**

It was moved by Mr. Hunter, seconded by Ms. Vanderheyden *that the Board of Health receive correspondence items a) through i).*

Carried

**OTHER BUSINESS**

**Upcoming meetings**

- Next Finance and Facilities Committee Meeting: Thursday September 1, 2016 at 9:00 a.m.
- Next Governance Committee Meeting: Thursday November 17, at 5:30 pm
- Next Board of Health Meeting: Thursday September 15, 2016 at 7:00 p.m.

**CONFIDENTIAL**

At 8:11 p.m., Chair Helmer invited a motion to move in camera to discuss matters regarding identifiable individuals and a proposed or pending acquisition of land by the Middlesex-London Board of Health.

At 8:11 p.m., it was moved by Mr. Peer, seconded by Mr. Hunter *that the Board of Health move in camera to discuss matters regarding identifiable individuals and a proposed or pending acquisition of land by the Middlesex-London Board of Health.*

Carried

At 8:12 p.m. all Health Unit staff, except Dr. Mackie, Dr. Hovhannisyan, Mr. Jordan Banninga, Mr. Chimere Okoronkwo, Mr. Steve Turner, Ms. Laura Di Cesare, Ms. Suzanne Vandervoort, Ms. Heather Lokko, and Ms. Elizabeth Milne left the meeting.

Carried

At 8:40 p.m. it was moved by Ms. Vanderheyden, seconded by Mr. Peer *that the Board of Health rise and return to public session.*

Carried

At 8:40 p.m. the Board of Health returned to public session.

Chair Helmer made a note that there would not be a Board of Health meeting in August.

**ADJOURNMENT**

At 8:41 p.m., it was moved by Ms. Vanderheyden, seconded by Ms. Fulton, *that the meeting be adjourned.*

Carried

---

**JESSE HELMER**  
Chair

---

**CHRISTOPHER MACKIE**  
Secretary-Treasurer



**PUBLIC MINUTES**  
**Finance and Facilities Committee**  
**50 King Street, Room 3A**  
**MIDDLESEX-LONDON BOARD OF HEALTH**  
**2016 September 1, 9:00 a.m.**

---

**COMMITTEE**

**MEMBERS PRESENT:**      **Ms. Trish Fulton (Committee Chair)**  
Mr. Marcel Meyer  
Mr. Ian Peer  
Mr. Jesse Helmer  
Ms. Joanne Vanderheyden

**OTHERS PRESENT:**      Dr. Christopher Mackie, Medical Officer of Health & CEO  
Ms. Lynn Guy, Executive Assistant to the Medical Officer of Health  
(Recorder)  
Mr. John Millson, Associate Director, Finance  
Mr. Jordan Banninga, Manager, Strategic Projects

At 9:00 a.m., Chair Fulton called the meeting to order.

**1. DISCLOSURES OF CONFLICT(S) OF INTEREST**

Chair Fulton inquired if there were any disclosures of conflict of interest to be declared. None were declared.

**2. APPROVAL OF AGENDA**

It was moved by Ms. Vanderheyden, seconded by Mr. Peer *that the [AGENDA](#) for the September 1, 2016 Finance and Facilities Committee meeting be approved.*

Carried

**3. APPROVAL OF MINUTES**

An amendment was made to wording in the confidential minutes for July 7, 2016.

It was moved by Mr. Meyer, seconded by Ms. Vanderheyden *that the Confidential MINUTES from the July 7, 2016 Finance and Facilities Committee in-camera session be approved as amended.*

Carried

It was moved by Mr. Meyer, seconded by Ms. Vanderheyden *that the [MINUTES](#) from the July 7, 2016 Finance and Facilities Committee meeting be approved.*

Carried

**4. NEW BUSINESS**

**4.1 Q2 Financial Update and Factual Certificate ([Report No. 027-16FFC](#))**

Mr. John Millson introduced this report and answered questions.

Discussion ensued about the following items:

- The likelihood of the Health Unit receiving an increase in funding of 2% from the Ministry and the funding formula that was used last year by the Ministry.

- The normal delays experienced when hiring and that efforts are made to minimize delays in hiring and mitigate impact on services.
- Clarification of item #10 of the Factual Certificate; City of London Legal is working on this item and it is expected that there will be no financial impact for the Health Unit

It was moved by Mr. Peer, seconded by Mr. Helmer, *that the Finance and Facilities Committee review and recommend that the Board of Health receive Report No. 027-16FFC re: "Q2 Financial Update & Factual Certificate" and appendices for information.*

Carried

#### **4.2 In-kind Support to 100% Programs ([Report No. 028-16FFC](#))**

Mr. John Millson reviewed this report and noted that 100% programs will most likely not receive increased funding.

Discussion ensued about amending the analysis of Cost Shared Program document to include the percentage of unallocated costs, when programs started and whether there are any issues to note.

Mr. Meyer noted that he would like to look into setting up a meeting between the Minister and Municipalities.

It was moved by Mr. Meyer, seconded by Mr. Helmer, *that the Finance and Facilities Committee receive report No. 028-16 FFC re: "In-Kind Support to 100% Programs" for information.*

Carried

#### **4.3 2017 Board of Health Budget - Financial Parameters ([Report No. 029-16FFC](#))**

Dr. Mackie noted that the Health Unit has not yet received notice of 2016 provincial funding and therefore staff are looking to the Board for guidance. The Committee further discussed this report and agreed to move forward knowing that there may be a need to make adjustments at a later date.

It was moved by Mr. Meyer, seconded by Mr. Helmer, *that the Finance and Facilities Committee make recommendation to the Board of Health to approve the following assumptions for planning the 2017 budget:*

- 1) 2% increase in provincial funding for Mandatory Programs; and
- 2) 0% increase in municipal funding for Mandatory Program; and further
- 3) 0 % grant increase for all other programs.

Carried

#### **4.4 March 31 Draft Financial Statements ([Report No. 030-16FFC](#))**

It was moved by Mr. Helmer, seconded by Ms. Vanderheyden, *that the Finance and Facilities Committee recommend that the Board of Health approve the audited Consolidated Financial Statements for the Middlesex-London Health Unit, March 31<sup>st</sup>, 2016 as appended to Report No. 030-16FFC.*

Carried

#### **4.5 Ministry of Transportation Grant ([Report No. 031-16FFC](#))**

It was moved by Mr. Peer, seconded by Mr. Meyer, *that the Finance and Facilities Committee review and make recommendation to the Board of Health to receive Report No. 031-16FFC; re: "Ministry of Transportation Grant" for information.*

Carried

## 5. CONFIDENTIAL

At 10:45 a.m. Chair Fulton invited a motion to move in camera to discuss items regarding a proposed or pending acquisition of land by the Middlesex-London Board of Health.

It was moved by Ms. Vanderheyden, seconded by Mr. Helmer *that the Finance and Facilities Committee move in camera to discuss items regarding a proposed or pending acquisition of land by the Middlesex-London Board of Health.*

Carried

At 12:55 p.m. it was moved by Ms. Vanderheyden, seconded by Mr. Helmer *that the Finance and Facilities Committee rise and return to public session to report that progress had been made on items regarding a proposed or pending acquisition of land by the Middlesex-London Board of Health.*

Carried

At 12:55 p.m. the Finance and Facilities Committee returned to public session.

## 6. OTHER BUSINESS

### Next meetings:

September 15, 2016, @ 6:00 p.m.  
October 6, 2016 @ 9:00 a.m.

## 7. ADJOURNMENT

Chair Fulton invited a motion to adjourn the meeting.

It was moved by Mr. Peer, seconded by Ms. Vanderheyden *that the meeting be adjourned.*

Carried

At 1:00 p.m. Chair Fulton *adjourned the meeting.*

---

TRISH FULTON  
Committee Chair

---

DR. CHRISTOPHER MACKIE  
Secretary-Treasurer



## MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 050-16

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health

DATE: 2016 September 15

### FINANCE AND FACILITIES COMMITTEE MEETING – SEPTEMBER 1

The Finance and Facilities Committee met at 9:00 a.m. on Thursday September 1, 2016. A full summary of the discussion can be found in the [Minutes](#).

The following reports were reviewed at the meeting and recommendations made:

Reports	Recommendations for Board of Health's Consideration and Information
<b>Q2 Financial Update and Factual Certificate</b>  ( <a href="#">Report No. 027-16FFC</a> )	It was moved by Mr. Peer, seconded by Mr. Helmer, <i>that the Finance and Facilities Committee review and recommend that the Board of Health receive Report No. 027-16FFC re: "Q2 Financial Update &amp; Factual Certificate" and appendices for information.</i>  Carried
<b>In-kind Support to 100% Programs</b>  ( <a href="#">Report No. 028-16FFC</a> )	It was moved by Mr. Meyer, seconded by Mr. Helmer, <i>that the Finance and Facilities Committee receive report No. 028-16 FFC re: "In-Kind Support to 100% Programs" for information.</i>  Carried
<b>2017 Board of Health Budget - Financial Parameters</b>  ( <a href="#">Report No. 029-16FFC</a> )	It was moved by Mr. Meyer, seconded by Mr. Helmer, <i>that the Finance and Facilities Committee make recommendation to the Board of Health to approve the following assumptions for planning the 2017 budget:</i> 1) 2% increase in provincial funding for Mandatory Programs; and 2) 0% increase in municipal funding for Mandatory Program; and further 3) 0 % grant increase for all other programs.  Carried
<b>March 31 Draft Financial Statements</b>  ( <a href="#">Report No. 030-16FFC</a> )	It was moved by Mr. Helmer, seconded by Ms. Vanderheyden, <i>that the Finance and Facilities Committee recommend that the Board of Health approve the audited Consolidated Financial Statements for the Middlesex-London Health Unit, March 31<sup>st</sup>, 2016 as appended to Report No. 030-16FFC.</i>  Carried
<b>Ministry of Transportation Grant</b>  ( <a href="#">Report No. 031-16FFC</a> )	It was moved by Mr. Peer, seconded by Mr. Meyer, <i>that the Finance and Facilities Committee review and make recommendation to the Board of Health to receive Report No. 031-16FFC; re: "Ministry of Transportation Grant" for information.</i>  Carried

The next Finance and Facilities Committee meeting will be Thursday, October 6, 2016 @ 9:00 a.m.

This report was prepared by Elizabeth Milne, Executive Assistant to the Board of Health and Communications.

Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health



## MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 051-16

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health

DATE: 2016 September 15

---

### PERSONS WHO INJECT DRUGS IN MIDDLESEX-LONDON: FOLLOW UP

#### **Recommendation**

*It is recommended that the Board of Health support the allocation of resources, described herein, to address the emerging public health emergency in persons who inject drugs in Middlesex-London.*

#### **Key Points**

- Rates of HIV, Hepatitis C, Invasive Group A Streptococcal Disease, and infective endocarditis continue to increase in persons who inject drugs in Middlesex-London.
- Rates are believed to be escalating due to several intersecting factors, including underlying mental health and addictions issues, and changes in prescription opioid drug practices.
- The Middlesex-London Health Unit is working with key stakeholders to address this public health emergency in persons who inject drugs.

#### **Background**

In June, a BOH report and presentation described the convergence of several emerging health issues in persons who inject drugs (PWID) in Middlesex-London (See [Board of Health Report 040-16](#)). As of September 1st, Public Health Ontario data indicate there have been 44 new diagnoses of HIV in Middlesex-London in 2016, surpassing the total number of cases diagnosed in all of 2015 (42). New cases continue to be reported at a rate of one to two per week. PWID continue to represent the majority of individuals newly diagnosed (approximately 70% of new diagnoses are attributed to the “Injection Drug Use” category for 2016). Additionally, Hepatitis C continues to be an issue, with 166 new cases reported so far in 2016. Invasive Group A Streptococcal disease and endocarditis continue to be important issues, with the latter having a case-fatality rate in the range of 30-40%.

#### **Continuing Strategies**

MLHU is continuing to address these health issues in PWID in Middlesex-London by developing and implementing a comprehensive HIV strategy with local and provincial stakeholders. A leadership team with representation from St. Joseph’s Infectious Diseases Care Program, Regional HIV/AIDS Connection, London InterCommunity Health Centre, London CARES, and Addiction Services Thames Valley has been created and consultations with the AIDS Bureau at the Ministry of Health and Long Term Care have occurred throughout the process. LHIN staff are also aware of this process.

Planned activities that stakeholders will focus on to decrease the transmission of HIV among PWID:

- Increased targeted HIV testing for this population, connecting them with care, and enabling retention in care using evidence-based models



- Collaboration and sharing of resources among community organizations to ensure care is adjusted to the unique needs of this population
- Identifying and filling gaps related to diagnosis, treatment and other support for PWID
- Coordination with the Community Drug & Alcohol Strategy for Middlesex London

Hospital-based HIV care has not been effective in retaining hard-to-reach PWID in care. Instead, comprehensive outreach models have been proven to be more effective in reaching the most vulnerable populations such as PWID.

Since May, consultations have been held with British Columbia (BC) and Saskatchewan provincial and regional public health leadership to learn more about the Seek and Treat for Optimal Prevention of HIV/AIDS Program (STOP HIV/AIDS). This program aims to increase the quality of life of people living with HIV and reduce HIV rates by preventing secondary transmission of HIV infections through a proactive public health approach to finding people living with HIV, promoting a Treatment as Prevention (TasP) evidence-based approach, linking them to HIV care and treatment programs, and supporting them to adhere to treatment. STOP HIV/AIDS aims to improve the experience of people living with HIV or AIDS in every health and social service interaction and significantly improve linkage and engagement across the full continuum of services in HIV prevention, testing and diagnosis, treatment, and care and support. The STOP HIV team is made up of interdisciplinary “pods” consisting of a nurse, an outreach worker, and a social worker. Their work is almost exclusively outreach based. Their focus is to connect people who are disconnected from care *into* care. This means they are meeting clients wherever they are: in their homes; in parks; in streets and alleys; hotels; clinics; and community centres. The STOP HIV team works closely with other services responsible for mental health, substance use and community health.

There are slight variations of the model between BC and Saskatchewan based on the population needs and community design with the focus in Saskatchewan on the “hard-to-reach” PWID population. Each province received substantial funding from their respective provincial governments to create outreach teams (Vancouver is funded for five Nurses, five Social Workers, and five Outreach staff, in addition to program management (coordinators, supervisors).

Without the availability of additional resources, there is a potential for the further spread of the HIV epidemic among PWID but also further through sexual network and perinatal transmission. Every HIV case is estimated to result in, on average, \$1.3 million in direct and indirect costs to health care and society. According to some estimates, this amount is doubled if addiction and mental health issues are considered.

MLHU is requesting initial funding from MOHLTC to adapt a similar model while leveraging existing resources (see [Appendix A](#) for costing). Ongoing funding will be sought through MLHU budget processes.

This report was prepared by Shaya Dhinsa, Manager of Sexual Health, and Todd Coleman, Epidemiologist.



Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health

**APPENDIX A****Detailed Reallocation Proposal**

<b><u>Item</u></b>	<b><u>Description</u></b>	<b><u>Cost*</u></b>
Outreach nurse (2)	\$48,000 cost per nurse	\$ 96,000
HIV coordinator		\$ 58,000
Program costs	Education, program supplies, transportation, laptops with licensing and cellphones	\$ 20,780
Outreach worker (1-2)	\$27,000 cost per peer support worker	\$ 54,000
<b>Estimated Total Cost</b>		<b>\$ 228,780</b>

\*NOTE: these figures represent 6 months of costs

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health

DATE: 2016 September 15

---

## **SEXUAL HEALTH SERVICES REVIEW: AN UPDATE**

### **Recommendation**

*It is recommended that Report No. 052-16 re Sexual Health Services Review: An Update be received for information.*

### **Key Points**

- Recommendations from Sexual Health Program Review are being implemented.
- Indicators for monitoring have been identified for evaluation.

### **Background**

The Sexual Health Team conducted program reviews in an effort to validate current evidence-informed approaches, identify opportunities to enhance the use of evidence-informed strategies, and increase effectiveness and efficiency of programs and services. The program review was completed June 2015 with a Board of Health report with recommendations December 2015. The next steps included assessing the applicability and transferability of the Sexual Health Promotion review findings and conducting another rapid review to focus on advocacy and supportive environment strategies. The recommendations from the Clinic review are in the process of implementation and evaluation. Attached are three technical reports related to this program review process: Effective Health Promotion Strategies for Middlesex-London Health Unit's Sexual Health Team is attached as [Appendix A](#); Program Review Sexual Health Clinic is attached as [Appendix B](#); and Sexual Health Recommendations is attached as [Appendix C](#). Several service improvements have come out of this work.

### **Service for Clients without OHIP**

As part of the recommendations from the review, the MLHU has developed and implemented standardized physician contracts that outline practice expectations and define billing procedures. The contract also documents the responsibilities of the Medical Director. The new physician contracts allow MLHU to provide services for clients who do not have a health card. This change has had a positive impact on access to services within the clinic, particularly for at-risk groups.

### **Expanded Birth Control Options**

Algorithms for Intrauterine device/Intrauterine system (IUD/IUS), Depo-Provera birth control medical directive and referrals for breast exams have been developed with input from clinic physicians, the manager and staff of sexual health and the medical director. These algorithms allow the staff to provide consistent care, maximize the value of the Public Health Nurse practice to ensure their knowledge and expertise is utilized, and increase services for clients that align with the Ontario Public Health Standards.

### **Enhanced Supervision Processes**

The medical director and student coordinator developed a streamlined documentation and supervision process for health care professional trainees.

**Improved Service in Strathroy**

The Strathroy office has limited physician clinics. To increase access to sexual health services, a new clinic model has been implemented where nurses provide specific sexual health services under medical directives and refer clients beyond their scope to physicians during physician-led clinics.

**Electronic Medical Record (EMR)**

The Council of Medical Officers of Health (COMOH) formed an Electronic Medical Record (EMR) Working Group. The working group is exploring and providing recommendations on EMR and data standardization as means of working collaboratively, leveraging strengths, quantifying their value proposition, and enabling a population health perspective.

**Customers Report High Satisfaction Rates**

Client satisfaction surveys are a component of quality assurance, as reported by the MOHLTC's Sexual Health Clinical Services Guidance Document (Ontario, 2010). The clinic conducted a client satisfaction survey between May and June 2015. Overall, a majority (88%) of the Clinic respondents rated the quality of the services received in both the STI and FP clinics as excellent or very good.

**Strengthening Health Promotion**

The Sexual Health Promotion (SHP) has begun implementing the findings of the SHP program review. Several capacity building training sessions have been used internally and in the community. This includes "train-the-trainer" activities, and may include peer-to-peer internally, the SHP team is working closely with the Young Adult Team to provide regular sexual health updates to the school nurses that actively target secondary school students. In the community, staff members are actively promoting positive space training for organizations aiming to become more inclusive. Also, more education is being done in post-secondary settings where students are given the knowledge and skills required to be effective at teaching sexual health. Lastly, the SHP team is looking at possible strategies to employ the peer to peer method that was identified as a successful strategy in the program review.

Additional evidence-based strategies that the SHP team has identified for future consideration include: universal bargaining to reduce the cost of condoms; increasing the availability of sexual health services in educational settings; increasing LGBTQ inclusivity in the community; and advocacy around HIV prevention.

**Next Steps**

The Sexual Health Team will continue to implement the recommendations. Indicators for monitoring have been identified and the evaluation process has begun. This will identify challenges/areas for improvement and assess the overall effectiveness of the implemented recommendations.

This report was prepared by Chris Blain, Health Promoter, and Shaya Dhinsa, Manager, Sexual Health.



Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health

# **Effective Health Promotion Strategies for Middlesex-London Health Unit's Sexual Health Team**



June 2015

For information, please contact:

Sexual Health  
Middlesex-London Health Unit  
50 King St.  
London, Ontario  
N6A 5L7  
phone: 519-663-5317  
e-mail:

© Copyright 2014  
Middlesex-London Health Unit  
50 King Street  
London, Ontario  
N6A 5L7

Cite reference as: Middlesex-London Health Unit (2015).  
Effective Health Promotion Strategies for Middlesex-London Health Unit's Sexual Health Team  
London, Ontario: Author.

Authors:

Christopher Blain, BHSc  
Deb Fenlon, RN, BScN

All rights reserved.

# Table of Contents

Acknowledgements .....	i
Executive Summary .....	ii
I. Issue .....	1
1. Local Context .....	1
II. Context .....	2
2. Background .....	2
III. Research Question .....	3
1. PICO Question .....	3
2. Search Strategy .....	3
3. Search Results .....	4
IV. Quality Assessment .....	5
1. Quality Assessment Tools and Strategy .....	5
2. Results .....	5
V. Synthesis of Findings .....	5
1. Summary of findings by intervention type, and significance .....	5
2. Summary of results of interventions by outcome measures .....	5
VI. Preliminary Program Recommendation .....	6
References .....	7
Appendix A: Public Health Requirements Associated with this Rapid Review .....	9
Appendix B: NCCMT: Methods for Efficiently Searching Research Evidence .....	12
Appendix C: Search Strategy .....	13
Appendix D: Final Search Results .....	16
Appendix E: Quality Assessment Tool for Systematic Reviews: AMSTAR .....	17
Appendix F: NCCMT: A Model for Evidence-Informed Decision-Making .....	19
Appendix G: NCCMT: Applicability and Transferability Tool .....	21
Appendix H: Blank Data Extraction Table .....	25
Appendix I: Summary of Findings by Primary Outcome Measure .....	26
Appendix J: Summary of Findings by Secondary Outcome Measure .....	28

## Acknowledgements

---

The following Middlesex-London Health Unit Staff for their valued contributions in this Rapid Review process:

Shaya Dhinsa, Manager, *Sexual Health*

Sexual Health Promotion Team, *Middlesex-London Health Unit*

Heather Lokko, Associate Director, *Oral Health, Communicable Diseases and Sexual Health*

Alison Locker, Epidemiologist, *Oral Health, Communicable Diseases and Sexual Health*

Sameena Vandivelu, Program Evaluator, *Oral Health, Communicable Diseases and Sexual Health*

Yvonne Tyml, Public Health Librarian, *Human Resources and Labour Relations Services*

Carolynne Gabriel, Public Health Librarian, *Human Resources and Labour Relations Services*

Our external mentors for sharing their time and expertise:

Donna Ciliska, Senior Knowledge Translation Advisor, *National Collaborating Centre for Methods & Tools (NCCMT)*

Danielle Charron, Library Coordinator, *City of Hamilton Public Health Services*

*Peel Public Health*



## Executive Summary

---

### Purpose

The Sexual Health team at the Middlesex-London Health Unit conducted a rapid review to determine the most current and effective health promotion strategies for reducing sexually transmitted infections (STI's) among youth aged 15-24 in Middlesex-London. The rationale for focusing on this age group was based on the epidemiology of the infection rates from local context (refer 1.1 Local Context for more information).

### Research Question

Among youth aged 15-24 years, what health promotion strategies are effective at reducing rates of sexually transmitted infections?

### Context

Currently, the Sexual Health team engages in numerous health promotion strategies intended to promote healthy sexuality in the residents of Middlesex-London. Some of these strategies include providing opportunities for education and skill building, creating and fostering supportive environments, raising awareness through mass media campaigns and using social media.

### Methods and Results

The original search strategy for this review was replicated from a rapid review completed by Peel Public Health in 2012. For the Middlesex-London Health Unit review, a total of 4 databases (Medline, PsycINFO, Cochrane, and CINAHL) were searched up until March 2015. The search strategy resulted in 276 articles, including best practice guidelines, meta-analysis and systematic review. Six systematic reviews were included after removal of duplicates, relevance assessment, full article review and quality assessment. Reference lists of all articles were also scanned with the inclusion and exclusion criterion.

### Key Findings

The literature demonstrates that there are a multitude of effective health promotion strategies available to public health professionals to influence sexual behaviour, sexual health knowledge, condom use, self-efficacy and attitudes of youth. In turn, this may positively impact the incidence of STI rates in our population.

Key findings from this rapid review of the literature are as follows:

- Facilitator-led interventions (e.g., public health professional, teacher) demonstrate a reduced incidence in sexually transmitted infections (STIs) through the use of behavioural interventions.
- Facilitator-led interventions also show improvement in behavioural outcomes and increased knowledge, specifically with regards to an increase in condom use.
- Social media and text messaging interventions are effective in increasing STI knowledge, particularly with respect to increased familiarity with barrier methods and how they reduce the transmission of STIs. There is a positive significant effect in condom use self-efficacy and a reduction in the proportion of individuals reporting multiple or new partners.
- Employing a train-the-trainer method demonstrates some effect in the reduction of the incidence of active syphilis and the prevalence of gonorrhea.
- Utilizing a peer-led approach is effective in increasing youth sexual health knowledge for HIV/AIDS; changing knowledge for STIs and HIV/AIDS; increasing positive behaviour in regards to the use of condoms; improving prevention skills and youth sexual health knowledge and attitudes of STI prevention methods.
- Interactive-computer-based programs (ICBP) reported demonstrate non-significant improvement in knowledge and self-efficacy, and statistically significant improvement in safe sex intention and behaviour

### Recommendation

It is recommended that Sexual Health team members consult with key stakeholders to further consider the above-mentioned key findings, by applying the following NCCMT tools: A Model for Evidence-Informed Decision-Making (Appendix F) and the Adaptability and Transferability Tool (Appendix G). This will facilitate the development of relevant final recommendations for sexual health programming.

# I. Issue

The Sexual Health (SH) team conducted a rapid review to determine the most current and effective health promotion strategies for reducing sexually transmitted infections (STIs) among youth aged 15-24 in Middlesex-London. This review was conducted to identify which team initiatives should be changed or discontinued, which should be continued or enhanced, and what new initiatives could be considered for implementation.

As a public health unit operating in the province of Ontario, the Board of Health is required to provide mandatory, and some additional sexual health programs and services (Appendix A). Mandated programs and services are primarily based on the following requirements:

- **Provincial Legislation** - [Health Protection and Promotion Act](#), R.S.O. 1990, c.H.7. (HPPA)
- **Provincial Standards** - [Ontario Public Health Standards](#), 2008 (OPHS), specifically:
  - Principles: Need, Impact, Impact, Capacity, Partnership and Collaboration
  - Foundational Standard
  - Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections
  - Reproductive Health (specifically decreased rate of adolescent pregnancy)
  - Infectious Diseases Prevention and Control
- **A Provincial Protocol** - [Population Health Assessment and Surveillance Protocol](#), 2008 (PHASP)

The OPHS and PHASP, in particular, establish the requirement that health units utilize evidence-informed decision making methodology in the context of their program planning, implementation/delivery, management and evaluation activities. Applying this approach better ensures:

- Health units efficiently and effectively identify and address public health issues in their community.
- Public health programs and services are planned and implemented in such a way as to avoid unintended harm.
- Public health demonstrates accountability through its effective and transparent use of public health resources.

## 1. Local Context

Before the team could begin looking to the various current and effective strategies, an update on epidemiology of infection rates for Middlesex-London was needed. This update highlighted the following:

- **Chlamydia:** The annual reported incidence rate of chlamydia infections in Middlesex-London was significantly higher than the rate in Ontario as a whole in each year between 2009 and 2013. While this is alarming, the gap between the two rates may be becoming less wide. Between 2009 and 2013, the average annual reported incidence rate in Middlesex-London was 307.4 cases per 100,000 people. Across the five-year time period, an average of 1,414 chlamydia cases were reported annually. The average annual reported incidence rate of chlamydia infections among females for this time period was highest among 20 to 24 year olds, followed by 15 to 19 year olds. For males, the average reported incidence rate of chlamydia infections was also highest among 20 to 24 year olds for this time period, followed by 25 to 29 year olds. Finally the average annual reported incidence rate among females exceeded that for males in all age groups except those 50 years of age and over.
- **Gonorrhea:** The annual reported incidence rate of gonorrhea infections in Middlesex-London was significantly lower than the rate in Ontario as a whole in each year between 2011 and 2013. Between 2009 and 2013, the average annual reported incidence rate in Middlesex-London was 29.8 gonorrhea cases per 100,000 people. Across the five-year time period, an average of 137 gonorrhea cases were reported annually. For this time period, the average annual reported incidence rate of gonorrhea infections was highest among 20 to 24 year olds, followed by 25 to 29 year olds, for both females and males. In the age groups 0 to 19 years and 20 to 24 years, the average annual reported incidence rate among females exceeded that for males. In the remaining age groups, the rate among males exceeded the rate for females.
- **Hepatitis C:** In terms of hepatitis C, the annual reported incidence rate in Middlesex-London was significantly higher than the rate in Ontario as a whole between 2009 and 2013. Although the

Middlesex-London rate decreased in 2013, the decrease is not statistically significant compared to the other years in this time frame. Between 2009 and 2013, the average annual reported incidence rate in Middlesex-London was 53.1 hepatitis C infections per 100,000 people. Across this 5 year period, an average of 244 hepatitis C infections was reported annually. The annual reported incidence rate among females was highest among 25 to 29 year olds, followed by 20 to 24 year olds. For males, the annual reported incidence rate was highest among 30 to 34 year olds, followed by 25 to 29 year olds. Lastly, the reported incidence rate among males exceeded the rate for females in all age groups except among those 19 years of age and under.

- **Infectious syphilis:** Between 2009 and 2013, the annual reported incidence rate of infectious syphilis in Middlesex-London fluctuated over the five-year period. After being statistically higher than the provincial rate in 2011, the incidence rate of infectious syphilis in Middlesex-London was not statistically different to the Ontario rate in each of 2012 and 2013. Due to the relatively few infectious syphilis cases reported in Middlesex-London, the associated confidence intervals are quite wide. Between 2009 and 2013, the average annual reported incidence rate in Middlesex-London was 4.8 infectious syphilis cases per 100,000 people. Across the five-year time period, an average of 22 infectious syphilis cases were reported annually. During this time period, the majority of infectious syphilis cases were reported among males at 91.8%. Due to the small number of cases reported among females in this time period (n=9), it is not possible to present gender specific rates. Across the five-year time period, the reported incidence rate of infectious syphilis was highest among those 20 to 24 years of age, followed by those 25 to 29 years of age and 30 to 34 years of age.
- **HIV/AIDS:** Between 2009 and 2013, the annual reported incidence rate of HIV and AIDS infections in Middlesex-London was similar to the provincial rate in each year.. Between 2009 and 2013, the average annual reported incidence rate in Middlesex-London was 6.3 cases per 100,000 people. Across the five-year time period, an average of 29 HIV/AIDS cases were reported annually. For females, the average annual reported incidence rate of HIV/AIDS infections between 2009 and 2013 was highest among 35 to 39 year olds, followed by 30 to 34 year olds. For males, the average annual reported incidence rate of HIV/AIDS infections was highest among 30 to 34 year olds, followed by 25 to 29 year olds. The average annual reported incidence rate among males exceeded the rate for females in all age groups except those 35 to 39 year olds, where the gender-specific rates were the same.

## II. Context

### 2. Background

The Sexual Health (SH) team is part of the Oral Health, Communicable Diseases, and Sexual Health (OHCDSH) service area. The Sexual Health team provides clinical services and engages in population health promotion initiatives. Currently, the front-line staff resources allocated to focus on planning, implementation and evaluation of population health promotion initiatives include a 0.4 FTE Program Assistant, 3.5 FTE Public Health Nurses (PHN's), 0.7 FTE Social Determinants of Health (SDOH) PHN and a 1.0 FTE Public Health Promoter. In the near future, a 0.5 FTE Health Promoter will join the team to focus on planning and implementing a comprehensive Community Drug Strategy. The annual programming budget, excluding FTE salaries, totals \$28,000. This budget is primarily used for programming and campaign material expenditures throughout the year.

Currently, the SH team engages in numerous health promotion strategies to promote healthy sexuality in the residents of Middlesex-London. One such strategy includes education and skill building in regards to sexual health. The team provides presentations to community groups and work places, with different education needs, on a variety of sexual health topics. The SH Team uses the principles of health promotion, disease prevention and health protection to educate individuals, groups, networks, and organizations to influence societal norms and raise awareness of sexuality. Topics for these presentations vary but often include an introduction to reproductive health for either men and/or women, background information on STIs, birth control methods, positive space training, the importance of getting tested, how to get tested, healthy relationships, and consent.

Besides community presentations, the SH team is highly active in creating supportive environments for sexual health. Much of this work focuses on Positive Space Training and encouraging organizations and community partners to offer inclusive services and resources for the Lesbian Gay Bisexual Transgender Queer (LGBTQ) population within Middlesex London. The SH team also does a lot of work to increase the societal norms for positive

sexual health and decrease the stigma related to STI testing. The team promotes a supportive environment where all birth control methods are considered beneficial in controlling unintended pregnancies.

Lastly, the SH team develops social media and mass media campaigns to promote various sexual health messages. In the past, the team has used various health behaviour theories to develop online interactive games, engaging social media campaigns and poster displays to spread the importance of STI testing and to promote MLHU sexual health services.

### III. Research Question

The research question examined in this review is as follows:

Among youth aged 15-24 years, what health promotion strategies are effective at reducing rates of sexually transmitted infections?

#### 1. PICO Question

<b>P (Population)</b>	15-24 years of age
<b>I (Intervention)</b>	Health promotion strategies including but not limited to: social marketing campaigns, peer to peer programs, internet-computer based interventions, train the trainer, facilitator-led
<b>C (Comparison)</b>	No health promotion strategy
<b>O (Outcome)</b>	Rates of sexually transmitted infections

#### 2. Search Strategy

The original search strategy for this review was replicated from a rapid review completed by Peel Public Health in 2012. A scoping search was performed prior to the initial literature search to verify the health promotion strategies that would be included in the PICO. For the Middlesex-London Health Unit review, a total of 4 databases (Medline, PsycINFO, Cochrane, and CINAHL) were searched up until March 2015. The search was narrowed to published literature from January 2010-present, English only, and only meta-analysis, systematic reviews and rapid reviews.

The inclusion criteria were broken down into 4 separate categories: types of studies, types of participants and settings, types of interventions, and types of outcome measures. To view the inclusion and exclusion criteria utilized in this review, please see Table 1 below.

Table 1: Inclusion and Exclusion Criteria

	<b>Inclusion Criteria</b>	<b>Exclusion Criteria</b>
<b>Types of Studies</b>	<ul style="list-style-type: none"> <li>Published literature from January 2010-present</li> <li>English only literature</li> <li>Studies only including meta-analysis</li> <li>Studies only including systematic reviews</li> <li>Studies only including rapid reviews</li> </ul>	<ul style="list-style-type: none"> <li>Non-English</li> <li>Non-published studies and guidelines</li> <li>Single studies</li> <li>Synopsis if single studies</li> <li>Textbooks</li> <li>Specialized registers</li> <li>Consultations on current contents</li> </ul>
<b>Types of Participants and Settings</b>	<ul style="list-style-type: none"> <li>A location that is similar to Middlesex-London in terms of studies in developed/western/high-resource setting</li> </ul>	<ul style="list-style-type: none"> <li>Studies that took place in a non-developed country</li> </ul>
<b>Types of Interventions</b>	<ul style="list-style-type: none"> <li>To include the 5 key interventions outlined in the PICO question: <ul style="list-style-type: none"> <li>social media campaigns;</li> <li>peer-to-peer programs;</li> <li>internet computer-based programs;</li> <li>train-the-trainer programs;</li> <li>facilitator-led interventions</li> </ul> </li> <li>The intervention was also to be prevention based and not offer any treatment</li> </ul>	<ul style="list-style-type: none"> <li>Studies that did not have similar interventions to the 5 key interventions outlined in the original PICO question</li> </ul>
<b>Types of Outcome Measures</b>	<ul style="list-style-type: none"> <li>Primary outcome measures (measureable outcomes): <ul style="list-style-type: none"> <li>reportable infection rates for chlamydia and gonorrhea</li> </ul> </li> <li>Secondary outcome measures (non-measureable outcomes): <ul style="list-style-type: none"> <li>sexual behaviour;</li> <li>attitudes;</li> <li>knowledge improvement;</li> <li>self-efficacy;</li> <li>safer-sex interventions;</li> </ul> </li> <li>condom use</li> </ul>	<ul style="list-style-type: none"> <li>Studies with outcome measures that were dissimilar to the primary outcome measure identified in the original PICO question</li> <li>Studies with outcome measures that were dissimilar to the secondary outcome measures identified in the original PICO question</li> </ul>

### 3. Search Results

Utilizing the National Collaborating Centre for Methods and Tools (NCCMT) method for efficiently searching the literature and the 6S Pyramid methodology (Appendix B), the search strategy (Appendix C) resulted in 276 articles. Six systematic reviews were included after removal of duplicates, relevance assessment, full article review and quality assessment. All articles were also scanned with the inclusion/exclusion criterion that was described in the above section. The final search results are outlined in Appendix D. References for the included studies are available at the end of this report. A list of the excluded reviews may be requested from the authors.

## IV. Quality Assessment

### 1. Quality Assessment Tools and Strategy

A quality assessment of each systematic review was completed to assess the validity and usefulness of the research findings. Each article was appraised using the AMSTAR (Appendix E) and graded on a scale out of 11. A score of seven or greater was viewed as a study of high quality and a score of five or six was considered a study of medium quality. Any study scoring less than five was rated as weak and those reviews were excluded from the review. The quality assessment process was completed by two reviewers and any discrepancies were resolved by consensus.

### 2. Results

The search results had been narrowed down to six articles before the quality assessment process was started. Four out of the six systematic reviews were of strong methodological quality. The remaining two articles were moderately ranked and were included in the data extraction with the above four articles. In total, six articles satisfied the quality assessment and would move on to data extraction. Copies of the completed quality assessment tools are available from the authors upon request. A blank copy data extraction table can be found in Appendix H. Copies of the copied data extraction tables for all six systematic reviews are also available upon request.

## V. Synthesis of Findings

This rapid review presents the results of the findings in the following ways:

- A summary of the literature findings, quality assessment and significance (Appendix I)
- A synthesis of the results by the outcome measures selected for the PICO (Appendix J)

### 1. Summary of findings by intervention type, and significance

Findings are presented by intervention type and comment is provided on their significance in regards to outcome measures (Appendix I). Clarification is provided regarding which research papers talked about each intervention. Furthermore, the main findings of each intervention are separated by author. These findings, and how they are presented, will help to formulate some recommendations at the end of the rapid review and to identify what strategies are most effective for each intervention.

### 2. Summary of results of interventions by outcome measures

With the six systematic reviews presented in this report, there were a number of outcome measures identified throughout. Findings were summarized based on the outcomes that were most relevant to this program review (highlighted in the PICO question at the start of this review and organized into primary and secondary outcomes based on what they actually measure) (Appendix J). In Appendix J, Table 1 presents primary outcomes in regards to STI rates. Table 2 examines the following secondary outcomes: sexual behaviour, sexual health knowledge, condom use, self-efficacy, and attitudes. This information will be valuable in the future because these outcome measures can be used to meet similar measures identified in the planning process of a new or re-evaluated program.

## VI. Preliminary Program Recommendation

The research evidence demonstrates that there are a multitude of effective interventions available to public health professionals to reduce the incidence of STI rates in the community. There is also evidence to suggest that there are a variety of strategies which may influence sexual health behaviour, sexual health knowledge, condom use, sexual health self-efficacy and attitudes in youth. The key findings from this rapid review of the literature include:

- Facilitator-led interventions (e.g., public health professional, teacher) demonstrate a reduced incidence in sexually transmitted infections (STIs) through the use of behavioural interventions.
- Facilitator-led interventions also show improvement in behavioural outcomes and increased knowledge, specifically with regards to an increase in condom use.
- Social media and text messaging interventions are effective in increasing STI knowledge, particularly with respect to increased familiarity with sexual protection methods and how they reduce the transmission of STIs. There is a positive significant effect in condom use self-efficacy and a reduction in the proportion of individuals reporting multiple or new partners.
- Employing a train-the-trainer method demonstrates some effect in the reduction of the incidence of active syphilis and the prevalence of gonorrhea.
- Utilizing a peer-led approach is effective in increasing youth sexual health knowledge for HIV/AIDS; changing knowledge for STIs and HIV/AIDS; increasing positive behaviour in regards to the use of condoms; improving prevention skills and youth sexual health knowledge and attitudes of STI prevention methods.
- Interactive-computer-based programs (ICBP) were reported to demonstrate statistically significant improvement in there outcomes however this was not demonstrated upon review of the confidence intervals.

**It is recommended that Sexual Health team members consult with key stakeholders to further consider the above-mentioned key findings, by applying the following NCCMT tools: A Model for Evidence-Informed Decision-Making (Appendix F) and the Adaptability and Transferability Tool (Appendix G). This will facilitate the development of relevant final recommendations for sexual health programming.**

## References

---

- Allen-Scott L.K., Hatfield J.M., & McIntyre L. (2014). A scoping review of unintended harm associated with public health interventions: Towards a typology and an understanding of underlying factors. *International Journal of Public Health*, 02/2014; 59(1):3-14. DOI: 1007/s00038-013-0526-6
- Armstrong, R., Waters, E., Dobbins, M. et al. (2013). Knowledge translation strategies to improve the use of evidence in public health decision making in local government: intervention design and implementation plan. *Implementation Science*, 8:121. Retrieved from <http://www.implementationscience.com/content/8/1/121>
- Bialek, R., Duffy, G., & Moran, J. (2009). *The Public Health Quality Improvement Handbook*. Wisconsin: Quality Press.
- City of Hamilton Public Health Services. (October 2014). Literature Review: Evidence for preventing pregnancy in teens. Hamilton, ON: Produced by the Surveillance Unit for the Teen Pregnancy Prevention Workgroup, City of Hamilton Public Health Services.
- Health Evidence.org. Keeping Track of Search Results: A Flowchart. [Retrieved March 10, 2015]
- Health Protection and Promotion Act, R.S.O. 1990, c.H.7. Available from: [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90h07\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h07_e.htm).
- Jones K, Eathington P, Baldwin K, Sipsma H. The impact of health education transmitted via social media or text messaging on adolescent and young adult risky sexual behavior: a systematic review of the literature. *SEX TRANSM DIS* 2014 Jul;41(7):413-9.
- Lazarus JV, Sihvonen-Riemenschneider H, Laukamm-Josten U, Wong F, Liljestrand J. Systematic review of interventions to prevent the spread of sexually transmitted infections, including HIV, among young people in Europe. [Review]. *Croatian Medical Journal* 2010 Feb;51(1):74-84.
- Lopez LM. Behavioral interventions for improving condom use for dual protection. *COCHRANE DATABASE SYST REV* 2013 Oct 16;(10).
- Ministry of Health and Long-Term Care. Ontario Public Health Organizational Standards. Toronto, ON: Queens Printer for Ontario; 2011. Available from: [http://www.health.gov.on.ca/en/pro/programs/publichealth/orgstandards/docs/org\\_std.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/orgstandards/docs/org_std.pdf)
- Ministry of Health and Long-Term Care, Public Health Division. Ontario Public Health Standards. Toronto, ON: Queen's Printer for Ontario; 2008 [cited 2009 Dec 14]. Available from: [http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/ophs\\_2008.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/ophs_2008.pdf)
- Ministry of Health and Long-Term Care, Public Health Division. Population Health Assessment and Surveillance Protocol. Toronto, ON: Queen's Printer for Ontario; 2008. Available from: [http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/population\\_health\\_assessment.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/population_health_assessment.pdf)
- National Collaborating Centre for Methods and Tools.(2012).A Model for Evidence-Informed Decision- Making in Public Health. [fact sheet]. Retrieved from: [http://www.nccmt.ca/pubs/FactSheet\\_EIDM\\_EN\\_WEB.pdf](http://www.nccmt.ca/pubs/FactSheet_EIDM_EN_WEB.pdf)
- National Collaborating Centre for Methods and Tools.(2015). Evidence-Informed Public Health - Search: Efficiently search for research evidence – 6S Pyramid. Retrieved from: <http://www.nccmt.ca/eiph/search-eng.html>
- National Collaborating Centre for Methods and Tools.(2007).Tool for Assessing Applicability and Transferability of Evidence. Retrieved from: [http://www.nccmt.ca/pubs/A&T\\_Tool\\_-\\_FINAL\\_English\\_Oct\\_07.pdf](http://www.nccmt.ca/pubs/A&T_Tool_-_FINAL_English_Oct_07.pdf)
- National Collaborating Centre for Methods and Tools.(2014).Tools to Get Started with Evidence-Informed Public Health. Retrieved from: [http://www.nccmt.ca/pubs/Tools%20to%20Get%20Started%20With%20EIPH\\_finalENJan2014.pdf](http://www.nccmt.ca/pubs/Tools%20to%20Get%20Started%20With%20EIPH_finalENJan2014.pdf)
- Pande, P., Neuman, RL, & Cavanaugh, R. (2014). *The Six Sigma Way – How to Maximize the Impact of Your Change Improvement Efforts*. New York: McGraw Hill Education.



- Peel Public Health – Region of Peel.(2012). Effective Health Promotion Strategies to Reduce Sexually Transmitted Infections: A Rapid Review. [report]. Retrieved from:  
<https://www.peelregion.ca/health/resources/pdf/EffectiveHealth.pdf>
- Picot J, Shepherd J, Kavanagh J, Cooper K, Harden A, Barnett-Page E, et al. Behavioural interventions for the prevention of sexually transmitted infections in young people aged 13-19 years: a systematic review. [Review]. HEALTH EDUC RES 2012 Jun;27(3):495-512.
- Public Health Agency of Canada. (2014, April 03).Core Competencies for Public Health in Canada. Retrieved from:  
[http://www.phac-aspc.gc.ca/php-psp/ccph-cesp/about\\_cc-apropos\\_ce-eng.php](http://www.phac-aspc.gc.ca/php-psp/ccph-cesp/about_cc-apropos_ce-eng.php)
- Sadovszky V, Draudt B, Boch S. A Systematic Review of Reviews of Behavioral Interventions to Promote Condom Use. WORLDVIEWS EVID BASED NURS 2014 Apr;11(2):107-17.
- Shea et al. BMC Medical Research Methodology 2007 7:10 doi:10.1186/1471-2288-7-10  
Shepherd J, Kavanagh J, Picot J, Cooper K, Harden A, Barnett-Page E, et al. The effectiveness and cost-effectiveness of behavioural interventions for the prevention of sexually transmitted infections in young people aged 13-19: a systematic review and economic evaluation. [Review] [175 refs]. Health Technology Assessment (Winchester, England) 2010 20;14(7):1-206.
- Sudbury District Health Unit. (2011). 10 Promising Practices to guide local public health practice to reduce social inequities in health: Technical briefing. Sudbury, ON: Author.
- Vodopivec\_Jamsek V, de Jongh T, Gurol-Urganci I, Atun R, Car J. Mobile phone messaging for preventive health care. Cochrane Database of Systematic Reviews 2012, Issue 12. Art. No.: CD007457.DOI: 10.1002/14651858.CD007457.pub2.

## Appendix A: Public Health Requirements Associated with this Rapid Review

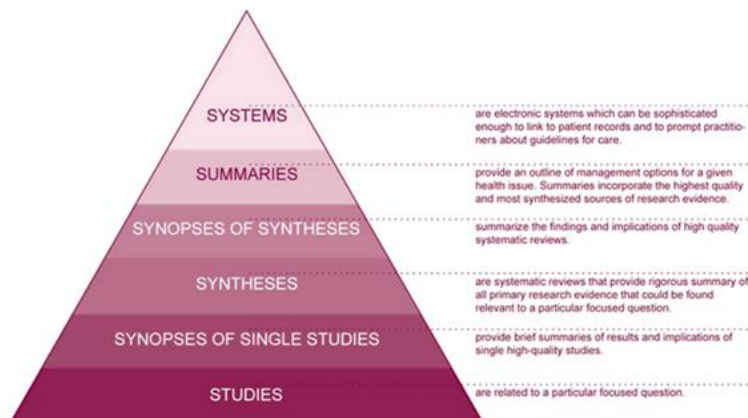
- **Provincial Standards** - [Ontario Public Health Standards](#), 2008 (*OPHS*), specifically:
  - Principles: Need, Impact, Impact, Capacity, Partnership and Collaboration
  - Foundational Standard
  - Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections
  - Infectious Diseases Prevention and Control
- A **Provincial Protocol** – [Population Health Assessment and Surveillance Protocol](#), 2008 (*PHASP*)

Governing Documents	Related Requirements
<b>Provincial Legislation:</b> <a href="#">Health Protection and Promotion Act</a> , R.S.O. 1990, c.H.7. ( <i>HPPA</i> )	<p>Relevance is associated with the control of infectious diseases and reportable diseases, including the provision of immunization services.</p> <p>Included within <b>HPPA's mandatory health programs and services:</b>          “2. Control of infectious diseases and reportable diseases, including provision of immunization services to children and adults.”</p> <p>“3. Health promotion, health protection and disease and injury prevention, including the prevention and control of cardiovascular disease, cancer, AIDS and other diseases.”</p> <p>Included within <b>HPPA's optional health programs and services:</b>          “9. A board of health may provide any other health program or service in any area in the health unit served by the board of health if, a) the board of health is of the opinion that the health program or service is necessary or desirable, having regard to the needs of persons in the area;”</p>
<b>Provincial Standard:</b> <a href="#">Ministry of Health and Long-Term Care Ontario Public Health Standards</a> , 2008: <a href="#">Principles</a>	<p>“1.<b>Need:</b>          The principle of need acknowledges the importance of using data and information to inform decision-making at the local level regarding program assessment, planning, delivery, management, and evaluation.”</p> <p>“2.<b>Impact:</b>          Boards of health shall assess, plan, deliver, and manage their programs and services by considering the following:          -Is there reasonable evidence of the effectiveness of the intervention in the scientific literature or in reviews of best practices? Boards of health shall draw on relevant research, evidence, and best practices to support integration of the Ontario Public Health Standards' requirements within their specific context in order to achieve intended outcomes.”</p> <p>“3.<b>Capacity:</b>          Understanding local public health capacity and the resources required to achieve outcomes is essential for effective management of programs and services. All boards of health shall strive to achieve the needed capacity and resources required to meet these standards.”</p> <p>“4. <b>Partnership and Collaboration:</b>          Boards of health shall foster the creation of a supportive environment for health through community and citizen engagement in the assessment, planning, delivery, management, and evaluation of programs and services. This will support improved local capacity to meet the public health needs of the community.”</p>

Governing Documents	Related Requirements
<p><b>Provincial Standard &amp; Protocol:</b>  <a href="#">Ministry of Health and Long-Term Care Ontario Public Health Standards, 2008:</a>  <a href="#">Foundational Standard</a></p>	<p><b><i>Population Health Assessment Requirements</i></b></p> <p>“1. The board of health shall assess current health status, health behaviours, preventative health practices, health care utilization relevant to public health, and demographic indicators in accordance with the <a href="#">Population Health Assessment and Surveillance Protocol</a>, 2008.”</p> <p>“2. The board of health shall assess trends and changes in local population health in accordance with the <a href="#">Population Health Assessment and Surveillance Protocol</a>, 2008.”</p> <p>“3. The board of health shall use population health, determinants of health and health inequities information to assess the needs of the local population, including the identification of populations at risk, to determine those groups that would benefit most from public health programs and services (i.e. priority populations).”</p> <p>“4. The board of health shall tailor public health programs and services to meet local population health needs, including those of priority populations to the extent possible based on available resources.”</p> <p>“5. The board of health shall provide population health information including determinants of health and health inequities to the public, community partners, and health care providers, in accordance with the <a href="#">Population Health Assessment and Surveillance Protocol</a>, 2008.”</p> <p><b><i>Research and Knowledge Exchange Requirements</i></b></p> <p>“8. The board of health shall engage in knowledge exchange activities with public health practitioners, policy-makers, community partners, health care providers, and the public regarding factors that determine the health of the population and support effective public health practice gained through population health assessment, surveillance, research, and program evaluation.”</p> <p>“9. The board of health shall foster relationships with community researchers, academic partners, and other appropriate organizations to support public health research and knowledge exchange.”</p> <p>“10. The board of health shall engage in public health research activities, which may include those conducted by the board of health alone or in partnership or collaboration with other organizations.”</p> <p><b><i>Program Evaluation Requirements</i></b></p> <p>“11. The board of health shall routinely monitor program activities and outcomes to assess and improve the implementation and effectiveness of programs and services, including collection, analysis, and periodic reporting of indicators related to inputs, resources, implementation processes, reach, outputs, and outcomes.”</p> <p>“12. The board of health shall conduct program evaluations when new interventions are developed or implemented, or when there is evidence of unexpected operational issues or program results, to understand the linkages between inputs, activities, outputs, and outcomes.”</p> <p>“13. The board of health shall use a range of methods to facilitate public health practitioners’ and policy-maker’s awareness of the factors that contribute to program effectiveness.”</p>

Governing Documents	Related Requirements
<p><b>Provincial Standard &amp; Protocol:</b>  <a href="#">Ministry of Health and Long-Term Care Ontario Public Health Standards, 2008: <i>Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections</i></a></p>	<p><b><i>Assessment and Surveillance Requirements</i></b></p> <p>“3. The board of health shall conduct epidemiological analysis of surveillance data, including monitoring trends over time, emerging trends, and priority populations, in accordance with the <a href="#">Population Health Assessment and Surveillance Protocol</a>, 2008.”</p> <p><b><i>Health Promotion and Policy Development Requirements</i></b></p> <p>“4. The board of health shall increase public awareness of the epidemiology, associated risk behaviours, risk factors, and risk reduction strategies related to healthy sexuality, sexually transmitted infections, and blood-borne infections by:</p> <ol style="list-style-type: none"> <li>Adapting and/or supplementing national and provincial health communication strategies; and/or</li> <li>Developing and implementing regional/local communications strategies.”</li> </ol> <p>“5. The board of health shall use a comprehensive health promotion approach to increase the community capacity regarding the promotion of healthy sexuality, including the prevention of adolescent pregnancies, sexually transmitted infections, and blood-borne infections, by:</p> <ol style="list-style-type: none"> <li>Collaborating with and engaging community partners and priority populations;</li> <li>Mobilizing and promoting access to community resources;</li> <li>Providing skill-building opportunities; and</li> <li>Sharing best practices and evidence.”</li> </ol> <p>“6. The board of health shall collaborate with community partners, including school boards, to create supportive environments to promote healthy sexuality and access to sexual health services.”</p>
<p><b>Provincial Standard &amp; Protocol:</b>  <a href="#">Ministry of Health and Long-Term Care Ontario Public Health Standards, 2008: <i>Infectious Diseases Prevention and Control</i></a></p>	<p><b><i>Assessment and Surveillance Requirements</i></b></p> <p>“3. The board of health shall conduct epidemiological analysis of surveillance data, including monitoring trends over time, emerging trends, and priority populations, in accordance with the <a href="#">Population Health Assessment and Surveillance Protocol</a>, 2008.”</p> <p><b><i>Disease Prevention Requirements</i></b></p> <p>“12. The board of health shall supplement provincial efforts in managing risk communications to the appropriate stakeholders on identified risks associated with infectious diseases of public health importance based on local epidemiology and epidemiological information.”</p>

## Appendix B: NCCMT: Methods for Efficiently Searching Research Evidence



**6S Pyramid 1**

## Appendix C: Search Strategy

Date of Search	Source of Search	Search Terms	# of Results
March 2, 2015	Medline	1 adolescent/ or young adult/	1813852
		2 (adolesc\$ or young adult\$ or youth\$ or teen\$ or ((university or college? or post secondary) adj1 student\$)).tw.	287893
		3 or/1-2 [POPULATION]	1904614
		4 exp health promotion/ or exp health education/ or "marketing of health services"/ or social marketing/ or sex education/ or computer communication networks/ or exp internet/ or communications media/ or exp mass media/ or exp telecommunications/ or risk reduction behavior/	336126
		5 (health promotion or strateg\$ or social marketing or communic\$ or outreach or social media or "web2.0" or "web 2.0" or facebook or twitter or myspace or SMS or blog* or vlog* or tumblr or flickr or vine or pinterest or youtube or social bookmark* or text messag\$ or iphone? or ipad? or laptop? or smartphone? or smart phone? or risk reduction or policy or policies or education or community development or advocacy or prevention or intervention\$).tw.	1924803
		6 4 or 5 [INTERVENTION]	2128254
		7 exp chlamydia infections/ or exp gonorrhea/ or exp syphilis/ or exp sexually transmitted diseases/ed, pc, tm	114026
		8 (chlamydia\$ or gonorrhea or syphilis or (sexual\$ adj1 transm\$ adj2 (diseas\$ or infection\$))).tw.	61513
		9 7 or 8 [STI]	139728
		10 (search\$ or systematic review or medline).tw. or meta-analysis.mp.pt. or cochrane database of systematic reviews.jn.	289946
		11 3 and 6 and 9 and 10	272
		12 developing countries/ or exp "africa south of the sahara"/	197345
		13 11 not 12	231
		14 limit 13 to yr=2010-current	124
		15 limit 14 to English	119

Date of Search	Source of Search	Search Terms	# of Results
March 2, 2015	PsycINFO	1 exp health promotion/ or exp health education/ or exp risk management/ or exp sexual risk taking/ or exp social marketing/ or exp sex education/ or exp intervention/	83891
		2 (health promotion or strateg\$ or social marketing or communic\$ or outreach or social media or "web2.0" or "web 2.0" or facebook or twitter or myspace or SMS or blog* or vlog* or tumblr or flickr or vine or pinterest or youtube or social bookmark* or text messag\$ or iphone? or ipad? or laptop? or smartphone? or smart phone? or risk reduction or policy or policies or education or community development or advocacy or prevention or intervention\$).tw.	590158
		3 1 or 2 [INTERVENTION]	596688
		4 exp sexually transmitted diseases/ or exp gonorrhea/ or exp syphilis/	23108
		5 (chlamydia\$ or gonorrhea or syphilis or (sexual\$ adj1 transm\$ adj2 (diseas\$ or infection\$))).tw.	5239
		6 4 or 5 [STI]	24878
		7 meta analysis/ or "literature review"/	1593
		8 (meta analy\$ or search\$ or systematic review? or medline).tw.	

Date of Search	Source of Search	Search Terms	# of Results
			63858
		9 7 or 8 [SR]	64108
		10 (college student* or post secondary student* or university student* or young adult* or adolescen* or teen* or youth*).tw.	180774
		11 exp college students/	31593
		12 10 or 11 [POPULATION]	192849
		13 3 and 6 and 9 and 12	93
		14 exp developing countries/	3185
		15 13 not 14	91
		16 (dissertation or journal article).dt.	1495137
		17 15 and 16	82
		18 limit 17 to (English and yr=2000-current)	51

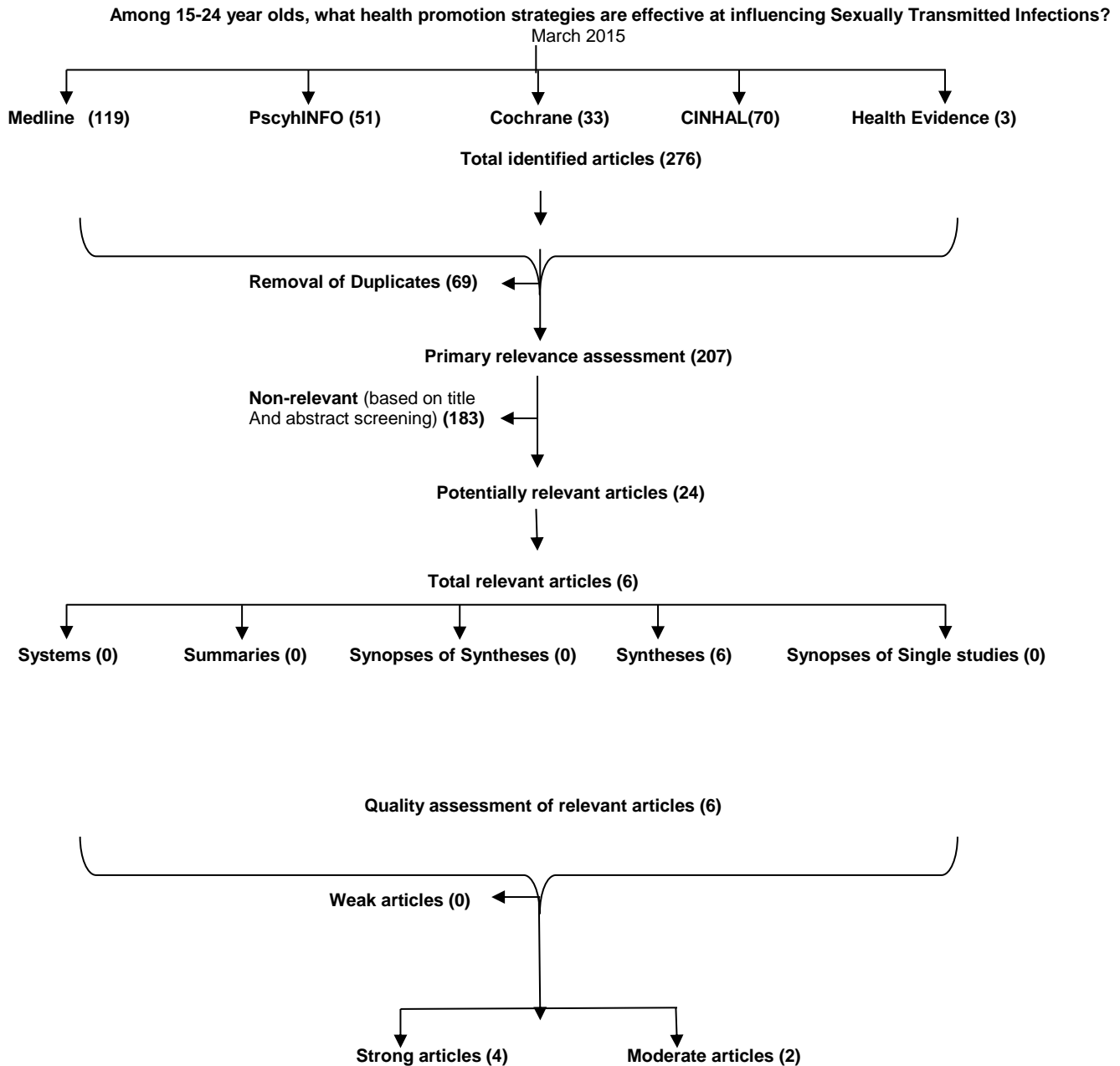
Date of Search	Source of Search	Search Terms	# of Results
March 2, 2015	Cochrane Database	1 (chlamydia* or gonorrhea or syphilis or (sexual* N11 transm* N2 (diseas* or infection*)))	61
		2 (ZU "sexually transmitted disease") or (ZU "sexually transmitted diseases epidemiology") or (ZU "sexually transmitted diseases prevention & control") or (ZU "sexually transmitted diseases transmission") or (ZU "gonorrhea epidemiology") or (ZU "gonorrhea prevention & control") or (ZU "gonorrhea control") or (ZU "syphilis transmission") or (ZU "syphilis, congenital prevention & control")	17
		3 S1 OR S2	61
		4 ("health promotion" or strateg* or "social marketing" or communic* or outreach or "social media" or "web2.0" or "web 2.0" or facebook or twitter or myspace or SMS or blog* or vlog* or tumblr or flickr or vine or pinterest or youtube or "social bookmark*" or "text messag*" or iphone# or ipad# or laptop# or smartphone# or "smart phone#" or "risk reduction" or policy or policies or education or "community development" or advocacy or prevention or intervention*)	5212
		5 (ZU "health promotion") or (ZU "health promotion methods") or (ZU "health promotion organization & administration") or (ZU "health education") or (ZU "health education methods") or (ZU "communication") or (ZU "social marketing") or (ZU "intervention") or (ZU "intervention studies") or (ZU "interventions") or (ZU "policy making")	182
		6 S4 OR S5	5261
		7 S3 AND S6	33

Date of Search	Source of Search	Search Terms	# of Results
March 2, 2015	CINAHL	1 (chlamydia* or gonorrhea or syphilis or (sexual* N11 transm* N2 (diseas* or infection*)))	12872
		2 (MH "Sexually Transmitted Diseases+/ED/PC/TM")	19526
		3 (MH "Chlamydia") OR (MH "Chlamydia Infections") OR (MH "Gonorrhea") OR (MH "Syphilis")	4039
		4 S1 OR S2 OR S3	27423
		5 (MH "Health Promotion+") OR (MH "Health Education+") OR (MH "Social Marketing") OR (MH "Social Media") OR (MH "Sex Education") OR (MH "Computer Communication Networks") OR (MH "Telecommunications+") OR (MH "Communications Media")	217348

Date of Search	Source of Search	Search Terms	# of Results
		OR (MH "World Wide Web+") OR (MH "Internet")	
		6 ("health promotion" or strateg* or "social marketing" or communic* or outreach or "social media" or "web2.0" or "web 2.0" or facebook or twitter or myspace or SMS or blog* or vlog* or tumblr or flickr or vine or pinterest or youtube or "social bookmark*" or "text messag*" or iphone# or ipad# or laptop# or smartphone# or "smart phone#" or "risk reduction" or policy or policies or education or "community development" or advocacy or prevention or intervention*)	955365
		7 S5 OR S6	1021897
		8 (MH "Adolescence") OR (MH "Young Adult") OR (MH "Students, College") OR (MH "Students, Undergraduate")	249785
		9 (adolescen* or "young adult*" or youth* or teen* or ((university or college# or "post secondary") N1 student*))	259738
		10 S8 OR S9	260603
		11 (MH "Systematic Review") OR (MH "Literature Review") OR (MH "Meta Analysis")	34736
		12 TI (search or "systematic review" or medline or "meta analy*" or "meta-analy*" or metaanaly*) OR AB(search or "systematic review" or medline or "meta analy*" or "meta-analy*" or metaanaly*)	55282
		13 PT systematic review or meta analysis	37416
		14 S11 OR S12 OR S13	74783
		15 S4 AND S7 AND S10 AND S14	70



## Appendix D: Final Search Results



**Source:** Health Evidence.org. *Keeping Track of Search Results: A Flowchart*. [Retrieved March 10, 2015]

## Appendix E: Quality Assessment Tool for Systematic Reviews: AMSTAR

### 1. Was an 'a priori' design provided? The research question and inclusion criteria should be established before the conduct of the review.

Note: Need to refer to a protocol, ethics approval, or pre-determined/a priori published research objectives to score a "yes."

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

### 2. Was there duplicate study selection and data extraction? There should be at least two independent data extractors and a consensus procedure for disagreements should be in place.

Note: 2 people do study selection, 2 people do data extraction, consensus process or one person checks the other's work.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

### 3. Was a comprehensive literature search performed?

At least two electronic sources should be searched. The report must include years and databases used (e.g., Central, EMBASE, and MEDLINE). Key words and/or MESH terms must be stated and where feasible the search strategy should be provided. All searches should be supplemented by consulting current contents, reviews, textbooks, specialized registers, or experts in the particular field of study, and by reviewing the references in the studies found. Note: If at least 2 sources + one supplementary strategy used, select "yes" (Cochrane register/Central counts as 2 sources; a grey literature search counts as supplementary).

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

### 4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?

The authors should state that they searched for reports regardless of their publication type. The authors should state whether or not they excluded any reports (from the systematic review), based on their publication status, language etc. Note: If review indicates that there was a search for "grey literature" or "unpublished literature," indicate "yes." SIGLE database, dissertations, conference proceedings, and trial registries are all considered grey for this purpose. If searching a source that contains both grey and non-grey, must specify that they were searching for grey/unpublished lit.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

### 5. Was a list of studies (included and excluded) provided?

A list of included and excluded studies should be provided. Note: Acceptable if the excluded studies are referenced. If there is an electronic link to the list but the link is dead, select "no."

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

### 6. Were the characteristics of the included studies provided?

In an aggregated form such as a table, data from the original studies should be provided on the participants, interventions and outcomes. The ranges of characteristics in all the studies analyzed e.g., age, race, sex, relevant socioeconomic data, disease status, duration, severity, or other diseases should be reported. Note: Acceptable if not in table format as long as they are described as above.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

### 7. Was the scientific quality of the included studies assessed and documented?

'A priori' methods of assessment should be provided (e.g., for effectiveness studies if the author(s) chose to include only randomized, double-blind, placebo controlled studies, or allocation concealment as inclusion criteria); for other types of studies alternative items will be relevant. Note: Can include use of a quality scoring tool or checklist, e.g., Jadad scale, risk of bias, sensitivity analysis, etc., or a description of quality items, with some kind of result for EACH study ("low" or "high" is fine, as long as it is clear which studies scored "low" and which scored "high"; a summary score/range for all studies is not acceptable).

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

**8. Was the scientific quality of the included studies used appropriately in formulating conclusions?**

The results of the methodological rigor and scientific quality should be considered in the analysis and the conclusions of the review, and explicitly stated in formulating recommendations. Note: Might say something such as “the results should be interpreted with caution due to poor quality of included studies.” Cannot score “yes” for this question if scored “no” for question 7.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

**9. Were the methods used to combine the findings of studies appropriate?**

For the pooled results, a test should be done to ensure the studies were combinable, to assess their homogeneity (i.e., Chi-squared test for homogeneity, I<sup>2</sup>). If heterogeneity exists a random effects model should be used and/or the clinical appropriateness of combining should be taken into consideration (i.e., is it sensible to combine?). Note: Indicate “yes” if they mention or describe heterogeneity, i.e., if they explain that they cannot pool because of heterogeneity/variability between interventions.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

**10. Was the likelihood of publication bias assessed?**

An assessment of publication bias should include a combination of graphical aids (e.g., funnel plot, other available tests) and/or statistical tests (e.g., Egger regression test, Hedges-Olken). Note: If no test values or funnel plot included, score “no”. Score “yes” if mentions that publication bias could not be assessed because there were fewer than 10 included studies.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

**11. Was the conflict of interest included?**


Potential sources of support should be clearly acknowledged in both the systematic review and the included studies. Note: To get a “yes,” must indicate source of funding or support for the systematic review AND for each of the included studies.

- ☐ Yes
- ☐ No
- ☐ Can't Answer
- ☐ Not Applicable

*Shea et al. BMC Medical Research Methodology 2007 7:10 doi:10.1186/1471-2288-7-10*

## Appendix F: NCCMT: A Model for Evidence-Informed Decision-Making


fact sheet



National Collaborating Centre  
for Methods and Tools

Centre de collaboration nationale  
des méthodes et outils

A Model for Evidence-Informed Decision Making in Public Health



Evidence-informed decision making involves integrating the best available research evidence into the decision-making process. Additional factors – community health issues and local context; community and political preferences and actions; and public health resources – create the environment in which that research evidence is interpreted and applied.

This model for evidence-informed decision making in public health is particularly relevant at the fifth step of evidence-informed public health: Adapt the information to a local context. (see diagram on reverse)

This model recognizes that important evidence can come from a variety of sources. Evidence considered in the decision-making process could include the following possible examples:

Sources of Evidence	Examples of Evidence for Consideration
Evidence from research	The most relevant, high-quality qualitative or quantitative evidence available Research findings from a variety of disciplines and sectors relevant to public health
Evidence about the frequency, causes, and modifying factors of local community health issues	Surveillance data and community health status reports to determine the magnitude of the health issue in the local setting Significance and importance of the issue in comparison to other community health concerns
Evidence from people about community and political preferences and actions	Needs and interests of community members Support or opposition from the public and/or government officials Current political climate (local, regional, provincial, federal) Current organizational/corporate climate
Evidence from various governments and programs about public health resources	Financial resources Human resources (personnel/staffing, administrative support, support from management) Materials (workspace, computers, supplies)

Phone 905.525.9140, ext. 20450 | Fax 905.529.4184  
[www.nccmt.ca](http://www.nccmt.ca) | [nccmt@mcmaster.ca](mailto:nccmt@mcmaster.ca)

Téléphone : 905.525.9140, ext. 20450 | Télécopieur : 905.529.4184  
[www.ccnmo.ca](http://www.ccnmo.ca) | [ccnmo@mcmaster.ca](mailto:ccnmo@mcmaster.ca)

No two public health situations are identical. The weight and influence that each factor will have on the decision-making process will depend upon the specific circumstances, as well as the skills and values held by the individuals and groups involved in the process. The placement of Public Health Expertise at the centre of the model is intentional. Ultimately, decision makers must draw on their explicit and tacit public health knowledge and expertise to incorporate all the relevant factors into the final decision, conclusion or recommendation.

Faced with a lack of time, limited access to peer-reviewed journals, inadequate critical appraisal skills and conflicting evidence, public health professionals may not always use high quality, relevant research to inform their public health program and policy decisions. Sources of synthesized and methodologically strong research evidence can overcome some of these barriers. These sources save time and increase confidence in the value of the research findings. Evidence may include quantitative and qualitative research findings from a variety of disciplines relevant to public health (for example, epidemiology, allied health, social sciences and education). However the *best* research evidence available will be different for each public health situation.

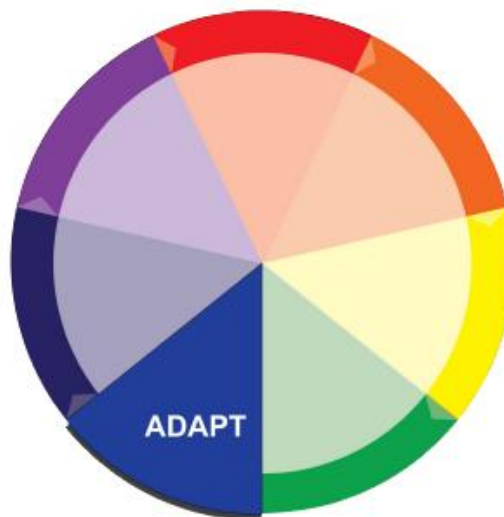
Evidence-informed decision making in public health offers several potential benefits:

- adoption of the most effective and cost-efficient interventions;
- prudent use of scarce resources;
- better health outcomes for individuals and communities.

The NCCMT has developed a resource to help public health practitioners implement this model of evidence-informed decision making whether considering starting a new program or stopping an existing program : It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence.

Two versions of the tool are available on the NCCMT website:  
A. When considering starting a new program. [<http://www.nccmt.ca/pubs/A&Trevised-startEN.pdf>] and B. When considering stopping an existing program. [<http://www.nccmt.ca/pubs/A&Trevised-stopEN.pdf>].

**For more resources and information on evidence-informed decision making in public health, visit our website:**  
**[www.nccmt.ca](http://www.nccmt.ca).**



### General References:

- Ciliska, D., Thomas, H., & Buffett, C. (2010). *An introduction to evidence-informed public health and a compendium of critical appraisal tools for public health practice* (Revised). Retrieved from the National Collaborating Centre for Methods and Tools: [http://www.nccmt.ca/pubs/IntroEIPH\\_compendiumENG\\_web.pdf](http://www.nccmt.ca/pubs/IntroEIPH_compendiumENG_web.pdf)
- DiCenso, A., Ciliska, D., & Guyatt, G. (2005). Introduction to evidence-based nursing. In A. DiCenso, D. Ciliska, & G. Guyatt (Eds.), *Evidence-based nursing: A guide to clinical practice* (pp. 3-19). St. Louis, MO: Elsevier Mosby.

### How to cite this resource :

National Collaborating Centre for Methods and Tools. (2012). *A Model for Evidence-Informed Decision-Making in Public Health*. [fact sheet]. Retrieved from [http://www.nccmt.ca/pubs/FactSheet\\_EIDM\\_EN\\_WEB.pdf](http://www.nccmt.ca/pubs/FactSheet_EIDM_EN_WEB.pdf).



## Appendix G: NCCMT: Applicability and Transferability Tool

### It worked there. Will it work here? a tool for assessing Applicability and Transferability of Evidence

#### A: When considering starting a new program

##### Purpose and target audience

To help public health managers and planners use evidence to choose appropriate programs for their community.

##### Where does this fit?

This tool helps you with the fifth step in the evidence-informed public health process:  
**Adapt** the information to a local context.

**You may have found evidence about an intervention that worked, but can you apply that evidence to your situation? Do you need to adapt the intervention for your population? ... your community? ... your team?**

This tool gives you a process and criteria to assess the applicability (feasibility) and transferability (generalizability) of evidence to public health practice and policy.

##### How to use this tool

At this stage, you will have already completed the first four steps in the evidence-informed public health process. You have defined your question (step 1), found (step 2) and appraised (step 3) the research evidence relevant to your question. You have also formed some recommendations based on the evidence that you found (step 4). (See [www.nccmt.ca/eiph](http://www.nccmt.ca/eiph) for more information.) These are all necessary steps, but you are not yet ready to decide whether to introduce, continue, or end a program or intervention in **your** local community.

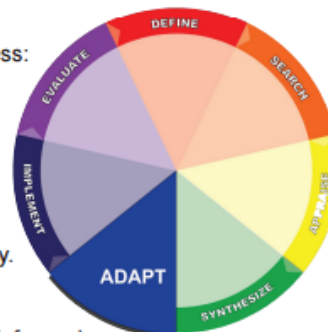
1. Decide who will be involved in the decision. Consider including partners from other sectors, disciplines and client groups. (*The remaining steps are done in collaboration with this entire group.*)
2. Orient group members to the process; establish time lines.
3. From the following list of criteria, choose the most important applicability and transferability assessment questions for the intervention of interest and the local context. Are these criteria equally important or should they be weighted differently? If so, choose what weights to assign. Not all criteria are relevant all the time. The group may decide that some criteria are more important than others at a particular time period and in a particular community.
4. Decide how final scoring will be done: Will you discuss each criterion to achieve consensus or add ratings from all group members? In that case, you would individually rate the importance/relevance of each question on a scale of 1 to 5, where 1 is low and 5 is high. Priority would then go to the highest scoring program.
5. Be sure to document the scoring process used.

##### How to cite this resource

Buffet, C., Ciliska, D., & Thomas, H. (2011). *It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence (A: When considering starting a new program)*. Hamilton, ON: National Collaborating Centre for Methods and Tools.

##### Contact:

Donna Ciliska ([ciliska@mcmaster.ca](mailto:ciliska@mcmaster.ca))  
National Collaborating Centre for Methods and Tools (NCCMT)  
School of Nursing, McMaster University  
Suite 302, 1685 Main Street West  
Hamilton, ON L8S 1G5  
Phone: (905) 525-9140, ext. 20450 Facsimile: (905) 529-4184



National Collaborating Centre  
for Methods and Tools  
Centre de collaboration nationale  
des méthodes et outils

## Assessment of Applicability & Transferability

Construct	Things to consider	Questions to Ask
<b>Applicability</b> <i>(feasibility)</i> <b>Can the intervention we found work for us?</b>	Political acceptability or influence	<ul style="list-style-type: none"> <li>• Will the intervention be allowed or supported in the current political climate?</li> <li>• Is there a potential public relations benefit for local government?</li> <li>• Will the public and target groups accept and support the intervention in its current format?</li> <li>• Is this intervention allowed/expected or required by local or provincial legislation /bylaws?</li> </ul>
	Social acceptability	<ul style="list-style-type: none"> <li>• Will my target population be interested in the intervention?</li> <li>• Is the intervention ethical?</li> </ul>
	Available essential resources (human and financial)	<ul style="list-style-type: none"> <li>• Who / what is essential for the local implementation?</li> <li>• Who will do the work? Are these people available (or are they too busy with other projects)? Do they know how? If not, is training available (and affordable)?</li> <li>• How much will the intervention cost? Can we afford to deliver the program (or is our budget already committed to other projects)?</li> <li>• How do we need to change the intervention to suit our local situation?</li> <li>• What are the full costs (include supplies, systems, space requirements for staff, training, technology/administrative supports, etc.)? How much will this intervention cost per unit of expected outcome? (total cost divided by number of people we expect to help)</li> <li>• Are there any other incremental health benefits to consider that could offset the costs of the intervention?</li> </ul>
	Organizational expertise and capacity	<ul style="list-style-type: none"> <li>• Does the intervention fit into the organization's current strategic and operational plans?</li> <li>• Does the intervention fit with the organization's mission and local priorities?</li> <li>• Does the intervention overlap, or will it compliment, existing programs?</li> <li>• Will this program enhance the reputation of the organization?</li> <li>• What barriers/structural issues or approval processes within the organization need to be addressed?</li> <li>• Is the organization motivated and open to new ideas? Is it a learning organization?</li> </ul>
<b>Transferability</b> <i>(generalizability)</i> <b>Can we expect similar results?</b>	Magnitude of health issue in local setting	<ul style="list-style-type: none"> <li>• Does the need exist?</li> <li>• How many people in my local population does this issue affect now? (i.e., what is our baseline prevalence?) How does this compare to the prevalence of the issue (risk status) described in the intervention we are considering?</li> </ul>
	Magnitude of the "reach" and cost effectiveness of the intervention	<ul style="list-style-type: none"> <li>• Will the intervention effectively reach a large proportion of the target population?</li> </ul>
	Characteristics of target population	<ul style="list-style-type: none"> <li>• Is the local population comparable to the study population?</li> <li>• Will any differences in characteristics (ethnicity, socio-demographic variables, number of persons affected) influence the effectiveness of the intervention locally?</li> </ul>

The National Collaborating Centre for Methods and Tools is affiliated with McMaster University and funded by the Public Health Agency of Canada

## It worked there. Will it work here? a tool for assessing Applicability and Transferability of Evidence

### B: When considering stopping an existing program

#### Purpose and target audience

To help public health managers and planners use evidence to stop doing a program when there is evidence that the program or intervention may not be effective.

#### Where does this fit?

This tool helps you with the fifth step in the evidence-informed public health process:  
**Adapt** the information to a local context.

**You may have found evidence of low or no effect about an intervention that you currently do, but can you apply that evidence to your situation?  
What would ending that intervention mean for your population?  
... your community? ... your team?**

This tool gives you a process and criteria to assess the applicability (feasibility) and transferability (generalizability) of evidence to public health practice and policy.

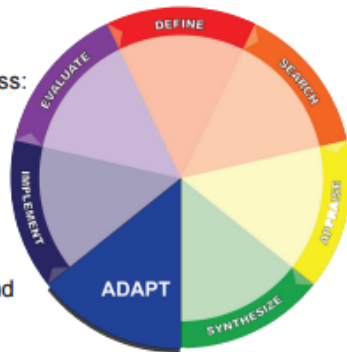
#### How to use this tool

At this stage, you will have already the first four steps in the evidence-informed public health process. You have defined your question (step 1), found (step 2) and appraised (step 3) the research evidence relevant to your question. You have also formed some recommendations based on the evidence that you found (step 4). (See [www.nccmt.ca/eph](http://www.nccmt.ca/eph) for more information.) These are all necessary steps, but you are not yet ready to decide whether to introduce, continue, or end a program or intervention in your local community.

1. Decide who will be involved in the decision. Consider including partners from other sectors, disciplines and client groups. (*The remaining steps are done in collaboration with this entire group.*)
2. Orient group members to the process; establish time lines.
3. From the following list of criteria, choose the most important applicability and transferability assessment questions for the intervention of interest and the local context. Are these criteria equally important or should they be weighted differently? If so, choose what weights to assign. Not all criteria are relevant all the time. The group may decide that some criteria are more important than others at a particular time period and in a particular community.
4. Decide how final scoring will be done: Will you discuss each criterion to achieve consensus or add ratings from all group members? In that case, you would individually rate the importance/relevance of each question on a scale of 1 to 5, where 1 is low and 5 is high. Priority would then go to the highest scoring program.
5. Be sure to document the scoring process used.

#### How to cite this resource

Buffet, C., Ciliska, D., & Thomas, H. (2011). *It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence (B: When considering stopping an existing program)*. Hamilton, ON: National Collaborating Centre for Methods and Tools.



National Collaborating Centre  
for Methods and Tools

Centre de collaboration nationale  
des méthodes et outils



## Assessment of Applicability & Transferability

Construct	Things to consider	Questions to Ask
<b>Applicability</b> <i>(feasibility)</i> <b>Can the intervention we found work for us?</b>	Political acceptability or influence	<ul style="list-style-type: none"> <li>• Will stopping the intervention be allowed or supported in current the political climate?</li> <li>• Is there a potential public relations benefit for local government to stopping this intervention if its lack of effectiveness became generally known?</li> <li>• Will the public and target groups accept and support the end of the program in its current format?</li> <li>• Is this intervention expected or required by local or provincial legislation /bylaws?</li> </ul>
	Social acceptability	<ul style="list-style-type: none"> <li>• Will my target population miss the intervention?</li> <li>• Is it ethical to stop the intervention?</li> </ul>
	Available essential resources (human and financial)	<ul style="list-style-type: none"> <li>• Who/what resources will be saved by stopping the program?</li> <li>• What are the financial and human costs of stopping the intervention?</li> <li>• What other options will be offered if this intervention/program is stopped?</li> <li>• How might people who are doing this project be redeployed?</li> </ul>
	Organizational expertise and capacity	<ul style="list-style-type: none"> <li>• Does the intervention fit into the organization's current strategic and operational plans? Will we miss an opportunity to support the strategic plans by taking away this program?</li> <li>• What steps will we need to take if we decide to stop this program?</li> <li>• What barriers/structural issues or approval processes within the organization need to be addressed?</li> <li>• How will using the evidence to stop the current program affect the reputation of the organization?</li> <li>• What is the emotional attachment of the staff to this program and how will we deal with that?</li> </ul>
<b>Transferability</b> <i>(generalizability)</i> <b>Can we expect similar results?</b>	Magnitude of health issue in local setting	<ul style="list-style-type: none"> <li>• Are there other (more effective) ways to achieve the same goals?</li> </ul>
	Magnitude of the "reach" and cost effectiveness of the intervention	<ul style="list-style-type: none"> <li>• Will we miss the opportunity to interact with a large proportion of the population if we stop doing this intervention?</li> </ul>
	Characteristics of target population	<ul style="list-style-type: none"> <li>• Is the local population comparable to the study population?</li> <li>• Will any differences in characteristics (ethnicity, socio-demographic variables, number of persons affected) influence the effectiveness of the intervention locally?</li> </ul>

**Contact:**

Donna Ciliska (ciliska@mcmaster.ca)  
 National Collaborating Centre for Methods and Tools (NCCMT)  
 School of Nursing, McMaster University  
 Suite 302, 1685 Main Street West  
 Hamilton, ON L8S 1G5  
 Phone: (905) 525-9140, ext. 20450 Facsimile: (905) 529-4184

The National Collaborating Centre for Methods and Tools is affiliated with McMaster University and funded by the Public Health Agency of Canada

## Appendix H: Blank Data Extraction Table

<b>Title</b>	
<b>Author</b>	
<b>Publication Date</b>	
<b>Quality Rating (<a href="#">AMSTAR Tool</a>)</b>	

<b>Factors</b>		<b>Assessment</b>			<b>Comments</b>
<b>Research question identified?</b>	Yes	Unclear	No		
<b>Population</b>					
<b>Are 15-24 year olds included?</b>	Yes	Unclear	No		
<b>Occur in developed countries?</b>	Yes	Unclear	No		
<b>Intervention</b>					
<b>Social Media campaign</b>	Yes	Unclear	No		
<b>Peer-to-peer program</b>	Yes	Unclear	No		
<b>Train-the-trainer program</b>	Yes	Unclear	No		
<b>Interactive computer-based program</b>	Yes	Unclear	No		
<b>Mass media campaign</b>	Yes	Unclear	No		
<b>Comparison</b>					
<b>Was a comparison included?</b>	Yes	Unclear	No		
<b>Outcome</b>					
<b>Primary</b>	<b>Decrease in STI rates?</b>	Yes	Unclear	No	
	<b>Improved sexual behaviour?</b>	Yes	Unclear	No	
<b>Secondary</b>	<b>Increased knowledge?</b>	Yes	Unclear	No	
	<b>Increased condom use?</b>	Yes	Unclear	No	
	<b>Improved self-efficacy?</b>	Yes	Unclear	No	
	<b>Improved attitudes?</b>	Yes	Unclear	No	

<b>Conclusion of the Literature</b>	
<b>Limitations of the Literature</b>	
<b>Additional Comments</b>	

## Appendix I: Summary of Findings by Primary Outcome Measure

**Table 1: Primary Outcome Measure**

Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Comments
<b>STI reduction</b>	<b><i>Sadovszky et al.</i></b> (2014)	<ul style="list-style-type: none"> <li>Of the 6 studies in this systematic review that looked at biological evidence for STI reduction, all 6 found that the behavioural interventions introduced reduced the incidence of STIs (reported OR: 0.88; 1.72; 0.74)</li> </ul>	<ul style="list-style-type: none"> <li>In 4 out of 8 studies, tailoring to gender or culture was found to be effective.</li> <li>Skills training that included condom application, building assertiveness, enhancing self-efficacy or communicating with a partner was found to be effective in decreasing risky behaviour in 4 studies. (reported OR 0.63, 1.81)</li> <li>Length of exposure, defined as either length of session or number of times the session was offered, was found to be effective in 3 studies as well.</li> <li>Sessions with longer durations were more effective.</li> <li>In terms of cost-efficiency, teacher-led interventions cost less than peer-led interventions.</li> <li>In conclusion, <i>Sadovszky et al.</i> suggest that tailoring content based on ethnicity, gender and culture to reflect person and interpersonal skill building exercises and exposure to content as the most important components in obtaining the outcomes noted in the review.</li> </ul>

Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Comments
STI reduction	<i>Lopez et al.</i> (2013)	<ul style="list-style-type: none"> <li>Four trails in this systematic review assessed the incidence or prevalence of HIV and HSV-2 <ul style="list-style-type: none"> <li>The investigators did not find any statistically significant differences in HIV outcomes between the study groups.</li> </ul> </li> <li>Three other trails in this review examined other STIs besides HIV <ul style="list-style-type: none"> <li>1/3 study found that the incidence rate of active syphilis (95% CI 0.35 to 0.96) was lower with the intervention group that had the STI program</li> <li>The same study above found the prevalence of gonorrhea was also lower for the intervention group (95% CI 0.11 to 0.70)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>This STI program focused on the Behavioral Change Theory of Interventions and offered community monthly meetings that incorporated group and individual activities as well as educational videos and pamphlets for distribution.</li> <li>This program was comprised of 16 topics that included condom use, STI information and family planning.</li> </ul>

## Appendix J: Summary of Findings by Secondary Outcome Measure

**Table 2: Secondary Outcome Measures**

Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Additional Comments
Sexual behaviour	<i>Sadowszky et al.</i> (2014)	<ul style="list-style-type: none"> <li>4 out of 13 articles reported a decrease in the frequency of sexual intercourse (reported OR 1.2)               <ul style="list-style-type: none"> <li>These 4 articles were also the articles that reported a statistically significant decrease in STI incidence rates.</li> </ul> </li> <li>3 out of 13 articles saw a decrease in the average number of sexual partners</li> </ul>	
	<i>Picot et al.</i> (2012)	<ul style="list-style-type: none"> <li>2 out of 5 studies reported a statistically significant difference for the intervention group.               <ul style="list-style-type: none"> <li>The participants were less likely to have initiated sexual intercourse compared to the control group</li> </ul> </li> <li>When a meta-analysis was done on 4 out of the 5 articles, the pooled odds ratio was 1.03 (95% CI 0.74-1.43), indicating no significant change overall</li> <li>6 studies looked at intervention effects on the number of sexual partners and found no significant difference between the intervention and comparison groups.</li> </ul>	
Sexual behaviour	<i>Shepherd et al.</i> (2010)	<ul style="list-style-type: none"> <li>5 studies examined initiation of sexual intercourse as an outcome.               <ul style="list-style-type: none"> <li>Three of the five studies found that there was no significant difference between the intervention and comparison group in the initiation of sexual activity among those who were virgins at baseline.</li> <li>The other two studies did report a statistically significant difference between groups                   <ul style="list-style-type: none"> <li>These two studies found that</li> </ul> </li> </ul> </li> </ul>	

Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Additional Comments
		<p>young people in the control group were nearly three times more likely to have initiated sexual activity than students in the intervention group.</p> <ul style="list-style-type: none"> <li>Overall, the fixed-effect pooled odds ratio was 1.03 (95% CI 0.74 to 1.43), with no statistically significant difference.</li> </ul>	
	<b>Lazarus et al.</b> (2010)	<ul style="list-style-type: none"> <li>3 out of 10 studies reported a statistically significant improvement in behaviour change.</li> <li>2 out of the overall 13 school based interventions reported having any positive effect on behaviour.</li> </ul>	<ul style="list-style-type: none"> <li>2 out of 3 studies used peers as the implementers of the sexual health education program while the other study was delivered by a teacher.</li> <li>Youth preferred interventions led by peers and health professionals.</li> </ul>
<b>Sexual health knowledge</b>	<b>Sadovszky et al.</b> (2014)	<ul style="list-style-type: none"> <li>4 out of 13 articles had an increase in STI/HIV knowledge.</li> </ul>	
	<b>Picot et al.</b> (2012)	<ul style="list-style-type: none"> <li>All 12 studies attempted to measure participants' knowledge (the test for knowledge varied due to the focus of the educational components of each intervention).</li> <li>10 out of the 12 included studies reported that the intervention had a statistically significant effect on increasing knowledge.</li> </ul>	
	<b>Jones et al.</b> (2014)	<ul style="list-style-type: none"> <li>7 studies examined the effectiveness of social media or text interventions on STI knowledge.</li> <li>All 7 studies demonstrated significant increases in STI knowledge, particularly an increase in the understanding of sexual protection methods and transmission.</li> </ul>	<ul style="list-style-type: none"> <li>It was noted that the highest level of knowledge increase was around the understanding of sexual protection methods and transmission.</li> </ul>

Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Additional Comments
<b>Sexual health knowledge</b>	<b><i>Shepherd et al.</i></b> (2010)	<ul style="list-style-type: none"> <li>10 of the 12 included studies reported that the intervention group had a statistically significant effect on increasing knowledge.</li> <li>Only 2 studies did not demonstrate a statistically significant difference in knowledge between young people in the intervention and comparison groups.</li> </ul>	
	<b><i>Lazarus et al.</i></b> (2010)	<ul style="list-style-type: none"> <li>11 out of 19 studies reported improvements in the sexual knowledge of the participants. Most of the peer-led interventions and teacher-led interventions improved participants' sexual health knowledge and attitudes.</li> </ul>	<ul style="list-style-type: none"> <li>Most of the peer-led interventions and teacher-led interventions improved participants' sexual health knowledge and attitudes</li> </ul>
<b>Condom Use</b>	<b><i>Sadovszky et al.</i></b> (2014)	<ul style="list-style-type: none"> <li>11 out of 13 reviews examined condom use</li> <li>They concluded that condom use is a positive health outcome of behavioural interventions to promote safer sex and reduce sexual risk behaviours.</li> </ul>	<ul style="list-style-type: none"> <li>A major strength of their findings is that behavioral interventions were found to be effective in a wide variety of populations even when there was variation in the way the interventions were implemented.</li> </ul>
	<b><i>Picot et al.</i></b> (2012)	<ul style="list-style-type: none"> <li>11 out of 12 studies contributed information on condom use.</li> <li>Statistically significant effects in favour of the intervention group were only reported by two of the studies for the condom use in terms of condom used at last sex and frequency of condom use.</li> <li>When data was available from 6 studies to be included in a meta-analysis, the fixed-effect pooled odds ratio was 1.07 (95% CI 0.889-1.30).</li> </ul>	<ul style="list-style-type: none"> <li>Overall no statistically significant difference was found between the intervention group and the control.</li> </ul>
	<b><i>Jones et al.</i></b> (2014)	<ul style="list-style-type: none"> <li>Overall, 6 studies examined interventions effects on condom use. <ul style="list-style-type: none"> <li>2 found statistically significant effects;</li> <li>2 studies had mixed effects;</li> <li>2 found no statistically effects at all</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Overall no statistically significant difference was found between the intervention group and the control.</li> </ul>

Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Additional Comments
<b>Condom Use</b>	<b><i>Shepherd et al.</i></b> (2010)	<ul style="list-style-type: none"> <li>Reported on 14 out of 15 studies that had condom use as an outcome</li> <li>Only 2 studies had statistically significant results for the intervention group versus the control <ul style="list-style-type: none"> <li>One study found that participants in the intervention group had an increase on the outcome of condom use at last sex (there was no statistically significant difference in condom use at first sex and frequency of condom use for this study).</li> <li>The second article reported on a statistically significant reduction in unprotected sex, likely from an increase in frequency of condom use. Otherwise, the remaining studies reported that there was no significant difference in condom use</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Otherwise, the remaining studies reported that there was no significant difference in condom use outcomes between groups or did not report on the statistical difference.</li> <li>Overall, the fixed-effect odds ratio was 1.07 (95% CI 0.88 to 1.30), with no overall statistical significance.</li> </ul>
<b>Self-efficacy</b>	<b><i>Sadovszky et al.</i></b> (2014)	<ul style="list-style-type: none"> <li>3 out of 13 articles reported an increase in self-efficacy in the intervention group compared to the control.</li> </ul>	<ul style="list-style-type: none"> <li>Skills training, such as building assertiveness, enhancing self-efficacy, and communication techniques with a partner were all part of the sexual education given in these sessions.</li> </ul>
	<b><i>Picot et al.</i></b> (2012)	<ul style="list-style-type: none"> <li>8 out of 12 studies measured self-efficacy when paired with a skills component</li> <li>The self-efficacy outcomes did not always correlate with the included skills component in each intervention <ul style="list-style-type: none"> <li>Two studies reported a statistically significant outcome on a single self-efficacy measure.</li> <li>Four other studies found statistically significant results for a self-efficacy measure but it was restricted to a subgroup analysis of young women.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The skills component varied with each intervention but included decision making, risk avoidance, condom use skills, sex refusal and communication.</li> </ul>



Outcome Measured	Intervention Reference	Effectiveness on Outcome Measured	Additional Comments
	<i>Jones et al. (2014)</i>	<ul style="list-style-type: none"> <li>4 studies that included participant self-efficacy and/or intentions</li> <li>Two studies reported significant increases in condom use self-efficacy and intention <ul style="list-style-type: none"> <li>One study additionally reporting an increase in participant's self-efficacy for delaying engagement in risky sexual encounters.</li> </ul> </li> <li>Another study reported an increase in intentions to use condoms with 23% of the participants.</li> <li>The last study looking at self-efficacy as an outcome reported no significant effects on intentions to use condoms.</li> </ul>	
<b>Attitudes</b>	<i>Shepherd et al. (2010)</i>	<ul style="list-style-type: none"> <li>8 studies that had an assessment of participants' attitudes among their outcomes. <ul style="list-style-type: none"> <li>6 investigated participants' attitudes towards risky sexual behaviour or sexual intercourse</li> <li>2 specifically focused on attitudes towards waiting to have sex</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A greater number of interventions that were assessed in relation to a control group, rather than those interventions assessed in comparison with standard sex education or to teacher-led interventions, found statistically significant effects.</li> </ul>

## **Program Review – Sexual Health Clinic**



June 2015

For information, please contact:

Laurie Young  
Middlesex-London Health Unit  
50 King St.  
London, Ontario  
N6A 5L7  
phone: 519-663-5317  
fax: 519-663-8241  
e-mail: [laurie.young@mlhu.on.ca](mailto:laurie.young@mlhu.on.ca)

© Copyright 2014  
Middlesex-London Health Unit  
50 King Street  
London, Ontario  
N6A 5L7

Cite reference as: Middlesex-London Health Unit (2015).  
Effective Health Promotion Strategies for Middlesex-London Health Unit's Sexual Health Team  
London, Ontario: Author.

Authors:

Sameena Vadivelu, Program Evaluator OHCD SH Services  
Rhonda Brittan, Public Health Nurse, OHCD SH Services  
Shaya Dhinsa, Manager, Sexual Health

All rights reserved.

## Table of Contents

---

Acknowledgements .....	i
I. Local and Provincial Sexually Transmitted Infections / Blood-borne Infections (STI/BBI) trends .....	1
Sexual Health Clinic Services .....	11
II. Priority Population for Sexual Health Services .....	15
III. Alignment of clinic activities with the Ontario Public Health Standards .....	16
Clinic Team Consultation and Activity .....	18
IV. Harm Reduction Best Practices Review Summary .....	19
V. Sexual Health Clinic Literature Summary .....	22
VI. Environmental Scan - Comparative Health units .....	27
Environmental Scan – Community organizations .....	32
VII. Clinic Physicians Survey .....	355
VIII. Client Satisfaction Survey .....	411
IX. Recommendations .....	55
References .....	611
Appendix A: OPHS Requirements & Team .....	63
Appendix B: Audit Summary Report to MLHU Documentation Committee .....	667
Appendix C: Literature Review Flow Chart .....	68

## Acknowledgements

---

The Evaluation team gratefully acknowledges The Clinic Team and The Clinic Physicians, who were instrumental in the Program Review. The Clinic Team and Clinic physicians provided valuable input and feedback throughout this review process and were involved in developing the recommendations. The team would also like to acknowledge and thank the survey respondents, who provided valuable feedback regarding the clinic services.

Appreciation is extended to Heather Lokko, Associate Director, OHCD SH Services and Dr. Gayane Hovhannisyan, Associate Medical Officer of Health for their support and guidance throughout the program review process.

Finally, the Evaluation team acknowledges the reviewers who dedicated time to review this report and provide feedback.

### **Evaluation Team:**

Sameena Vadivelu, Program Evaluator OHCD SH Services  
Shaya Dhinsa, Program Manager OHCD SH Services

## Introduction

The Ontario Public Health Standards mandate that Sexual Health Services are offered by the Middlesex-London Health Unit. The Clinic team and the Sexual Health Promotion team comprise the Sexual Health Team; its goals are to 1) prevent or reduce the burden of sexually transmitted infections and blood-borne infections, and 2) promote healthy sexuality. Services and initiatives provided by both The Clinic team and the Sexual Health Promotion team work toward achieving these goals.

The Sexual Health Team initiated a program review process in August 2014, in an effort to validate current evidence-informed approaches, identify opportunities to enhance the use of evidence-informed strategies, and increase effectiveness and efficiency of services. The program review was guided by the principles of need, impact, capacity, and collaboration and partnerships (Ontario, 2008), and framed by the National Collaborating Centre on Methods and Tools (NCCMT) Model for Evidence-Informed Decision-Making in Public Health (NCCMT, 2010).

This report focuses on the review of the Sexual Health Clinic services only. Components of this review include:

- Recent trends in sexually transmitted infections and blood-borne infections (STI/BBI) in the Middlesex-London region
- Priority populations for sexual health services
- Environmental scan of comparable health units and local community organizations offering sexual health services
- Review of best practices for harm reduction services
- Survey with The Clinic Physicians
- Client satisfaction survey
- Sexual Health Clinic Literature Summary

## I. Local and Provincial Sexually Transmitted Infections / Blood-borne Infections (STI/BBI) trends

The burden of sexually transmitted infections and blood-borne infections (STI/BBIs) in the Middlesex-London region provides the context in which The Clinic offers services. To that end, regional and provincial rates for STI/BBIs between 2009 and 2013 are included in this report.

### Data Source

Rates were calculated using local and provincial disease counts retrieved from the integrated Public Health Information System (iPHIS). Disease counts were used for the numerator and population estimates/population projections were used for the denominator. Population estimates for the denominator were used to calculate the 2009 to 2012 rates. For the 2013 rate, population projections (for Middlesex-London and Ontario) were used for the denominator. Population projections are less precise than population estimates, and may over- or under- estimate the total population, therefore the 2013 rates should be interpreted with caution. Rate calculations are likely to change once the 2013 population estimates become available.

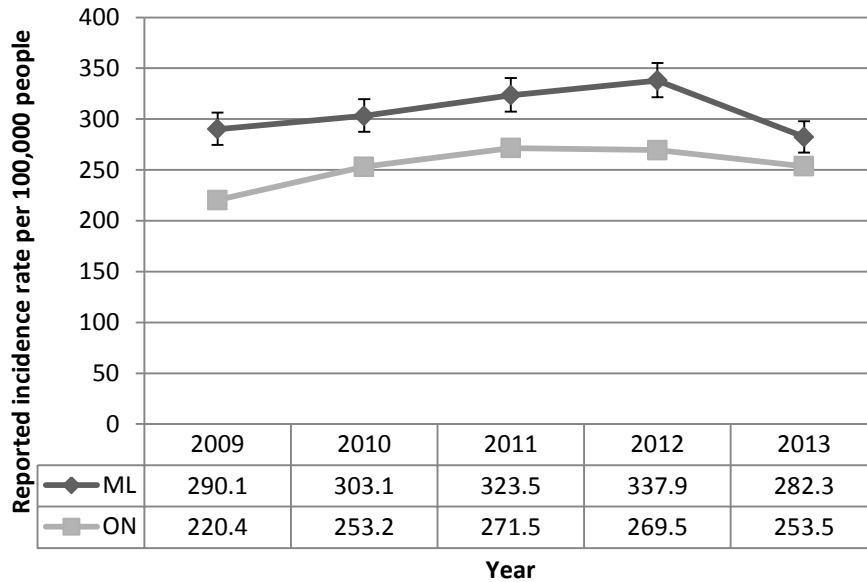
### Chlamydia

Chlamydia was the most commonly reported STI in the Middlesex-London region with an average annual reported incidence rate of 307.4 infections per 100,000 between 2009 and 2013 (Figure 1.1). The rate of reported Chlamydia infections in Middlesex-London was significantly higher than the Ontario rate across the five-year period, although the gap between the two rates appears to narrow in 2013, due to a significant decrease in the local rate compared to the previous year. The difference between the local and provincial rates may be influenced by a number of factors. A large number of youth and young adults attend post-secondary institutions in Middlesex-London; STI rates are known to be higher in this age group. The difference may also be related to higher testing rates by local health care providers, including those at The Clinic, and therefore increased detection. It is also possible that Chlamydia rates in the Middlesex-London population are truly higher compared to Ontario as a whole.

For both males and females, rates of reported Chlamydia infections are highest in younger age groups (Figure 1.2). Between 2009 and 2013, the highest average annual reported incidence rate is observed among males and females

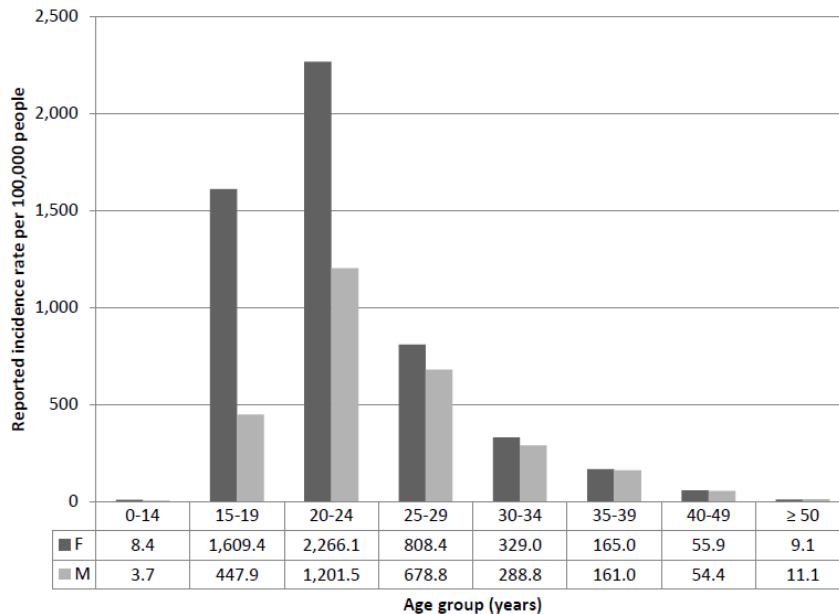
20-24 years of age (F: 2,266.1 per 100,000, M: 1,201.5 per 100,000). This is followed by the 15-19 year old age group for females (1,609.4 per 100,000) and the 25-29 year old age group for males (678.8 per 100,000).

**Figure 1.1: Reported incidence rate of Chlamydia infections per 100,000, Middlesex-London and Ontario, 2009 to 2013**



Source: Numerator: ML: MLHU iPHIS database, extracted November 13, 2014. ON: Ontario iPHIS database, extracted various dates. Denominator: ML and ON: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014.

**Figure 1.2: Reported incidence rate of Chlamydia infections per 100,000, by age and sex, Middlesex-London, 2009 to 2013 annual average**



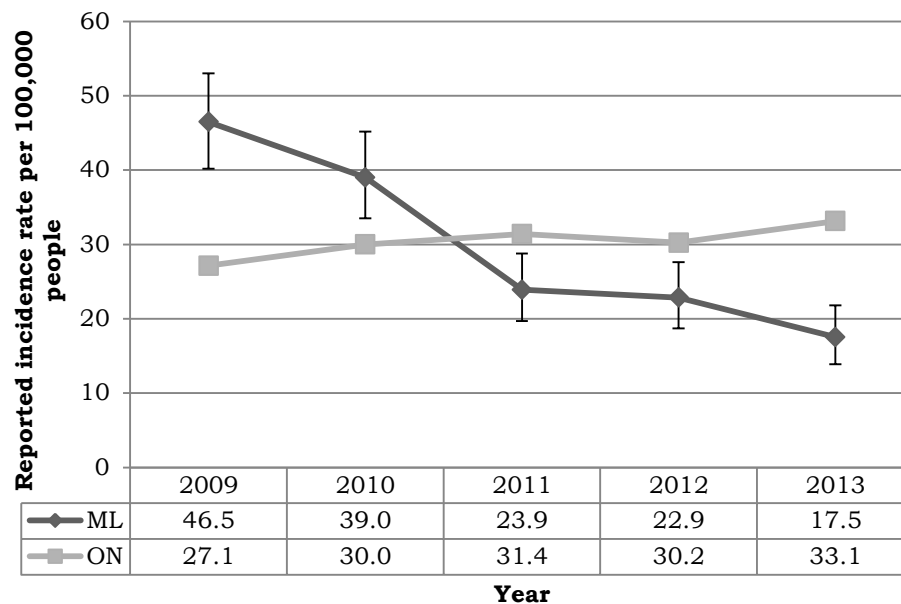
Source: Numerator: MLHU iPHIS database, extracted November 13, 2014. Denominator: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario extracted September 26, 2014.

## Gonorrhea

Between 2009 and 2013, the average annual reported incidence rate in Middlesex-London was 29.8 cases per 100,000 (Figure 1.3). From 2011 to 2013, the annual reported incidence rate for the region was significantly lower than the annual rates in Ontario as a whole.

In Middlesex-London, the highest average annual reported incidence rate for Gonorrhea infections over the five-year time period was observed among those between the ages of 20-24, regardless of gender (Figure 1.4). Generally, the average annual reported incidence rate for males exceeded that of females in all age groups, with exception to the ≤19 and 20-24 year old age groups, where the rate for females exceed that of males.

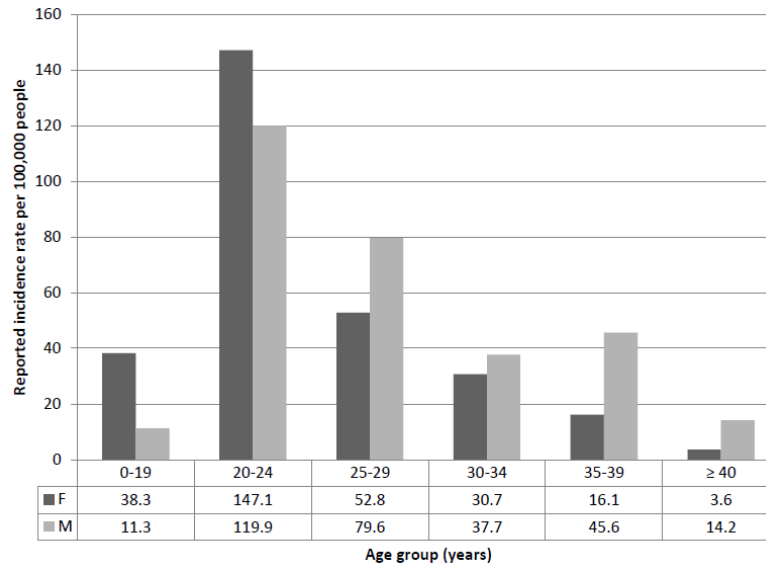
**Figure 1.3: Reported incidence rate of Gonorrhea infections per 100,000, Middlesex-London, 2009 to 2013 annual average**



Source: Numerator: ML: MLHU iPHIS database, extracted November 13, 2014. ON: Ontario iPHIS database, extracted various dates. Denominator: ML and ON: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014.



**Figure.1.4: Reported incidence rate of Gonorrhea infections per 100,000, by age and sex, Middlesex-London, 2009 to 2013 annual average**



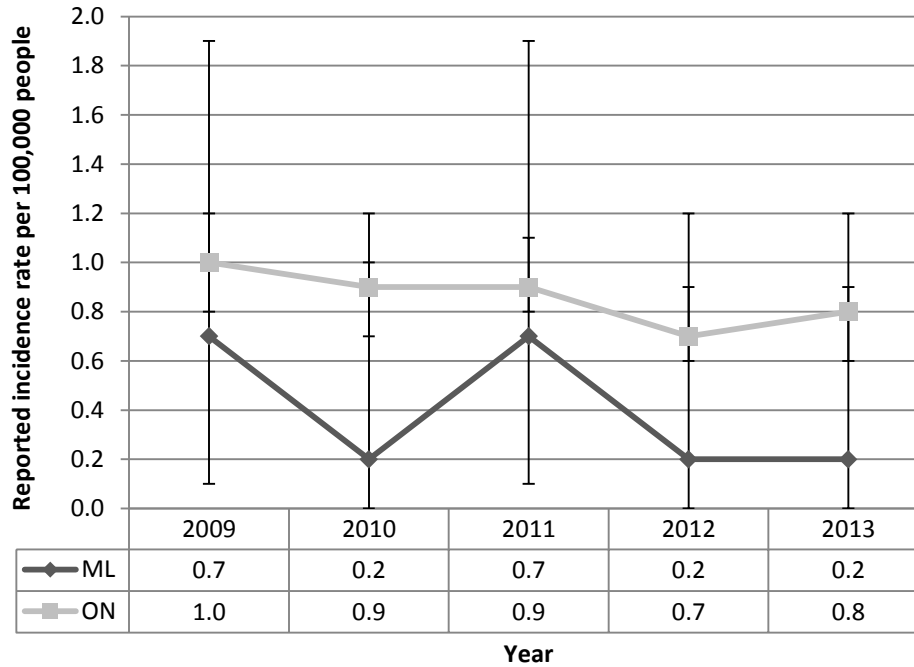
Source: Numerator: MLHU iPHIS database, extracted November 13, 2014. Denominator: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014.

### Acute Hepatitis B\*

Nine cases of acute Hepatitis B were reported in Middlesex-London between 2009 and 2013. The annual reported incidence rate of acute Hepatitis B infections was similar across the five year period (Figure 1.5). The annual reported incidence rate for acute Hepatitis B infections in Middlesex-London should be interpreted with caution due to small cell counts as there were less than five cases in each year between 2009 and 2013. There were no significant differences observed between the annual reported incidence rate of acute Hepatitis B infections in Middlesex-London and the annual reported incidence rate of acute Hepatitis B infections in the province.

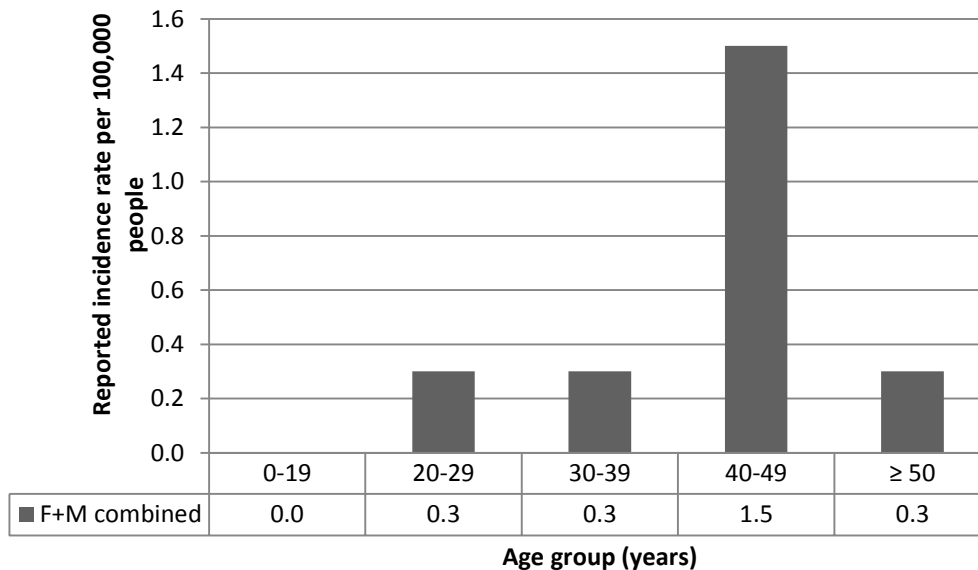
During the five year period, the reported incidence rate of acute Hepatitis B infections was highest among those between the ages of 40 and 49 (1.5 per 100,000) (Figure 1.6). Gender-specific rates for Hepatitis B infections could not be calculated due to small number of cases reported across the five-year time period.

**Figure 1.5: Reported incidence rate of acute Hepatitis B infections per 100,000 people, Middlesex-London and Ontario, 2009 to 2013**



Source: Numerator: Ontario Ministry of Health and Long-Term Care iPHIS database. Date extracted: November 11, 2015 Denominator: Population Estimates (2009-2013), Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Received: July 3, 2014.

**Figure 1.6: Reported incidence rate of acute hepatitis B infections per 100,000 people, by age, Middlesex-London, 2009 to 2013 annual average**



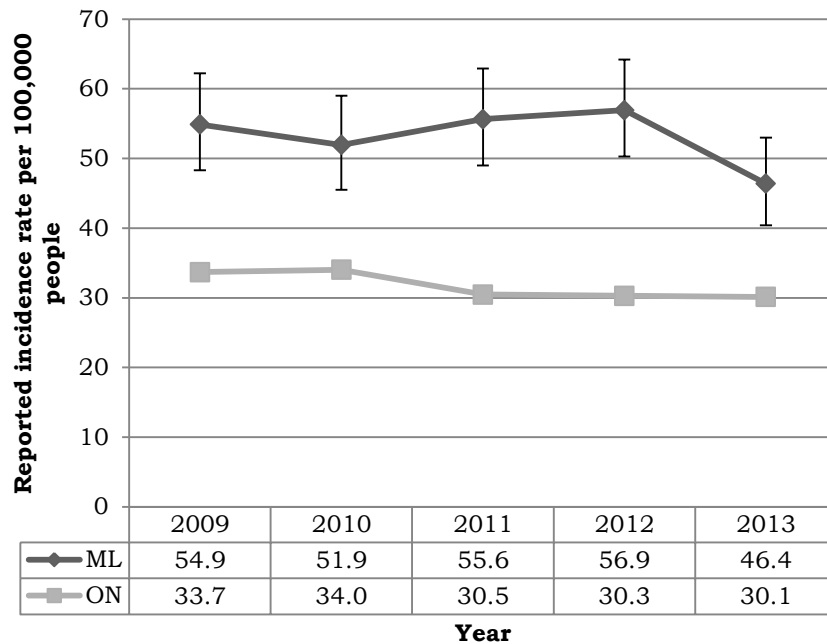
Source: Numerator: Ontario Ministry of Health and Long-Term Care iPHIS database. Date extracted: November 11, 2015 Denominator: Population Estimates (2009-2013), Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Received: July 3, 2014.

## Hepatitis C (acute and chronic infections)

Over the five year period, the average annual reported incidence rate for Hepatitis C was 53.1 acute and chronic infections per 100,000 (Figure 1.7). The Middlesex-London rate for all Hepatitis C infections was significantly higher than the provincial rate each year between 2009 and 2013. The 2013 rate for Middlesex-London suggested a decline; however this decrease is not statistically significant compared to the local rate from the previous four years. The reasons for the Middlesex-London rate being significantly higher than the Ontario rate are not fully understood. There is an active community of people who use drugs, including injecting drugs, in London and the surrounding area. A national study that included local people who inject drugs showed that the prevalence of Hepatitis C among London participants (79.1%) was higher than the prevalence among study participants from across Canada (68.0%) (Middlesex-London Health Unit, 2013). Transmission among people who inject drugs may account for some of the difference, but there are likely other factors contributing to the higher rates of Hepatitis C infections in Middlesex-London compared to the province as a whole.

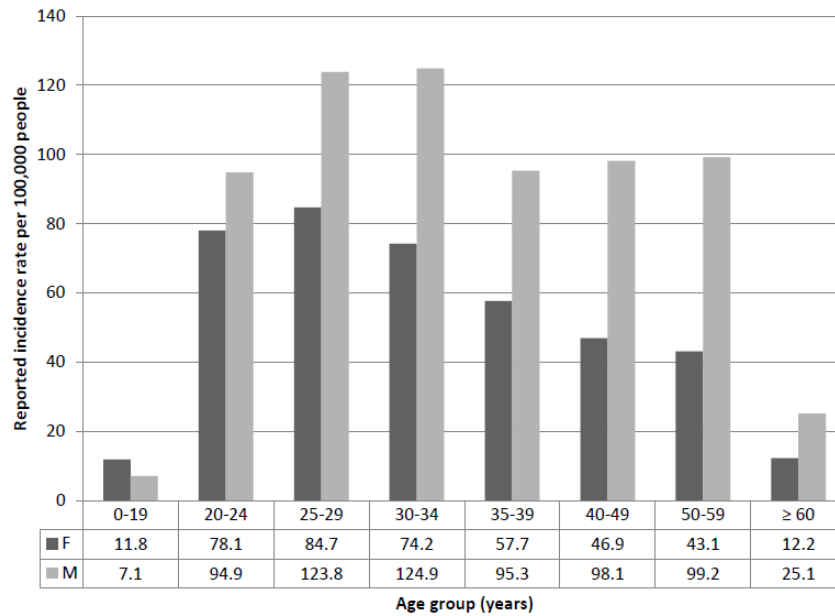
Between 2009 and 2013, the highest average annual reported incidence rate for Hepatitis C infections was among males between the ages of 30-34 (124.9 per 100,000), followed by the 25-29 year old age group (123.8 per 100,000) (Figure 1.8). For females, the highest average annual reported incidence rate for Hepatitis C infections as reported among those between the ages of 25-29 (123.8 per 100,000), followed by those between the ages of 20-24 (78.1 per 100,000). Generally, the average annual reported incidence rate for males exceeded that of females in all age groups, with exception to the ≤19 year old age group, where the rate for females exceed that of males.

**Figure 1.7: Reported incidence rate of Hepatitis C infections (acute and chronic) per 100,000, Middlesex-London and Ontario, 2009 to 2013**



Source: Numerator: ML: MLHU iPHIS database, extracted December 17, 2014. ON: Ontario iPHIS database, extracted various dates. Denominator: ML and ON: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014.

**Figure 1.8: Reported incidence rate of Hepatitis C (acute and chronic) infections per 100,000, by age and sex, Middlesex-London, 2009 to 2013 annual average**



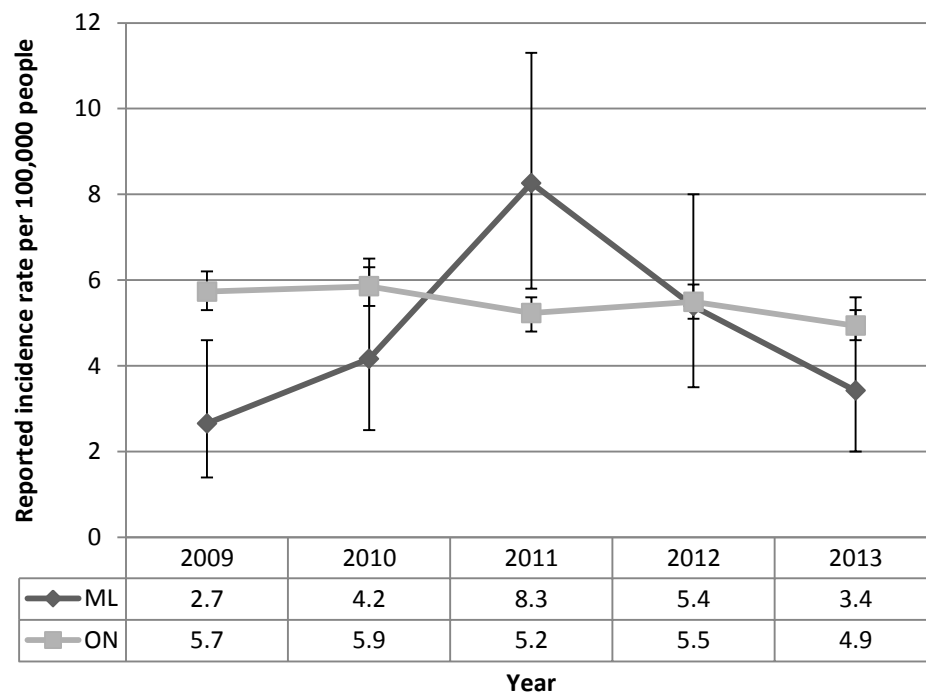
Source: Numerator: MLHU iPHIS database, extracted February 11, 2015. Denominator: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, intelliHEALTH Ontario, extracted September 26, 2014

## Infectious Syphilis<sup>1</sup>

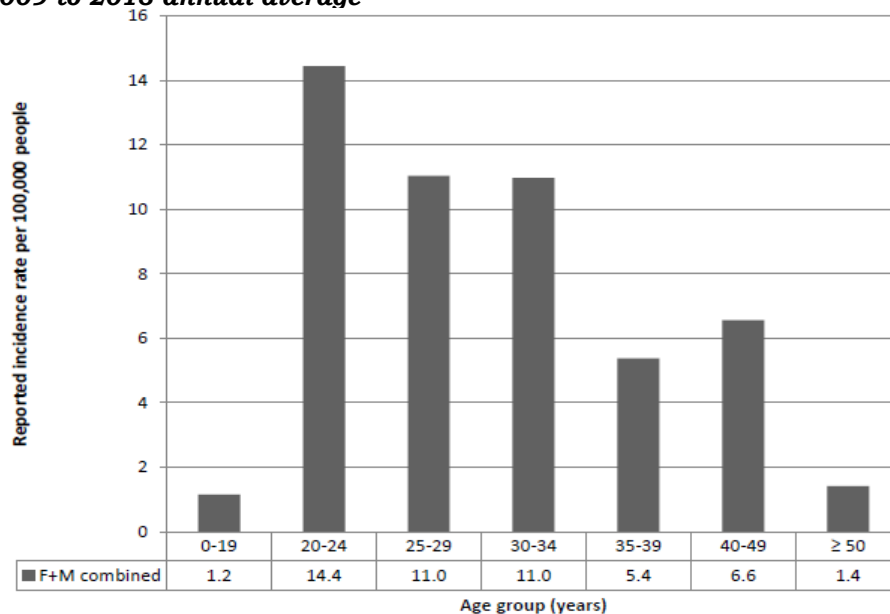
The annual reported incidence rate for infectious syphilis fluctuated between 2009 and 2013. Over this five year period, the average annual reported incidence rate was 4.8 cases per 100,000 (Figure 1.9). The only year where the Middlesex-London rate was significantly higher than the provincial rate was in 2011; in all other years, the local rate was significantly lower than, or similar to, the Ontario rate. A province wide syphilis outbreak in 2011 is a potential factor that contributed to this observed increase. Additionally, a targeted outreach campaign for syphilis implemented by the Health Unit in 2011 may have increased testing locally, resulting in an increased detection of cases.

Between 2009 and 2013, majority (91.8%) of infectious syphilis cases were reported among males (Figure 1.10). As a result, gender- and age-specific rates for infectious syphilis could not be calculated due to the small number of female cases reported in each age group. During the five year period, the reported incidence rate of infectious syphilis was highest among those between 20-24 years of age (14.4 per 100,000). This is followed by those between the ages of 25-29 and 30-34, where the average annual incidence rate was 11.0 infections per 100,000 for both age groups.

<sup>1</sup> A number of stages are used to characterize syphilis infections; those that are classified as primary, secondary, and early latent infections are considered infectious

**Figure 1.9: Reported incidence rate of Infectious Syphilis infections per 100,000, Middlesex-London 2009-2013**

Source: Numerator: ML: MLHU iPHIS database, extracted November 13, 2014. ON: Ontario iPHIS database, extracted various dates. Denominator: ML and ON: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014.

**Figure 1.10: Reported incidence rate of Infectious Syphilis infections per 100,000, by age, Middlesex-London, 2009 to 2013 annual average**

Source: Numerator: MLHU iPHIS database, extracted November 13, 2014. Denominator: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014

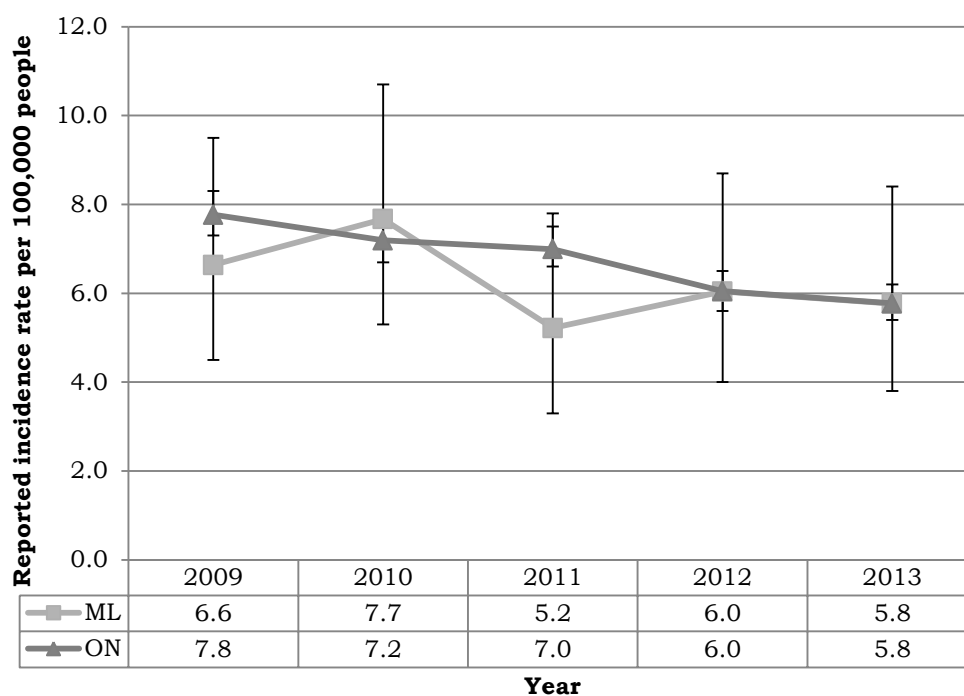
## HIV/AIDS Infections

Between 2009 and 2013, the average annual reported incidence rate for HIV/AIDS infections in Middlesex-London was 6.3 cases per 100,000, there were no significant differences between the local and provincial rates over the five-year time period of interest (Figure 1.11)

In order to calculate comparable gender- and age-specific rates, it was necessary to combine all cases 40 years of age and over, due to the fact that the number of reported HIV/AIDS infections among females in this age group was relatively small and less than half the number of infections reported among males. Although not shown in Figure 12, it was possible to calculate more specific rates for males over the age of 40 years.

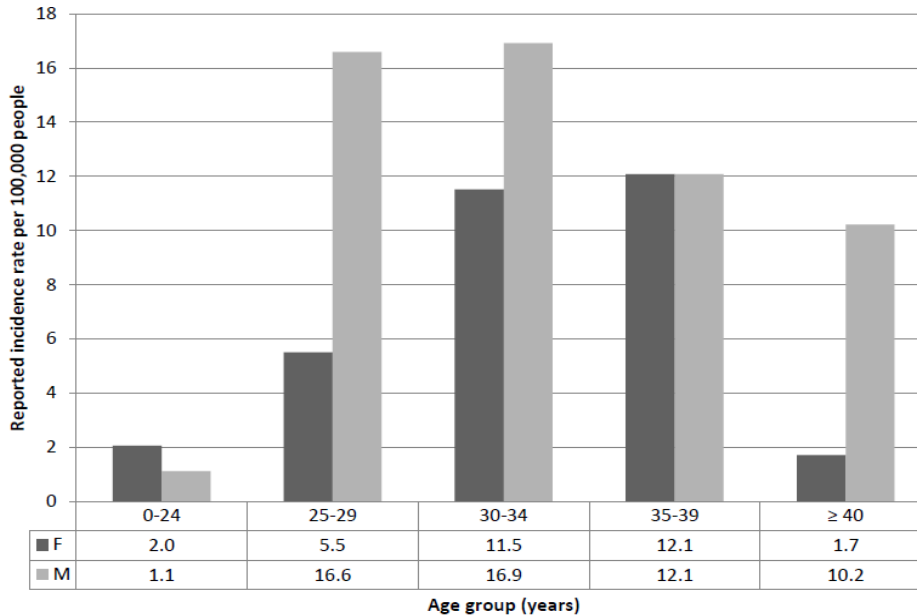
Across the five-year period, the average annual reported incidence rate of HIV/AIDS infections was highest among the 40-49 year old age group for males, at 19.5 infections per 100,000 (data not shown), followed by those between the ages of 30-34 (16.9 per 100,000) (Figure 1.12).. For females, the highest average annual reported incidence rate was among the 35-39 year old age group (12.1 per 100,000 females), followed by the 30-34 year old age group (11.5 per 100,000)

**Figure 1.11: Reported incidence rate of HIV/AIDS infections per 100,000, Middlesex-London, 2009 to 2013 annual average**



Source: Numerator: ML and ON: Ontario iPHIS database (preliminary provincial data files), extracted various dates.  
 Denominator: ML and ON: Statistics Canada population estimates (2009-2012) and projections (2013),  
 MOHLTC, IntelliHEALTH Ontario, extracted September 26, 2014

**Figure 1.12: Reported incidence rate of HIV/AIDS infections per 100,000, by age and sex, Middlesex-London, 2009 to 2013 annual average**



Source: Numerator: MLHU iPHIS database, extracted January 14, 2015. Denominator: Statistics Canada population estimates (2009-2012) and projections (2013), MOHLTC, intelliHEALTH Ontario, extracted September 26, 2014

### Impact of Middlesex-London STI/BBI trends

- Youth and young adults under the age of 30 years are a priority population for sexual health services and promotion efforts, given the high rates of chlamydia and gonorrhea reported in this age group, and the possible long-term impacts (e.g., PID) if these STIs are not prevented and/or properly treated. Recognizing the chlamydia and gonorrhea disproportionately affects those in the younger age groups, the sexual health team plans campaigns and presentations (i.e. Toys, Lubes and Condoms Show, Guinness World Record STI testing, health fairs) to increase sexual health awareness and promote STI/BBI testing.
- Gender-specific sexual health services and health promotion may be warranted for Hepatitis C, Infectious Syphilis, and HIV. As evident in the data presented above, majority (91.8%) of infectious syphilis cases were reported among males. Similarly for HIV/AIDS the number infections reported among females was less than half the number of male cases.
- The high rates of Hepatitis C infections in Middlesex-London compared to Ontario may warrant further investigation and action.

## Sexual Health Clinic Services

The Clinic team provides clinical services to address the local STI/BBi trends and the reproductive indicators. Clinical services for the provision of birth control and the diagnosis and treatment of sexually transmitted infections (STIs). Follow-up on reportable STIs are also performed by The Clinic staff to prevent transmission to others. Needle Exchange Program services are also offered at the Sexual Health Clinic. All services are confidential, non-judgmental, client-focused and easily accessible. The provision of these services are in place to ensure that the local STI/BBi trends and

The Clinic is comprised of the Sexually Transmitted Infection (STI) Clinic and Family Planning (FP) Clinic. The Clinic is located at 50 King Street and has an off-site office in Strathroy.

At the 50 King Street office:

- There are three Sexually Transmitted Infection (STI) Clinics per week. Clinics operate on a drop-in basis, and provide free and confidential testing, treatment and counselling. No health card is required. Females and males of all ages can access services offered at the STI Clinic.
- There are eight Family Planning (FP) Clinics per week. Clinics operate by appointment and provide [birth control](#) services, emergency contraception (plan B and IUD), pregnancy testing, family planning, cervical screening ([pap tests](#)) and breast examinations. A health card is usually required. Only females under 50 years of age can access services offered at the FP Clinic.
- Birth Control and the Emergency Contraceptive Pill (ECP) can be purchased on a walk-in basis Monday to Thursday 9am to 7pm and Fridays 9am to 4pm.
- Needle Exchange Program services are available on a drop-in basis Monday to Thursday 9am to 7pm and Fridays 9am to 4pm. Clients have confidential access to harm reduction supplies, including naloxone, and counselling which can be accessed through a private entrance. No health card is required.

At the Strathroy office:

- At the Strathroy office, services are available every second and fourth Thursdays of the month. No health card is required.
- Birth Control and the Emergency Contraceptive Pill (ECP) can be purchased on a walk-in basis every second and fourth Thursday of the month
- Needle Exchange Program services are available on a drop-in basis every Thursday. Clients have access to harm reduction supplies, including naloxone, and counselling, similar to those offered at the 50 King Street office. No health card is required and services are confidential.

## Client Demographics

Basic demographic information of clients is collected using the Hampson Client Management System. There were a total of 10,429 clients who visited The Clinic in 2014. Females were seen in a larger number, in comparison to males, as the Family Planning Clinic services are mainly targeted for females. Nearly half (47.0%) of the clients in 2014 were youth between the ages of 15 and 24.

**Table 1.1: Demographic characteristics of the clients attending The Clinic in 2014**

Age range		
	Female	Male
<15 years old	42	4
15 - 19 years old	1331	235
20 - 24 years old	2581	829
25 - 29 years old	1877	652
30 - 39 years old	1322	601
≥40 years old	489	466
<b>Total</b>	<b>7642</b>	<b>2787</b>

Source: Hampson Client Management System, retrieved June 10, 2015. Excludes gender not specified/recorded

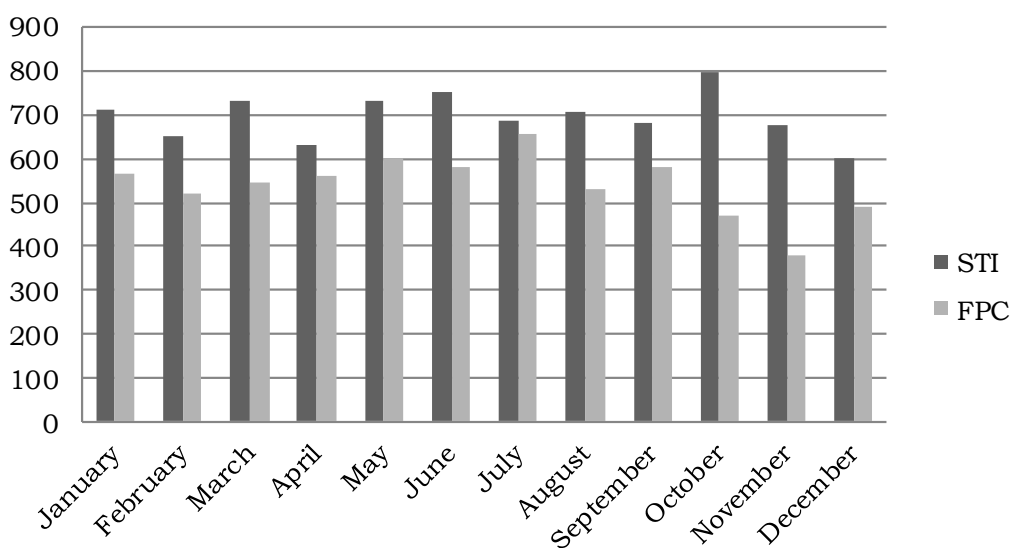


## Clinic visit

The number of clinic visits in 2014 was higher for the STI Clinics in comparison to the Family Planning Clinics. This is due to the drop-in clinic model, which allows for a high volume of clients to be seen. In 2014, the number of visits to the STI clinic was lower in the February, April and December months. This may be due to university/college reading week, summer and Christmas holiday seasons.

The number of visits to the Family Planning Clinic was smaller in comparison to the STI Clinic. The Family Planning Clinic operates a booked appointment clinic model. The length of the appointments are also longer depending on the reason for visit – hence, only a set number of clients can be seen per clinic. The number of visits appears to be lower in the October and November months. A potential reason for this decline could be the number of one doctor clinics in comparison to previous months. The total number of clinic visits in 2014 is illustrated in Figure 1.14 by month and clinic.

**Figure 1.14 Total number of visits, by Clinic and Month in 2014**

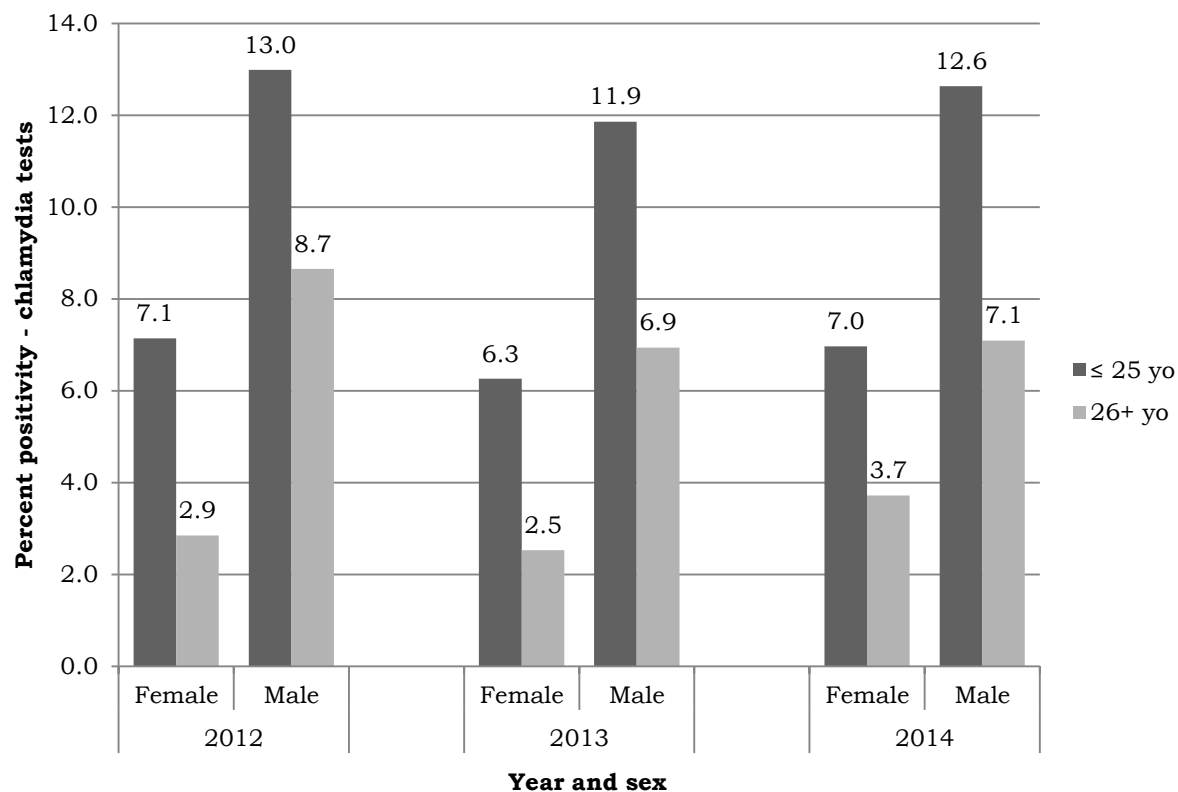


## Detection of Chlamydia and Gonorrhea in The Clinic

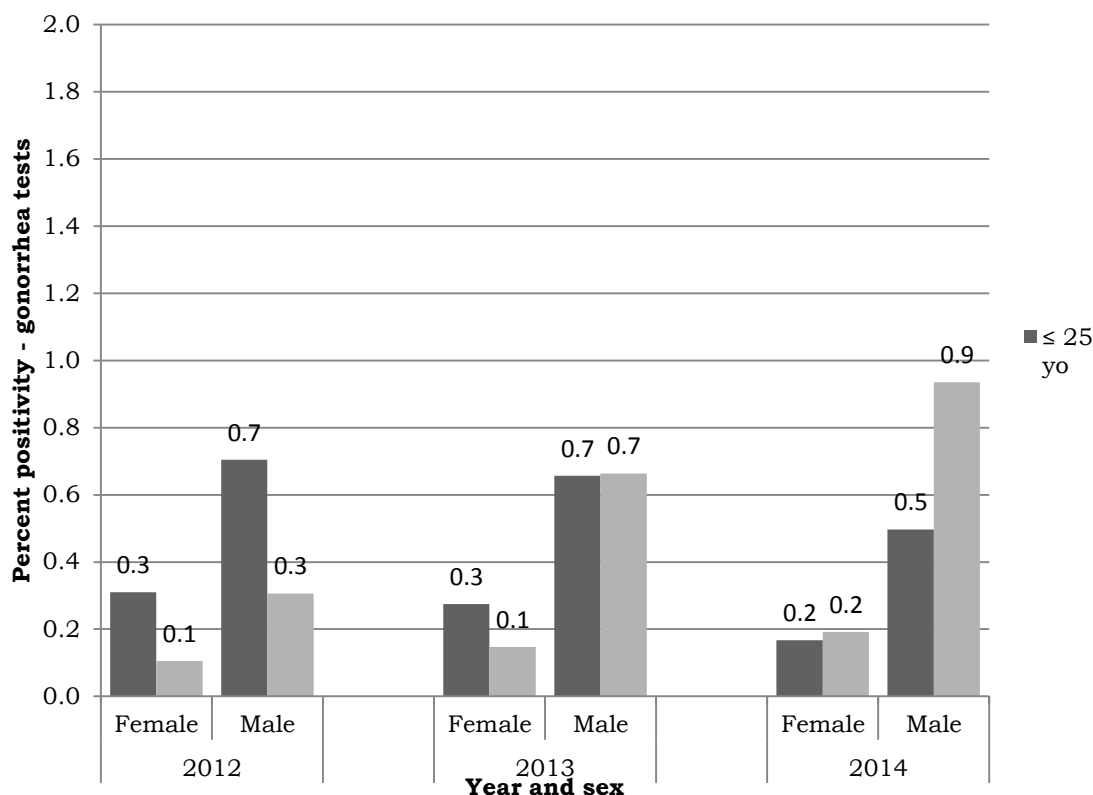
In 2014, there were a total of 1,468 cases of Chlamydia reported in the Middlesex-London region. 41.2% of the total confirmed cases (n=1468) in Middlesex-London were diagnosed at The Clinic\*. There were 8,922 clients tested for Chlamydia in The Clinic and 6.8% positivity among these tests. The percent positivity by gender and age group between 2012 and 2014 are depicted in Figure 1.15. Male clients had a higher percent positivity for Chlamydia in comparison to females in their respective age groups. For both males and females, clients aged 25 and under had a higher percent positivity than clients aged 26 and over.

In 2014, there were a total of 109 confirmed cases of Gonorrhea in Middlesex-London. 28.4% of the total confirmed cases (n=109) were diagnosed at The Clinic\*. A total of 8,938 clients were tested for Gonorrhea in The Clinic, with 0.3% positivity. The percent positivity for gonorrhea by gender and age group between 2012 and 2014 are depicted in Figure 1.16. In all age groups, male clients had a higher percent positivity for gonorrhea than the female clients. The age group with the highest percent positivity varied between 2012 and 2014. In 2012, male clients 25 and under had the highest percent positivity. However in 2013, the percent positivity for males was equal for both age groups. In 2014, males 26 years of age and over had a higher percent positivity in comparison to those 25 and under.

**Figure 1.15: Percent positivity of Chlamydia tests performed, by sex and age group, all MLHU clinics, 2012 to 2014**



\* The numerator used to calculate percent positivity includes all clients with laboratory confirmed infections diagnosed at the MLHU family planning and STI clinics, while the denominator includes laboratory-confirmed infections diagnosed among only Middlesex-London residents. Please interpret percent positivity with caution as the percentages presented may under- or over-estimate the percentage of infections among Middlesex-London residents diagnosed at MLHU clinics.

**Figure 1.16: Percent positivity of Gonorrhea tests performed, by sex and age group, all MLHU clinics, 2012 to 2014**

### Pap tests

Pap tests are solely done in the Family Planning Clinics. The number of pap tests completed between 2012 and 2014 are illustrated in Table 1.2. In 2014, there were 1,158 Pap test conducted in the MLHU Clinics. Between 2012 and 2014 there has been a 66% decline in the number of pap tests completed at the MLHU Clinics. Changes to the screening guidelines may be a contributing factor to this observed decrease.

**Table 1.2: Total number of Pap tests performed in all MLHU clinics\*, by age group, 2012 to 2014**

Age group (years)	2012	2013	2014
	# (column %)	# (column %)	# (column %)
< 15	4 (0.1%)	0	0
15-19	374 (11.0%)	42 (2.0%)	10 (0.9%)
20-24	1,162 (34.1%)	708 (33.4%)	373 (32.2%)
25-29	1,022 (30.0%)	735 (34.7%)	361 (31.2%)
30-34	458 (13.4%)	314 (14.8%)	208 (18.0%)
35-39	184 (5.4%)	168 (7.9%)	97 (8.4%)
40-44	114 (3.3%)	92 (4.3%)	64 (5.5%)
45-49	81 (2.4%)	60 (2.8%)	39 (3.4%)
≥ 50	8 (0.4%)	1 (0.0%)	6 (0.5%)
<b>TOTAL</b>	<b>3,407</b>	<b>2,120</b>	<b>1,158</b>

## Pregnancy Tests

Pregnancy testing is available in both the Family Planning Clinics and the STI Clinics. The number of positive pregnancy tests between 2012 and 2014 are illustrated in Table 1.3.

**Table 1.3: Number of positive pregnancy tests in Family Planning and STI Clinics, 2012 to 2014**

	2012	2013	2014
<b>Family Planning Clinic</b>	105	164	219
<b>STI Clinic</b>	152	137	80

## Emergency Contraceptive Pill

The Emergency Contraceptive Pill (ECP) prevents pregnancy by preventing or delaying the release of the egg. It is used to prevent pregnancy up to 72 hours after unprotected intercourse. There is some evidence that it may be taken up to 120 hours, but it may not be as effective. ECP is available for sale at The Clinic. Clients or a third party can obtain ECP following a consult with a Public Health Nurse. The number of ECP sold at The Clinic between 2012 and 2014 are illustrated in Table 1.4.

**Table 1.4: Number of Emergency Contraceptive Pills sold in The Clinic, 2012 to 2014**

	2012	2013	2014
Plan B	145	1	2
NovLevo	530	667	568

## II. Priority Population for Sexual Health Services

The Ontario Public Health Standards (OPHS) is the overarching body that mandates the services provided for Sexual Health. The OPHS set requirements to help enable the Board of Health to reach the desired sexual health goals and outcomes. A key component of these requirements is to “identify and work with local priority populations” (Ontario, 2008). Priority populations are defined as those “at risk and for whom public health interventions may be reasonably considered to have a substantial impact at the population level” (Ontario, 2008). As per the *Population Health Assessment and Surveillance Protocol (PHASP) (2008)*, priority populations can be defined by considering the following factors:

- Socio-demographic and geographic characteristics of the population residing in Middlesex-London
- Interpretation of existing and/or acquired data and information that describe the relationship between the barriers and specific program requirements (e.g., relationship between age or education and reproductive outcomes; immigration status and tobacco use etc.)
- Program evaluation data and information which identifies program benefits and gaps for diverse populations.

Priority populations for STIs/BBIs have been well researched and defined by the Public Health Agency of Canada (PHAC). The Canadian Public Health Association (CPHA) has further refined this to include:

- Aboriginal peoples (First Nations, Inuit, and Métis peoples)
- Gay, bisexual, two-spirit, and other MSM (men who have sex with men)
- People who use substances, including injection drugs
- People who are or have been in prison
- Youth at risk
- Women at risk
- People from African, Caribbean, Black (ACB), and other countries where HIV is endemic, including newcomers
- People who are living with HIV/AIDS
- Other population groups, such as those without legal status in Canada or without health insurance and people without a family doctor

Presently, the reach of The Clinic to priority populations as defined by PHAC, cannot be formally reported due to limited data collection of pertinent variables. However, with the review of clinic activities, it is evident that focused work (i.e. visitation to the Elgin Mills Detention Centre, community presentations) is done with specific priority

populations (youth, Lesbian Gay Bisexual Transgender Queer (LGBTQ) population and at-risk women who are incarcerated). In addition, review of the client demographics indicate that the clinic services are largely accessed by youth. This suggests that the clinic services are accessed by some of the identified priority populations – however the extent of this reach cannot be reported with certainty.

As next steps, the proportion of the above identified priority population in Middlesex London will need to be estimated. In addition, a formal assessment of The Clinic's reach will need to be conducted when pertinent data becomes available. Determining the proportion of clients from priority populations who utilize clinic services will help assess whether the current clinic model/practices sufficiently reaches the priority populations. This will further help evaluate whether the board of health outcomes regarding priority populations have been achieved.

### III. Alignment of clinic activities with the Ontario Public Health Standards

A review of the OPHS was performed by The Clinic team to align its activities with the requirements under the Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections component. There are 12 requirements in this component categorized into three sections: *Assessment and Surveillance, Health Promotion and Policy Development and Disease Prevention/Health Protection*. The requirements were reviewed and corresponding clinic activities were identified by the team to determine whether the current clinic practices fulfilled the requirements. This helped determine areas of strength and identify gaps. A complete table of the analysis can be found in *Appendix A*.

Overall, The Clinic meets the requirements of the Sexual Health, Sexually Transmitted Infections and Blood-borne Infections Standard, with a few identified gaps. Clinic activities met and exceeded the requirements in the *Assessment & Surveillance and Health Promotion & Policy Development* sections. However, a few gaps were identified in the *Disease Prevention/Health Protection* section from this review process:

#### **Requirement #7:**

***The board of health shall provide clinical services for priority populations to address contraception, comprehensive pregnancy counselling, sexually transmitted infections, and blood-borne infections. For further information, refer to the Sexual Health Clinic Services Manual, 2002 (or as current).***

Clinical services to address contraception, comprehensive pregnancy counselling and STIs/BBIs are available for priority populations. Targeted work is also done with priority populations such as women at risk, youth, LGBTQ to raise awareness and promote the use of clinical services. With the current information available, the case demographics of clients indicate that clinic services are utilized by those between 15-24 years of age.. In 2014, The Clinic was utilized by 3,912 female clients and 1,064 male clients in the 15-24 year age group. Youth between the ages of 15-24 have been considered a priority population for sexual health, as incidence rates suggests that STIs, particularly Chlamydia and Gonorrhea, disproportionately affects those in the younger age groups (refer to Local and Provincial STI/BBi trends section). Additionally the refined priority population list provided by the CPHA further indicates that youth are a priority population for sexual health (CPHA, 2012).

#### **Requirement #9:**

***The board of health shall provide or ensure access to provincially funded drugs for the treatment of sexually transmitted infections, at no cost to clients, in accordance with the Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008 (or as current).***

Testing and treatment for STIs is consistently practiced in The Clinic, and is available to all clients. To further increase the accessibility to STI treatments, The Clinic distributes provincially funded STI medications to community health care providers. The availability of this service is communicated to physicians through MLHU's Health Care Provider Outreach initiative. With the extent of current efforts, there has been a low uptake of this service. In 2014, there were only 19 community physicians that requested provincially funded treatments from the Health Unit.

**Requirement #10:**

***The board of health shall communicate and coordinate care with health care providers to achieve a comprehensive and consistent approach to the management of sexually transmitted infections and blood-borne infections.***

Currently, the Sexual Health Team communicates information and updates through the electronic and paper-form binder that is associated with the MLHU Health Care Provider Outreach initiative. However, the team identified concerns regarding limited engagement with and lack of use of STI best practices (i.e. incorrect use of first-line of treatment for gonorrhea) among community physicians, with current team outreach efforts.

In regards to coordination of care, it was identified that there was good coordination of care between the community health care provider, the Health Unit and support services. Health care providers connect with the Health Unit to coordinate care on an as needed basis.

In addition to the 12 requirements under the Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections Standard, The Clinic team identified additional activities routinely performed in the clinic that did not fit under the *Assessment and Surveillance, Health Promotion and Policy Development and Disease Prevention/Health Protection* sections. Hence, to comprehensively capture these practices, a section, *Knowledge Exchange and Continuous Quality Improvement (CQI)*, was developed. The Clinic performs annual chart audits to ensure documentation is consistent with the College of Nursing standards (Appendix B), quarterly meetings with the Sexual Health team for knowledge exchange and CQI purposes and annual review of professional licenses. A complete list of the additional activities is listed in Appendix A.

The Clinic's Knowledge Exchange and CQI practices are found to closely align with the Quality Assurance component of the Ministry of Health and Long Term Care's *Sexual Health Clinical Services Guidance Document* (MOHLTC, 2002). These activities met the three required components for the Quality Assurance program, as per the MOHLTC document:

Requirements for Quality Assurance	Clinic activities
Identification and addressing of members who are incapacitated, incompetent or unfit to practice	<ul style="list-style-type: none"> <li>Annual review of Physician License and Canadian Medical Protection Association Status</li> <li>All PHN's have current College of Nurses license</li> </ul>
Professional development through the improvement and maintenance of competence	<ul style="list-style-type: none"> <li>In-services by physicians and other internal and external guest speakers;, learnings from staff attending conferences shared</li> <li>Protocol updates (e.g., processing/ dispensing external birth control scripts</li> <li>Consultation with Professional Practice Leader related to nursing practice</li> </ul>
Improvement of patient outcomes through concentration on professional performance	<ul style="list-style-type: none"> <li>Surveys</li> <li>Chart audits</li> <li>Incident reports</li> </ul>

## Clinic Team Consultation and Activity

Engagement with frontline staff was a key contributor to this program review. Input was sought from The Clinic team via unstructured discussions. The objective of these discussions were to gauge the team's perspective on aspects of The Clinic and gather information on gaps and barriers that have been observed during interactions with clients. Through the discussion the following themes surfaced:

### Access to Family Planning Clinic services for clients without a health card

Clients with family planning needs require a health card to access family planning services. This presents a barrier to access clinic services for clients without a health card. Although physicians are encouraged to see up to 3% of clients without a health card, there have been challenges associated with this strategy. It was identified that having a structured process in place would ensure an efficient clinic flow by equally distributing clients without a health card to each clinic physician. Further, PHNs who visit the Elgin Mills Detention Centre have received feedback from inmates regarding the challenges around accessing family planning services. The feedback suggested that individuals may not all have a fixed address to apply and obtain a health card.

### Enhancements to the Electronic database

Limitations of the current electronic database were identified during the discussions. It was identified that enhancements to improve the data quality and usability of the database can be beneficial. There is limited capacity to directly download lab results from the Public Health Ontario Laboratory. As a result the current practice is to manually input the results. Although a formal audit to determine the rate of transcription errors for manual data entry was not performed, this practice introduces a potential for transcription errors. The long term sustainability of the database was identified to be limited; hence there is a need to explore other options for an electronic database, if feasible.

### Expand the methods of payment accepted and birth control options and vaccines

Cash and debit are the only method of payment accepted at The Clinic. This has been a barrier for clients who prefer to pay with credit. The total amount owing can be large depending on the type of birth control purchased (i.e. IUD/IUS) or if the client purchases birth control months in advance. In such cases, clients have had to leave the site to withdraw cash. This results in some clients who do not return to complete the purchase.

Additionally, a need to expand birth control and vaccine options in The Clinic was also identified as the current vaccine stock does not align with client needs. For example, the Gardasil vaccine is only stocked in the Immunization Clinic. Clients who request this vaccine need to visit the Immunization Clinic to purchase the vaccine and have it administered. This poses challenges because the clinic hours of the Immunization Clinic and the Sexual Health Clinic do not always coincide; resulting in clients having to return to the Immunization Clinic on another day to have the vaccine administered.

### Continuously engage and enhance partnerships with community health care providers

Updates regarding STI treatment guidelines are communicated to community healthcare providers through the Health Unit's Community Healthcare Outreach Provider Initiative. Through this initiative updates are communicated in a binder format, along with other Health Unit-wide updates. However it is unclear if information in the binder is reviewed by the health care provider. Challenges were identified with this approach, as there continues to be inconsistent adherence to the STI best practices guidelines. Follow-up with community physicians for confirmed STI cases often reveal that incorrect STI education is provided to clients or an incorrect treatment is prescribed.

## IV. Harm Reduction Best Practices Review Summary

### Background

#### Ontario Public Health Standards 2008

Sexual Health, Sexually Transmitted Infections, and Blood -borne Infections (including HIV) program standard - Board of health outcome:

- Priority populations have access to harm reduction services to reduce the transmission of sexually transmitted infections and blood-borne infections.

Specific requirements under this standard:

11. The board of health shall engage community partners and priority populations in the planning, development, and implementation of harm reduction programming.
12. The board of health shall ensure access to a variety of harm reduction program delivery models which shall include the provision of sterile needles and syringes and may include other evidence-informed harm reduction strategies in response to local surveillance.

#### Current Harm Reduction Programming at MLHU

The Counterpoint Needle Exchange Program (NEP) is operated by the Regional HIV/AIDS Connection (RHAC) and funded through the Middlesex-London Health Unit. The NEP offers clean needle/syringes and related equipment; safer inhalation kits; sharps containers and sharps collection; and information related to safer drug use, drug treatment, and general health and wellness. Overdose prevention education, training and naloxone kits are available to those at risk of opioid overdose through *The Naloxone Program*.

#### What is Harm Reduction?

“Harm reduction emphasizes human rights and the importance of treating all people with respect, dignity and compassion, regardless of drug use. It is a non-judgmental approach that accepts the person as they are and their right to make choices.” (CNA/CNAC, 2012, pg. 1)

Harm reduction is characterized by:

- A primary goal of reducing drug-related harm rather than a primary goal of reducing drug-use
- Pragmatic strategies and interventions for people who continue to use drugs
- A net reduction in drug-related harm
- Ensuring drug users are treated with dignity. This includes a non-judgmental and non-punitive stance towards the consumption of alcohol and drugs
- A focus on realistic and achievable goals  
(Erickson et al., 1997; Lenton and Single, 1998 in Strike et al. 2006).

Using these principles, harm reduction programs are developed to reduce or eliminate the adverse health, social, and economic consequences of drug use without requiring abstinence (Strike et al. 2006).

#### Best Practices

Information that follows has been drawn from Canadian best practice documents. The focus of this best practice review is on the high level program structure and includes the following components: program delivery models, staffing, additional services, needle disposal and recovery, and monitoring and evaluation. Specific recommended practices related to distribution of each piece of safer drug use equipment exists, but is not reviewed here. This information can be found in the 2013 Best Practice Recommendations for Canadian Harm Reduction Programs document.



## Program Delivery Models

- The design and implementation of service delivery models should be tailored to local needs, taking into account level of injection drug use, types of drugs used, and population demographics.
- Offering NSPs through health units can enhance effectiveness of services.
- Providing services at multiple sites with varied hours of operation increases access. Internationally, many of the most successful NSPs provide a mix of service delivery modes.
  - Regular hours and permanent sites ensure people know when and where to access services.
  - Mobile services and outreach expand geographic and service coverage to areas where people commonly use drugs and reach those who don't access fixed-site locations
  - Peer distribution can increase access to harm reduction supplies for people who use illegal drugs.
  - Provision of injection equipment by pharmacies can increase the availability and the use of sterile equipment. However evidence shows that there is a reluctance of pharmacists to do so.
  - Several countries, including Netherlands, Germany, Italy and Australia, use syringe vending machines to supplement fixed-site services

“Offering needle exchange services in more than one location, at different times of the day and night and from different models of delivery is likely to increase the number of IDUs who will use program services and maximize the effectiveness in terms of preventing transmission of HIV, HBV, HCV and other blood borne pathogens” (Strike et al. 2006).

## Staffing

Best Practice documents are consistent in their assertion that the attitudes and knowledge held by staff are imperative to the effectiveness of NEPs and the harm reduction approach.

Staff who are approachable, friendly, non-judgemental, non-directive, knowledgeable, and have awareness of issues related to addictions and street-life are better able to develop and sustain rapport with clients (Strike et al., 2006). Ongoing staff training and development has been identified as a need internationally, nationally, and provincially (BCCDC, 2008).

It is imperative that staff have knowledge of safe injection and inhalation equipment and practices in order to educate clients. Within Ontario, a series of training webinars has been developed and held by the Ontario HIV and Substance Use Training Program (OHSUTP) in partnership with AIDS and Hepatitis C Program of the MOHLTC. Topics include: Injection drug use and equipment; Smoking crack cocaine and equipment; Harm reduction: Further strategies and issues to consider. Additionally the Best Practice Recommendations for Canadian Harm Reduction Programs document contains equipment specific chapters with detailed practice recommendations to guide NEP staff practice.

“Nurses have a responsibility to provide non-judgmental care to individuals and families affected by substance use, regardless of setting, social class, income, age, gender or ethnicity, and they can influence the development of organizational and governmental harm reduction policies related to drug use” (CNA/CNAC, 2012, pg. 1).

## Additional Services

People who inject drugs often have and are at risk for multiple health problems yet they experience significant barriers to accessing health services. NSPs are most effective if they provide or are linked with primary health care services, and additionally provide referrals and warm transfers to health and social services in the community who are supportive and non-judgemental. Such services for provision or referral include wound care, abscess care and other first aid; HIV, Hep C, TB testing and counselling; vaccination; sexual health services, drug treatment information and services; resources and services to meet basic needs including food and housing (BCCDC, 2008; Strike et al, 2006).

NSPs should maintain a supply of appropriate written materials including information about safer injecting practices, prevention of transmission of blood borne diseases, overdose prevention, vein care and safer sex. Provision of these materials can provide opportunity for client engagement, health promotion and other interventions (BCCDC, 2008).

## **Needle Disposal and Recovery**

NSPs “have an obligation to provide a robust recovery and disposal system”. Effective recovery and disposal practices require multiple approaches (sharps containers, drop boxes, pick-up services) and the participation of a variety of stakeholders (e.g. municipal governments, business associations, community agencies, and people who use injection drugs) (BCCDC, 2008).

The 2013 Best Practice Recommendations for Canadian Harm Reduction Programs document recommends the following practices for disposal and handling of used drug equipment:

- “Regular review and assessment of compliance with local, provincial/territorial and federal regulations regarding collection, storage, transportation, security and disposal of biomedical waste
- Educate clients and staff members on how to properly handle, secure and dispose of used injection and non-injection equipment
- Encourage clients to return and/or properly dispose of used injection and non-injection equipment
- Provide clients with tamper resistant sharps containers in a variety of sizes
- Provide multiple, convenient locations for safe disposal of used equipment in rural and urban settings. Do not penalize or refuse to provide new equipment to clients who fail to return used drug equipment.
- Visually estimate the amount of returned equipment; staff should not touch used equipment and neither staff nor clients should manually count used equipment
- Encourage staff and clients to be vaccinated against hepatitis B (HBV)
- Provide access to safety devices for staff and procedures for first aid and post-exposure prophylaxis (PEP)”

## **Monitoring and Evaluation**

Ongoing/periodic monitoring and evaluation is important to determine to what extent the NSP is meeting the needs of clients and the community. Suggested types of information to collect include: what drugs are being used locally and modes of administration; levels of knowledge regarding risk and protective behaviours; patterns of risk and protective behaviours such as needle sharing; adverse health consequences of drug use; client demographic information including gender, age, ethnicity, Aboriginal status, gender identity, where clients live and use drugs (BCCDC, 2008; Strike et al, 2006).

It is recommended that NSP activity reports collect information such as dates, times and locations of client contacts; supplies provided; and if provision of or referral to other health services was completed (BCCDC, 2008).

## V. Sexual Health Clinic Literature Summary

### **Key Findings**

- High quality evidence on models for the delivery of sexual health clinic services is very limited.
- Outreach strategies have been found to be successful in reaching populations that would not otherwise access mainstream sexual health services.
- Due to limited high-quality literature, it is recommended that sexual health clinic models be determined based on the needs of specific populations. It is also recommended that populations not utilizing clinic services are identified, and their sexual health needs and barriers to accessing sexual health clinic services are assessed.
- If outreach clinics are incorporated into sexual health programming, it is recommended that the health unit collaborates with community organization(s) and builds trust within the target populations to ensure efficiency and success.
- Incentives were effective in increasing the uptake of STI testing; the use of incentives in non-clinical settings was more effective than in clinical settings. This approach reached populations most at risk and with limited access to services.

Sexual Health Clinical Services are guided by the principles of the MOHLTC's *Sexual Health Clinical Services Guidance Document* (MOHLTC, 2002). This document discusses various aspects of Sexual Health Clinics and provides direction for the planning and delivery of clinical services. The clinic model by which services are delivered is determined by individual Public Health Units. Hence, this literature review was initiated to identify evidence informed clinic strategies/models.

The aim of the literature review was to identify strategies/models most effective in the delivery of sexual health clinic services. Searches were conducted on the Canadian Best Practices Portal, EBSCO, EMBASE, Medline, HealthStar, Cochrane, PubMed and Public Health Grey Literature Database. Limited publications were identified for sexual health clinical services in Canada; hence, the scan was expanded to include sexual health clinic services in Australia and United Kingdom. The search strategy and the screening flowchart are documented in Appendix C.

The search generated 978 articles that were screened by title and abstract for relevancy. Full text articles were retrieved for 84 articles of which 82 articles were excluded. To align with the NCCMT 6S Pyramid only meta-analyses, systematic reviews and guidance documents were reviewed. Systematic reviews were critically appraised using the AMSTAR tool. Through this process there were two high-quality articles that were identified. The two systematic reviews identified discussed two different strategies for the delivery of sexual health clinical services: outreach clinic programs (Hengel et al., 2013) and incentivized testing (Lee et al., 2014).

### **Outreach**

Outreach is an effective approach to deliver sexual health clinic services to populations that may not access mainstream sexual health services. Clinics situated within existing venues that are frequented by at-risk populations appear to be most successful in encouraging participation and increasing the uptake of sexual health services. Despite this approach reaching a relatively small and specific population, the yield of infection among those tested was high. The systematic review conducted by Hengel et al. (2013) identified 18 articles reporting 25 unique outreach programs implemented within various settings. For the purpose of this report, only outreach programs in Canada, US, Australia and UK are discussed.

#### *Men who have sex with men (MSM)*

Six outreach programs targeted men who have sex with men (MSM). Outreach in five out of the six programs was implemented in sex venues, and one program was implemented in a social venue. Testing for Chlamydia and Gonorrhea were offered in a sex venue in Australia over the course of 8 weeks. A low participation rate was recorded among those that attended the sex venues; however among those who participated, the testing rate was high. Of the 521 participants, 98% provided a urine sample, 97% provided a rectal swab and 100% provided a throat swab (Lister et al., 2003). Building on this outreach approach, follow-up clinics were conducted in the same sex venues, but offered comprehensive sexual health services (i.e. Hepatitis C testing, syphilis testing, STI treatment, etc.) rather than offering tests for Chlamydia and Gonorrhea only (Lister et al., 2005). The outcomes of the Chlamydia and Gonorrhea outreach clinic and the comprehensive sexual health clinic were evaluated. The

evaluation report highlighted that although the comprehensive sexual health clinic served a smaller number of MSM, a significantly higher positivity rate was found in the comprehensive clinic than the one offering Chlamydia and Gonorrhea tests only (Lister et al., 2005). Similarly an outreach program in men-only sex venues in the UK, performed 193 assessments (of which 20 were from returning clients) over 12 visits, and detected a total of 12 STI cases among the 173 unique assessments (Emerson et al., 2010). Evaluation of this model found that the outreach clinic reached a population that would not otherwise be tested. An outreach program in the US also offered a venue-based HIV/STI testing to MSM accessing sex venues, event, parties and internet sex sites. A total of 1694 clients participated, of which 1357 (80.1%) were tested for HIV and 934 were tested for Chlamydia and Gonorrhea. Among those tested there were 42 cases of HIV, and 11.6% tested positive for Chlamydia, Gonorrhea, or both (McNeely et al., 2010). In addition, an outreach initiative during events attended by MSM offered comprehensive health services, including sexual health. The participation rate was not reported due to multiple health services being offered, however there were 182 participants that provided a urine/blood sample for STIs (Blank et al., 2005).

Further to the articles included in the systematic review, an outreach program, Know on the Go, planned and implemented in Vancouver was identified in the literature search (Vancouver STOP Project, 2013). The initiative was informed with findings from a community consultation report with men in outdoor sex venues. This helped determine the need within the population and the strategies that would best address the need. Using this information, mini satellite sexual health clinics were planned and implemented by the region's health authority in collaboration with community agencies. Clinics were set up in three bathhouses and via a mobile van – offering all the services as a sexual health clinic, but outside of the traditional clinic setting. This approach was noted by nurses to provide an opportunity to address a range of issues beyond HIV and STIs. Performance reports have shown that both initiatives provide an opportunity for HIV/STI testing in populations that may not otherwise get tested (Vancouver STOP Project, 2013). This initiative was found to reach an important demographic as 10% of the people using this service had never been tested for HIV and 18% had never been tested for STIs, while 45% had not been tested for HIV in more than a year (Vancouver STOP Project, 2013). Overall this pilot project was found to be helpful in reaching those that may not otherwise access services and provided an opportunity to initiate contact with healthcare providers. Comprehensive outreach sexual health services are feasible, but are dependent on developing strong relationships, maintaining a passive approach and providing flexible and individualized services.

In summary, most of the outreach clinics targeted toward MSM were developed in response to the population's need. Although the total participation rates among total venue attendees were not reported in many of the studies, the uptake of the services among those that participated was high. Successful execution of the clinics involved partnerships and collaborations with community organizations.

### *Youth*

There were eleven youth outreach programs that were identified in the review by Hengel et al. (2013). All eleven outreach programs were conducted in Australia and US. Four programs were conducted in street or community areas, four were conducted in service venues and three were conducted in social venues (i.e. sporting club, leisure centres). Venue-based outreach was found to be a more successful strategy than offering outreach for sexual health services in street settings for youth.

### *Social venue*

In studies reporting outreach models in social venues, participation rate was reported in two out of the three outreach programs, with rates above 80% in both studies (Lorimere, Reid & Hart, 2009; Kong et al. 2009). Among those that participated, testing rates were the highest (100% and 85.2%) in outreach clinics conducted in sporting clubs (Gold, Hocking & Hellard, 2007; Kong et al. 2009). Outreach clinics in sporting clubs approached players in the locker rooms and asked for their participation. Among those asked, 108 agreed to participate and completed a survey about their sexual health (i.e. behaviours, partners, seeking health care), of which 92 participants provided a urine sample (Gold, Hocking & Hellard, 2007). The positivity rate was 3.9% for Chlamydia and 0 cases of Gonorrhea. The survey revealed that among the 108 participants, only 33% had ever discussed their sexual health with their physician. Similarly, a study conducted in Australia had sexual health outreach clinics in sporting clubs (Kong et al. 2009). The outreach clinic had a 95% participation rate, with 709 individuals participating. This strategy was used to screen for Chlamydia, and yielded a positivity rate of 3.9%. Upon evaluation, the outreach strategy was found to be well received by the youth population and participants found the outreach clinic useful as it increased access to testing and treatment. Furthermore, outreach services were setup in three social venues (workplace, education setting, and fitness centre) in the UK (Lorimere, Reid & Hart, 2009). Among the three settings participation was highest among outreach clinics in health and fitness centers (48%). The overall positivity rate was 4.4% for Chlamydia. Among those that participated, 93.4% of males and 66.6% of females reported not having tests for Chlamydia completed in the past. Overall outreach in social venues was found to be feasible and acceptable among youth. Highest participation rates were found particularly among fitness/sporting clubs among the three studies discussed.

### *Service Venue*

Five studies reviewed in the systematic review were conducted in either service venues, street settings or both. Two of the five studies (Martin et al., 2009; Johnson et al., 2008) are excluded as the services (i.e. mail-in testing kits) offered in the outreach clinics fall outside the scope of this review. Among the three studies, only one reported a participation rate (81.3%) for outreach in service venues (Marrazzo et al., 2007) and two reported participation rates for street/community setting outreach programs – both below 25%. (Marrazzo et al., 2007; Buhner-Skinner et al., 2009).

A study conducted in the US set up outreach programs in various settings, including a drug treatment facility and a street setting. A higher uptake of STI services was observed in the drug treatment facility (81.3%) in comparison to outreach STI services in street settings (23.9%) (Marrazzo et al., 2007). Positivity rates for Chlamydia were not provided in this study. Similarly a study by Morris et al. (2010) provided outreach clinics in service venues and street/community settings. A total of 1632 individuals were screened at venues located in high STI prevalent areas. Highest numbers of participants were tested in a community area, followed by parenting centres and drug treatment centres. Participation rates were not reported; hence it is unclear which setting had a higher uptake of services. Outreach initiatives in drug treatment and corrections centres yielded the highest positivity rate (11.1%). This was followed by individuals reached in parenting centres (6.3%) and finally outreach in community areas (4.9%) (Morris et al., 2010). This study also highlighted that using peer volunteers increased Chlamydia case detection by 3.2% in comparison to outreach where peer volunteers were not used. In addition, Buhner-Skinner et al. (2009) provided outreach services in street settings and service venues targeted toward youth. The street outreach program resulted in participation rate of 21.3%, while a participation rate for the service venues was not reported. No cases of Chlamydia were detected in the street outreach program, however a 13% positivity rate was found in the outreach program in the service venue (Buhner-Skinner et al., 2009).

Further to studies discussed in the systematic review, an evaluation report of an outreach clinic was identified in the literature search. In the UK, outreach clinics have been provided in youth clubs to provide sexual health services in an accessible and user-friendly manner (Hayter, 2005). The clinics were set up in areas where levels of teen pregnancy and STI rates were high. These services were provided by nurses as well as youth workers (who were trained in counselling, provided education on safer sex, condom use and provided information on contraception, and STIs). The clinics were staffed by a nurse and two youth workers once a week. An evaluation of this clinic revealed that youth found the outreach clinics to be confidential, a place where they were listened to and a safe place to discuss sexual health and relationship issues. The evaluation highlighted that situating outreach clinics where youth would normally attend for social reasons was reported to be helpful by many respondents. Although youth indicated that they attended the venue to “chill out”, many subsequently used sexual health services. This evaluation found that situating an outreach clinic in a social setting to be successful in reaching youth (Hayter, 2005). However, because baseline data is not provided, it is difficult to determine whether a higher percentage of youth utilized the outreach services in comparison to non-outreach clinics.

### *Additional venues for at-risk populations*

Shelters are also potential venues for outreach services. Outreach clinics were implemented in two cities in USA. Outreach was used to provide sexual health services to adults accessing services at the shelter (Grimley, 2006). This strategy yielded a high participation (96.7%) rate, a high testing (98.6%) and a high rate of test result retrieval over the three month period. A \$12 food coupon was provided as an incentive to participants, and may be a contributing factor to the high participation rate. Through the outreach clinic, 32 cases of Chlamydia, 23 cases of Gonorrhea, 3 cases of Syphilis and 2 cases of HIV were detected. All individuals that were positive were asymptomatic. In addition, Hengel et al. (2013) reviewed a study where sexual health services were provided at a community venue targeted toward the transgender community and women (Rusch et al., 2008). Screening for STIs occurred during a weekly program that provided food and general health care services. Participation rates were not included however, among those that participated (n=126), the testing rate was 73%. The positivity rate of Chlamydia was 2.2% and no cases of Gonorrhea were detected.

### *Possible Implications for Practice*

Based on the literature available, outreach clinics appear to be beneficial in reaching populations that may not actively seek out sexual health services. Outreach clinics organized in existing venues appear to be more successful in encouraging participation than street-based settings. The studies discussed above have provided outreach services to those that are identified as priority populations by Canadian Public Health Association (please refer to the Priority Population for Sexual Health Services section). Hence it may be worthwhile to identify populations that have limited access to sexual health services in the Middlesex-London region and consider offering outreach services. In addition, it is recommended that a focus group or discussions be held with the target priority population to determine the feasibility of outreach services in the local context prior to implementation.

### **HIV/STI Incentivized testing strategy**

The provision of incentives to increase the uptake of STI/HIV testing has also been identified as an effective strategy among various populations. A systematic review was identified, where the impacts of incentivizing HIV/STI testing in clinical and non-clinical settings was assessed. Lee et al. (2014) reviewed seven articles, two of which were from developing countries. Hence for the purposes of this report, the findings of these two articles are excluded. Of the remaining five studies, four were conducted in various locations across the US and one in Australia. Studies were conducted in clinical settings in three out of the five articles (Chacko et al., 1987; Haukoos et al., 2005; Malotte et al., 2004), and the remaining two were in non-clinical settings (Geringer & Hinton, 1993; Currie et al., 2010). Incentives varying between 5\$ to 25\$ was provided in four of the reviewed studies, and an incentive to enter into a \$50 lottery was provided in the remaining study.

A higher rate of STI/HIV testing was reported in the incentivized group in comparison to the control in all five of the reviewed studies (Table 2). Studies in clinical settings had a modest point difference between the incentivized and non-incentivized group (Chacko et al., 1987; Haukoos et al., 2005; Malotte et al., 2004). In comparison, studies in non-clinical settings reported a larger point difference between the two groups (Geringer & Hinton, 1993; Currie et al., 2010). In two of the studies conducted in a clinical setting, a non-significant difference was found among the incentivized and non-incentivized group. The incentives (\$20 and entrance into 50\$ lottery) in both studies were provided during re-tests. Only one study conducted in a clinical setting reported a significant difference between the two groups. The incentivized group in this study received a 25\$ incentive. In contrast, the two studies conducted in non-clinical setting were found to have significant difference between the incentivized and non-incentivized group – one study offering a 5\$ incentive and the other offering a 10\$ incentive.

Overall, incentives were effective in increasing the uptake of STI testing, with a great effect found with incentives provided in non-clinical settings in comparison to clinical settings. This approach reached populations most at risk and with limited access to services. Implementation of incentivized non-clinical testing can provide opportunities to increase STI testing and reach populations previously missed via traditional testing methodologies.

**Table 5.1: Characteristics of HIV/STI Incentivized testing studies reviewed**

<b>Study Author</b>	<b>Setting</b>	<b>Population</b>	<b>Outcome measure</b>	<b>Control group</b>	<b>Intervention group</b>	<b>Outcome of intervention group</b>	<b>Outcome of control group</b>	<b>Statistical analyses between the groups</b>
Chacko et al.	Clinical, Baltimore USA	Teenagers treated at an STI clinic	Test of cure rate	Request for test of cure	Control group with the incentive of entrance into 50\$ lottery	33%	31%	Non-significant
Currie et al.	University setting, Australia	Sexually active university students	Screening rate	Screening offered at campus activities	10\$ incentive for on-campus screening and result retrieval via text messages	42.4%	22.9%	Significant
Geringer & Hinton	Shelters and Drug treatment centres, Philadelphia USA	Population in shelters and drug treatment centres	Test result retrieval rate	Testing and result retrieval at shelters and STI centres	Control group with \$5 incentive for test result retrieval	69%	47%	Significant
Haukoos et al.	Clinical, Los Angeles, USA	Emergency Department patients with high HIV risk	Screening rate	Referral for voluntary counseling and testing 1 week after ED visit	Control group with 25\$ incentive for the fulfillment of voluntary counseling and testing referral	23%	8%	Significant
Malotte et al.	Clinical, Prince George's County and Los Angeles	Patients treated in an STI clinic	Repeat testing rate	Request for 3 month retesting	Control group with 20\$ incentive for retesting	13.2%	11.4%	Non-significant

## Limitations

- There is limited high-quality evidence and research published on sexual health clinic models. Among the two systematic reviews that were identified, two different strategies were discussed.
- All studies that utilized an outreach model did not have a control group, making it difficult to determine whether the uptake of clinical services by a population is truly higher in the outreach model.
- Prevalence of STI/BBIs and uptake statistics reported in the individual studies may not be reflective of the uptake of services if the Health Unit were to adopt a similar strategy as the Middlesex County and London population may be different. The generalizability of the findings are weak as many of the studies, because they were venue-based, used a convenience sample.
- Definition of outreach clinic/program varied across the studies, as some offered complete clinical services in outreach settings, while others only offered specific services (i.e. Chlamydia testing). In addition, the length of time outreach clinics were implemented varied across the studies.
- Participation rates in outreach models were recorded by some of the studies; however percentages were not recorded with reference to the total number of participants approached. Hence high participation rates may not reflect increase uptake of outreach services. In addition, studies that reported an evaluation of the outreach clinics did not specify how the sample size was calculated. Hence the sample size may not be truly representatives of those that used the outreach services.

## Factors that impact local applicability

- A mobile sexual health clinic service was organized in 2010 in collaboration with a faculty member at Western University. It is unclear why this initiative was unsuccessful as there are no documents on the planning of this initiative or any formal evaluations conducted. Hence prior to the planning or implementation of outreach services, it is important to assess this strategy within the local context (i.e., focus group with target population). It is recommended that the Applicability and Transferability of Evidence Tool by NCCMT be used to assess the local applicability of the strategy discussed.
- Populations and settings where strategies were effective may not truly be representative of the London and Middlesex County populations and environment, and may lead to a different result.
- Studies from the systematic reviews focused on specific populations (i.e. MSM, youth), hence the success of the strategy may not be generalized to other populations. The success of outreach strategies discussed in the literature review highlight the importance of clearly defining the population need, forming community/venue partnerships and building trust with the population.

## VI. Environmental Scan - Comparative Health units

An environmental scan of seven comparator health units in Ontario was conducted: Region of Waterloo Public Health (ROWPH), Wellington-Dufferin Guelph Public Health (WDGPH), Windsor-Essex County Health Unit (WECHU), Niagara Region Public Health, City of Hamilton Public Health, Peel Public Health and York Region Public Health. Three of health units, Niagara Region Public Health, City of Hamilton Public Health and Windsor-Essex County Health Unit, are part of the same peer group as Middlesex-London Health Unit. The goal of the environmental scan was to gather details on provision of sexual health and harm reduction services among the comparator health units.

Two Public Health Nurses from The Clinic contacted representatives (i.e. Public Health Nurse, Manager) from each of the health units. Environmental scans for five health units were completed via a phone discussion and two were completed by the comparator health unit's representative. To corroborate the results, the completed environmental scans were sent back to the health unit's representative and the program manager for review. This process ensured that accurate information was captured, and also provided an opportunity for the representatives to include additional information, if needed. Only



responses of one comparator health unit were not validated through this process. The results of the environmental scan are presented in aggregate format.

## **Harm Reduction Services**

Only one out of the seven health units did not offer harm reduction services; all harm reduction services for the area served by this health unit was planned and organized by the region's AIDS Committee. Harm reduction services in the remainder of the health units were offered at fixed sites, via mobile services, or both. Two of the comparator health units provided harm reduction services at fixed sites only, one health unit offered two mobile services and the remaining three health units offered services at fixed and mobile sites. Three of the mobile harm reduction services were operated by the health unit and two were operated in collaboration with community agencies. Two out of the four comparators that offered mobile service had a Public Health Nurse on-site (not every day) to provide STI testing, treatment and counselling as needed. The types of harm reduction supplies distributed varied across the six health units. None of the comparator health units offered both Naloxone and safer inhalation kits in addition to the standard harm reduction supplies – two of the comparators only offered Naloxone and two others offered safer-inhalation kits only. Supplies were accessible via community partners in all six health units, whereas walk-in access to fixed health unit sites was only available in five out of the six health units. Harm reduction supplies were accessible in a public reception area in four out of the five health units that offered walk-in access. Only one comparator provided access to supplies in a private room; clients walked-in to main reception and then taken to a private room for assessments, health teaching and supplies. Almost all the health units indicated collecting information on the client's gender, new/returning client and the number of supplies provided. In addition, a few health units also collected the client's date of birth, drug of choice, education/counselling provided, type of referral made, GPS coordinates of where needle exchange occurred (for mobile service).

Outreach initiatives for harm reduction services are in place in all six of the comparator health units. In three comparators, the program manager(s) was responsible for planning the outreach initiatives. In the remaining three health units, outreach initiatives were planned in collaboration with community organizations, the health unit's harm reduction team or outreach nurses. Outreach initiatives in most health units entail mobile needle exchange services. However, initiatives in some health units also included condom distribution and outreach services in shelters, street health centres, drop-in centres, services for sex workers and community organizations that serve target populations.

Harm reduction services offered by MLHU has some distinct differences in comparison to the six comparator health units. Similar to three of the comparator health units, MLHU offers both fixed and mobile harm reduction services. The mobile service is operated in collaboration with Regional HIV/AIDS Connection (RHAC) between 11am to 6pm Monday through Friday. No STI/HIV testing or treatment is available on the mobile van. Harm reduction supplies are accessible via three community partners (My Sister's Place, RHAC and Youth Opportunities Unlimited), walk-in to the two health unit sites (London and Strathroy), and RHAC's Mobile Van. The Health Unit is the only one among the comparators that offers a private entrance with a doorbell for clients to access supplies. Clients can directly walk to the private entrance, by-passing main reception. In addition, MLHU is the only health unit to provide clients with on-site access to both Naloxone and safer inhalation kits (along with standard Ministry funded harm reduction supplies). Similar to the comparator health units, MLHU collects information on the client's gender, date of birth, new/returning client and the number of supplies (needle tips, crack pipe kits, sharps container, piercing kits) returned and given out. A code word unique to each client is also collected to record the number of returning clients. Currently, the mobile service operated in collaboration with RHAC is the only outreach initiative available at MLHU.

## **Sexual Health and Family Planning Clinic**

### **Clinic Model and Documentation**

All seven health units have combined sexual health and family planning clinics. The reasons for having combined clinics include either a decreased need for birth control services, clients requesting "one-stop shop" type service or birth control and STI/BBI services being too intertwined to separate. There were no comparator health units that have protocols regarding the availability of female/male physicians. However, four of the comparators clinics had primarily female physicians. Among the seven health units,

five had clinical team assistants (CTA) or administrative assistants (AA) or receptionists. Clinic chart documentation processes/tools varied across the health units. Clinics in three of the health units were completely electronic (e.g., OSCAR database), two health units used half paper and half electronic documentation and the remaining two only used paper charts.

In comparison to the seven health units, MLHU is the only health unit to offer sexual health and family planning services through two separate clinics (STI Clinic and FP Clinic). Neither the STI nor the FP Clinics have protocols regarding the availability of male/female physicians. However, there are only female physicians in the FP Clinic and a combination of male and female physicians in the STI Clinic. Female clients are accompanied by a CTA when male physicians conduct examinations in the STI Clinic. The Health Unit has CTA and AA support, similar to five comparator health units. There are two CTAs available during the FP Clinic, 4-5 CTAs during the STI Clinic and 1 part-time AA. The STI and FP Clinic's use both paper and electronic documentation.

### **Specific Clinic Services**

In three out of the seven combined clinics, clients require a health card for Pap tests and breast examinations. However, one of the comparators noted that if a client does not have a health card, the health unit will absorb the costs and provide the service (i.e. Pap test). On-site phlebotomy is available at all seven health unit clinics. Due to all seven of the comparators offering combined clinic services, phlebotomy is available to clients accessing both STI and family planning services. This procedure is performed by a clinic nurse in six of the comparators, whereas at one health unit, phlebotomy can be performed by either a physician or a clinic nurse. Microscopy is only offered on-site by one comparator health unit. Therapeutic abortions are not available at any of the comparator health units.

At MLHU, clients accessing services at the STI Clinic do not need a health card; however a health card is requested for Pap tests and breast examinations done in the FP Clinic. FP Clinic physicians are encouraged to see up to 3% of clients without a health card. Phlebotomy is only available on-site to STI clients. Family planning clients are provided a requisition form for phlebotomy services at an external site. In comparison to the comparator health units, MLHU is the only health unit where phlebotomy is not available on-site for clients with family planning related appointments. In addition, MLHU offers on-site microscopy in both clinics. All STI physicians and one FP physician are able to perform this. Therapeutic abortions are not available at MLHU.

### **Nurse-Led Clinics**

There are four health units that offer a combination of nurse-led and physician-led clinics in varying ratios and services. Nurse's scope of practice in nurse-led clinics varies across the comparator health units. However, STI testing was a common practice completed by nurses in all four health units reporting nurse-led clinics. In one of the comparator health units, only clinics in schools were nurse-led, similar to MLHU. At MLHU the school outreach clinic offers combined clinic services. Public Health Nurses in school settings have a medical directive to provide STI testing and treatment, pregnancy testing and one month starts on oral contraceptives.

### **Service Billing**

Five health units pay physicians an hourly rate ranging between \$100/per hour and \$110 /per hour. In the remaining two health units, physicians are only paid through OHIP billing. Administrative Assistants complete the billing process in four health units. Additionally, nurse practitioners are available at five of the health units, and all are salaried.

Overhead costs are only charged by one of the comparator health unit with a percentage ranging between 3% and 5%. The remaining six health units do not charge overhead costs. One health unit specified that this was because physicians are not employees of the health unit, but rather employed as vendors and have no ownership over the clinical sites. Each physician enters into a contract with the comparator health unit.

MLHU has a similar billing practice/model as two of the comparator health units. Physicians at MLHU were paid through OHIP, with billing for FP Clinic physicians completed by MLHU, and billing for STI Clinic physicians completed externally. MLHU does not charge overhead costs.

### **Clinic statistics**

The seven health units were asked to provide statistics regarding to the populations that access STI clinic services, number of clients seen for STI related purposes and the number of STIs diagnosed at the health unit relative to the jurisdiction.

#### *Populations seeking STI clinic services*

Clients of all ages are seen at all seven health units, with two health units specifying MSM as a particular population who access clinic services. At MLHU all ages are seen at the STI Clinic and females under 50 years are seen at the FP Clinic. Currently, MLHU does not collect pertinent data to identify specific populations that access services.

#### *Number of clients seen STI related purposes*

The reported number of clients seen for STI related purposes varied largely across the seven health units. The numbers are not provided in this report as all the health units had a combined clinic model and hence the respondents only provided an estimate. In addition since all the health units had multiple off-site locations, the numbers reported may/may not be reflective of all clinic sites.

In 2014, there were 8,742 clients seen in the STI Clinic at MLHU.

#### *Number of STIs relative to jurisdiction*

Only one comparator health unit provided the number of STIs diagnosed relative to its jurisdiction. It was reported that 22% of all Chlamydia cases and 28% of all Gonorrhea cases were diagnosed at the comparator health unit's clinics.

In 2013, MLHU diagnosed 40.6% of the total Chlamydia cases (n=1,320) and 37.8% of the total Gonorrhea cases (n=82) at The Clinic.

### **Emergency Contraception and Birth Control**

Plan B for emergency contraception is available at a reduced cost (\$10 or \$15) or for free at all seven health units. One of the comparators only offers Plan B prophylactically to clients. Plan B is not provided to a third party in six of the seven comparator health units. MLHU offers Plan B to clients for \$10 or for free following a consultation with a PHN each time. Plan B can be provided to a third party following a similar consultation process – MLHU is one of the only health units among the comparators to do this.

IUD insertions are only offered by three out of the seven comparator health units. Among these health units, only one indicated that all its physicians were trained to perform IUD insertions. In addition, IUDs are not available for emergency contraception in any of the three health units offering IUD insertions services. IUD insertions are available at MLHU, with three out of the seven FP physicians trained to insert. In 2014, 56 clients had IUD insertions in the FP Clinic. MLHU is the only health unit among the comparator health units to offer IUDs for emergency contraception.

Birth control options are offered at a reduced cost at all seven comparator health units. Overall the prices for birth control are fairly consistent across all seven health units. External scripts for birth control are filled by four comparators, while the remaining three only fill external birth control scripts for clients of the health unit. The birth control options available at MLHU are similar to the seven health units and comparable in prices. External scripts for birth control are filled at MLHU, without having to become a client. In 2014, MLHU filled 1,375 external scripts for birth control.

### **Depo-Provera**

Nurses only administer Depo-Provera via Medical Directive in two comparator health units. In the remaining five health units, nurses cannot order Depo-Provera via Medical Directive. However, three of

the five health units indicated that nurses can administer or dispense Depo-Provera if there was a nurse practitioner or physician order on file.

PHNs at MLHU do not have a medical directive to administer Depo-Provera. Depo-Provera is only administered by physicians at the Health Unit.

## **STI Treatment**

There are limited STI treatments (excluding those that are provincially-funded) which are provided for free by the seven health units. Only one health unit provides Metronidazole for free. Valtrex is not provided for free by any of the comparator health units. It is either unavailable at the health unit or available for purchase. Liquid nitrogen is available at six of the health units. All seven of the comparator health units offer STI medications to community physicians to provide free treatment to clients.

In comparison to the seven health units, MLHU offers a greater number of STI medications for free. Currently, Metronidazole, Valtrex, Fluconazole and Cipro are provided to clients for free in addition to the provincially-funded medications. Similar to the seven comparator health units, MLHU distributes STI medications to community physicians. In 2014, MLHU distributed STI medication to 19 community physicians upon their request. Community physicians are made aware of this service by the Health Unit's Health Care Provider Outreach initiative.

## **HIV Testing and Post Exposure Prophylaxis (PEP)**

All seven health units offer more than one type of HIV testing. Nominal testing is available in six of the comparator health units and non-nominal testing is available at three health units. Anonymous testing (via Point-of-Care (POC) HIV testing) is available at five out of the seven comparators. Post-exposure prophylaxis is unavailable at all seven comparator health units.

Similar to two of the comparator health units, MLHU offers nominal and non-nominal HIV testing. The health unit does not offer POC testing; this is available to clients through the Options Clinic at London Intercommunity Health Centre. MLHU is the only health unit among the comparators that offered post-exposure prophylaxis at on-site.

## **Polymerase Chain Reaction (PCR) Testing**

PCR testing for Hepatitis C was available in clinics at five health units. Two out of the five health units offered this service only to clients who met specific criteria. MLHU also offers PCR testing in its clinics. Testing is used to confirm a diagnosis and is provided with the referral.

## **Screening**

There are a number of screening tools that are integrated within the clinic services at the seven health units. Screening for abuse is done in two health units, with one specifying the Routine Universal Comprehensive Screening (RUCS) tool for this. Three comparator health units performed alcohol screening and four performed screening for smoking cessation. Only MLHU and one other comparator health unit screened for alcohol, abuse and smoking cessation.

## **Case management and contact tracing practices**

There are multiple strategies utilized for contact tracing by the seven health units. One primarily contacted clients via letter and/or phone call. Other forms of technology, such as text, email and Facebook, are used as a last resort in five of the comparator health units. Home visits are also done on a need basis by one health unit. In most health units, PHNs work in the clinic and perform case management. However in one comparator health unit, PHNs on the STI team worked exclusively on case management.

MLHU uses all forms of technology (e.g., email, Facebook, text messaging) to connect with clients and complete contact tracing. Like the majority of comparator health units, PHNs at MLHU work in the clinic and do case management.

## Section 22

Section 22 for HIV and STIs are served by three comparator health units whereas three others give out sections for HIV only. Among the six health units that provided a response, two specified that Section 22's were delivered by a process server. At MLHU, Section 22's are served for HIV only and are delivered by a PHN or the Program Manager.

## Summary

Overall the services offered at the MLHU clinic are consistent and similar to the provision of sexual health services in the seven comparator health units. All seven of the comparator health units have a combined clinic model, with three health units reporting one doctor clinics with varying ratios of PHNs/RNs. Clinic hours varied across the health units ranging between 3.5 hours and 6 hours. With two health units that (clinic operating for 3.5 hours and 6 hours) reported seeing 35 clients on average per clinic. MLHU is the only health unit among its comparator to have a separate clinic model. Clinics are staffed based on the type of clinic. Typically, STI Clinics are run by 2-3 physicians, 4 PHNs and 4-5 CTAs and FP Clinics are run by 2 physicians, 3 PHNs and 2 CTAs. With the current model, there were 8,742 clients seen in 2014 for STIs purposes. With the current clinic model, MLHU diagnosed 41.2% (605) of the total Chlamydia cases (n=1,468) in 2014 and 28.4% (31) of the total Gonorrhea cases (n=109) in 2014 in its clinics. These percentages were higher in comparison to the one other health unit who provided this statistic. Another health unit also indicated diagnosing a lower number of STIs in its clinic in comparison to the region (without providing statistics).

MLHU also offers additional services (not largely provided in the other health units) which are intended to increase accessibility for clients. In summary, MLHU provides a larger number of free STI medications, microscopy on-site, fills external birth control scripts at a lowered cost to non-clients, offers third party emergency contraception and IUD insertions for emergency contraception. MLHU was the only health unit where IUDs were inserted for emergency contraception. This service is provided at MLHU in accordance with best practices (i.e. SOGC). In addition, MLHU is the only health unit to provide a separate private entrance for clients accessing harm reduction supplies and offer both Naloxone and safer inhalation kits on-site.

The information from the environmental scan highlighted that MLHU was the only health unit that did not offer phlebotomy services on-site to clients accessing family planning services. In addition, all health units had off-site clinic locations within the community, with three health units having targeted clinics (i.e. clinics for street-involved populations, clinic in a priority neighbourhood, youth only clinic).

## Environmental Scan – Community organizations

Further to the environmental scan with comparator health units, community organizations in London were contacted to participate in an environmental scan. Twelve community organizations were contacted to participate, of which eleven participated: London Intercommunity Health Centre (Options and Hepatitis C Care Program), Centre for Hope, Oxford Walk-in Clinic, Wharncliffe Walk-in Clinic, MLHU-Nurse Practitioner Clinic, Western Student Health Services, Fanshawe Student Health Services, Health Zone, My Sister's Place, Infectious Disease Care Program and Regional HIV/AIDS Connection. The purpose of the community environmental scan was to identify the target populations and the services available through the organization. This information may be helpful in determining opportunities for future collaborations related to sexual health initiatives. All environmental scans were completed via phone discussions. For the purpose of this report, only information pertaining to harm reduction and sexual health/birth controls services are reported.

## **Organizations offering primary care services**

### **Populations that utilize services**

Six community organizations primarily offered primary care services which included sexual health services. Two of the six community organizations were targeted and accessed by marginalized populations, such as homeless/unstably housed, sex workers, immigrants, young families, clients without a family physician/health card, children under 6 years of age and their immediate family. Both of these organizations also provided services to those covered by the Interim Federal Health Program. In addition, both organizations had outreach sites across the community and within other community agencies (i.e. Rothlome's House, My Sister's Place and Women's Community House).

The remaining four organizations (2 walk-in clinics and 2 student health centres) that provided primary care services was largely accessed by students (in late teens to early twenties and mature students). A health card (or UNIP coverage) is required for all services offered through the four agencies. Clients covered through the Interim Federal Health Program are provided service in two out of the four organizations. The remaining two organizations were unsure, as they have not encountered this in the past.

### **Clinic Model**

None of the clinics were nurse-led in the six community organizations. However, in two of the organizations, clinics are nurse practitioner (NP)-led. Protocols regarding the presence of a female/male physician did not exist in any of the six organizations. The two organizations that are NP-led mainly consisted of female NPs, while the remaining four organizations provided clients with the option of having a nurse/staff sit in during the appointment when a female physician was unavailable.

Physicians were only available in four out of the six organizations. Physicians in three of the clinics were paid only by OHIP. In the remaining clinic, most physicians were paid by OHIP – with exception of two physicians who were salaried.

### **Emergency Contraception and Birth Control**

Plan B was the only form of emergency contraception available at the two organizations that offered emergency contraception. Plan B was only provided to a third party in one of the organizations following a consultation. Although Plan B was available through two community organizations, only one consistently had this available. The remaining four community organizations did not offer Plan B through their clinics; however clients were directed to the clinic's pharmacy to purchase the morning after pill.

IUDs were available in three of the six community organizations, however none offer IUDs for emergency contraception. In two of the three community organizations, not all physicians or NPs were trained to insert. In the remaining organization, clinics were run by one NP, who was able to perform IUD insertions.

In addition, low cost contraception was not widely available through the community agencies. Contraception was only available at a lowered cost or for free through one clinic. This clinic was run by a NP from MLHU who obtained the birth control pills from the MLHU Clinic. The remaining five organizations provided clients with a script for birth control.

### **STI Treatment**

Organizations that are NP-led provided free treatments for STIs. In the remaining organizations, two provided free treatments for Gonorrhea, one provided medications received from the MLHU Clinic for free (did not specify which ones) and one agency did not provide any free STI treatments.

### **HIV Testing**

Nominal HIV testing was the most common method among the six community organizations. Only one organization offered non-nominal HIV testing, using the date of birth and student number. Post-exposure

prophylaxis or anonymous HIV testing was not available through any of the six community agencies providing primary care services.

### **Case management and contact tracing practices**

Case management and contact tracing practices were similar across the six community organizations. All six agencies contacted clients via phone. In addition to a phone call, a few organizations reached clients through email or text messaging.

### **Organizations offering STI/Blood-Borne Infection (BBI) testing**

There were two community organizations out of the eleven that primarily provided STI/BBI testing: London Intercommunity Health Centre (LIHC) (Options Clinic and Hepatitis C Care Program) and Infectious Disease Care Program (IDCP). Birth control and Family Planning services are not available through these organizations.

### **Populations that utilize services**

Services offered through both organizations are primarily utilized by marginalized populations (i.e. individuals on income support, low education, unstably housed and persons with past/current injection drug use). Both organizations offered a variety of outreach initiatives across a number of organizations within the community: My Sister's Place, Bathhouse, RHAC, At^lohsa, on-reserves, London Housing and Elgin-Middlesex Detection Centre.

### **STI/BBI Testing available**

Both organizations primarily offered STI/BBI testing in addition to a variety of support services (i.e. medication counseling, medical and psychiatric consult, nutritional assessment). One of the organizations offered Syphilis testing, Hepatitis C testing and Point-of-Care (POC) HIV testing. The other organization did not offer testing for Syphilis, Hepatitis C or POC HIV Testing, but did provide nominal and non-nominal testing for HIV. PEPs were available through both organizations. Testing for STIs such as Chlamydia and Gonorrhea were not available at both community organizations.

### **Organizations offering harm reduction services**

Two of the eleven community organizations provided harm reduction services: My Sister's Place and Regional HIV/AIDS Connections. Harm reductions services are funded by MLHU and operated by Regional HIV/AIDS Connections. My Sister's Place is a satellite location.

### **Populations that utilize services**

Among the two organizations that offered harm reduction services, one only saw women over the age of 16 years and the other organization primarily saw males at its fixed site and females at its mobile service.

### **Harm reduction services**

Both organizations offered on-site access to harm reduction services. Supplies could be obtained through walk-in. In one organization client's walk-in to the main reception area to access supplies, while the other organization has a similar process to the Health Unit. Clients, if comfortable, were able to access supplies at the reception or could use the private entrance. Supplies were also accessible via mobile services in one of the community organizations. Both community agencies offered similar supplies to the Health Unit.

### **Summary**

The findings highlighted that sexual health and family planning services offered by The Clinic are not replicated in full within the community. Among these organizations, The Clinic is one of the only local organizations that consistently offered birth control and the emergency contraception pill for free or at a

lowered cost. In addition to this, a variety of options for birth control and emergency contraception are available to meet client need. Currently The Clinic is the only local organization which offered STI medications, Metronidazole, Valtrex, Fluconazole and Cipro, for free. Although The Clinic distributed STI medications to community healthcare providers, among the organizations in the environmental scan only some provided free STI treatments.

Harm reduction services within the community are fairly consistent and similar to services offered at The Clinic. This may largely be due to MLHU funding the harm reduction services and closely collaborating with the two community organizations discussed.

It is worth noting that most organizations had a number of outreach sites within the community and within other community organizations. Organizations with outreach programs reported reaching marginalized populations in a greater number. In addition, organizations listed above that offered STI/BBI services primarily provided testing for blood-borne infections (at both fixed and outreach sites) and testing for bacterial STIs was not widely available.

Overall, the community environmental scan highlighted that there is a large inventory of services available locally, offering sexual health and harm reduction services in varying degrees. However, further investigation is warranted to determine if the sexual health and harm reduction needs of the local population are adequately met by the current provision of services by the community organizations. Additionally as bacterial STI testing (without a health card) is not widely available in the community; it may be worth investigating if this service is needed by the populations that utilize the outreach sites of community organizations.

## VII. Clinic Physicians Survey

### **Key Findings**

- 8 clinic physicians (n=9) indicated that the current clinic hours were sufficient to meet client needs
- 5 clinic physicians (n=7) disagreed with offering clinic services in additional locations
- 4 Family Planning physicians (n=6) provided a percentage (ranging between <3% - 10%) of clients they are willing to see without a health card
- 4 clinic physicians (n=7) are supportive of MLHU exploring other payment options
- 5 clinic physicians (n=8) were satisfied with their physical working conditions

### **Background**

The Clinic physician's engagement and perspectives was identified as an important component to inform this review process. To help capture their perspectives, a physician survey was conducted. The purpose of the survey was to gather FP and STI physician's opinions and feedback on various aspects of The Clinic, such as hours, services, payment models and assessments/medical directives.

### **Methodology**

#### **Survey design and data collection**

In reviewing the information gathered for the program review, a set of questions were developed regarding the clinic's structure and services. The questions were tailored into two separate surveys to account for the different roles and services provided by the STI and FP physicians. Each survey question was collaboratively assessed and revised by the service area Director, Program Manager and Program Evaluator. The survey was not piloted due to time limitations. However, the findings were presented and



discussed with the clinic physicians in a group setting to ensure the results were interpreted accurately. This process was completed to validate the results and provide an opportunity to gain more detailed comments.

The Clinic manager contacted all the clinic physicians via E-mail and requested their participation in the survey. The survey was only administered electronically via FluidSurveys and available between February 20<sup>th</sup> and February 26<sup>th</sup>. The findings of the survey were presented to physicians, during which time nine of the twelve clinic physicians attended.

## Data analysis

Quantitative survey data was analyzed directly in FluidSurveys. Information was presented as frequency data. Qualitative responses were exported to Excel and analyzed for commonality and reported based on underlying themes. Results for both FP and STI physicians are reported together for each survey item. Missing data was stated for each question, if any existed.

## Results

There are a total of 12 clinic physicians, all of which were eligible to participate - four physicians worked exclusively in the STI Clinic and the remaining 8 physicians worked exclusively in the FP Clinic. The response rate was 75%, as 9 out of the 12 physicians participated (Table 7.1). The reasons for non-participation were not collected.

**Table 7.1: Number of physicians who responded**

Clinic	# of respondents (%)
Family Planning	7 (88%)
STI	2 (50%)

## Operational hours of the Clinic

Three survey items examined the operational hours of The Clinic and the physician's flexibility with increasing clinic hours. 6 out of 7 FP physicians and both STI physicians either agreed or strongly agreed that the current clinic hours were sufficient to meet client needs. FP physicians commented on offering family planning appointments over the lunch hour, or increase the availability of morning and afternoon appointments (i.e. 8:50am to 12pm or 12:50pm to 4pm). Four out of seven FP physicians were supportive of formally increasing the operational hours of the clinic to 3 hours. The remaining three FP physicians and both STI physicians indicated that current clinics operate for 3 hours on average. FP physicians provided comments which suggest that they would consider 3 to 4 hour clinics if there was a 30 minute overlap between physicians, if physicians working the morning/afternoon shifts were not adversely affected (i.e. lose a shift) or if the lunch hour was better utilized. Six FP physicians and one STI physician agreed to have flexibility with their schedules if the operational hours of the clinics were to change. Two physicians (one FP physician and one STI physician) either disagreed or strongly disagreed with having this flexibility in their schedules.

## Additional Clinic locations

A large number of The Clinic physicians disagreed with offering additional clinic locations. Physicians indicated that the needs of the community needed to be established to determine if additional locations are warranted. Four FP physicians and one STI physician disagreed with offering sexual health clinics in additional locations. A FP physician indicated that additional locations would only be feasible if the clinic shifted to a paperless system. A STI physician also noted that the current location was accessible to young people given the attendance rate. Only two FP physicians agreed with offering additional clinic locations.

### Services to clients without a health card

Physicians in the FP Clinic were asked about the percentage of clients they currently saw without a health card, and the percentage of clients they were willing to see without a health card. As clients of the STI Clinic did not need a health card for service, STI physicians were not asked this question. The Clinic encourages FP physicians to see up to 3% of clients without a health card. FP physicians provided different percentages of clients they current saw and were willing to see without a health card. Majority of the physicians indicated not knowing the percentage of clients they currently saw without a health card. A summary of the physician responses are provided in Table 7.2.

**Table 7.2: Responses for the percentage of clients without a health card physicians currently see and the percentage of clients without a health card physicians are willing to see**

	% of clients physician currently see	% of clients physician willing to see
<b>Respondent 1</b>	2%	<3%
<b>Respondent 2</b>	Has not occurred	10%
<b>Respondent 3</b>	Not sure, 1%	No response
<b>Respondent 4</b>	Not sure. Staff direct clients to take care of this prior to appointment	No reason for physicians to see clients without a health card as the clinic has salaried PHNs
<b>Respondent 5</b>	Don't know	5%
<b>Respondent 6</b>	<5%	<5%
<b>Respondent 7</b>	Not sure	None, if overhead costs are charged based on billings. If the patients are willing to pay for service then it would depend

### Payment models

Five FP physicians and two STI physicians responded to the question regarding physician payment models. Three FP physicians were supportive of the health unit exploring other payment options and two FP physicians either disagreed or strongly disagreed with this. Overall FP physicians indicated that their support for overhead costs would be dependent on the percentage and the amount of autonomy physicians received. Of the three physicians that were supportive of the Health Unit exploring other payment models, only one would continue to work at The Clinic and the remaining two were unsure. Among the two physicians who were not supportive of exploring other payment options, one would continue to work at the Health Unit.

One STI physician was supportive of the Health Unit exploring other payment options. Similar to the comments provided by the FP physicians, the STI physician indicated that their support is dependent on the percentage of overhead cost charged. The other STI physician strongly disagreed and commented that they do not wish to see a change from the current remuneration system. Both STI physicians were not sure about continuing to work at the clinic if another payment model was implemented.

The findings regarding payment models should be interpreted with caution as the survey question may have been leading to respondents. The question was intended to be comprehensive of all payment models, however only overhead cost was included as an example. This may have led physicians to provide their response specific to the overhead cost model. In addition, it is worth noting that the question regarding continuing to work at the Health Unit was not posed toward a specific payment model, hence physician responses may be different once a payment model is decided upon.

## **IUD Insertions**

IUD insertions are not performed in STI Clinics; as a result only FP physicians were asked questions pertaining to this service. Four physicians indicated that insertions should be incorporated into regular clinic hours. The remaining three FP physicians were not in support of this, due to unpredictable complications during the procedure that could be disruptive to the flow of the clinic. Additional training/resources for IUD insertions were needed by four physicians, if the clinic were to shift to a model where most/all physicians performed this procedure. Two of the four physicians commented that they should have a choice on whether or not they want to perform this procedure. Only one physician indicated not needing any additional training/resources. Of the remaining two physicians, one did not respond, and one physician was unsure and indicated that the issue was personal risk aversion rather than individual skill.

## **Phlebotomy Services**

Phlebotomy is only available to clients on-site during the STI Clinics. FP clients receive a requisition form to have the procedure done at an external lab. Hence, FP physicians were only asked if bloodwork for STIs would more likely be ordered if someone was on-site to perform this procedure. Four physicians indicated that they would not be more likely to order bloodwork for STIs if services were available on-site. These physicians noted that phlebotomy requisitions are ordered as required and not based on availability of the service on-site. Of the remaining three physicians, two indicated that they would be more likely to order bloodwork for STIs if someone was available on-site, and one physician was unsure. During the group discussion with the physicians, it was noted that the physicians interpreted this question as questioning their practice as phlebotomy requisitions are ordered based on need rather than on-site availability. The group discussion clarified this, and comments indicated that phlebotomy services on-site during FP clinics would increase access to clients but not influence the physician's practice to order phlebotomy service.

## **Review of Nurse and Physician assessments**

Six FP physicians and one STI physician either agreed or strongly agreed that it would be beneficial to examine nurse and physician assessments to ensure there were no duplications. Only one FP physician strongly disagreed with this statement and commented that physicians are obligated to perform an assessment as per their license and malpractice insurance and that often times there are discrepancies between what the nurses are told and what the physicians are told by the client; hence physicians need to perform assessments to determine the appropriateness of a treatment/procedure. One STI physician also disagreed with examining nurse and physician assessments to ensure that there was no duplication. Additionally, clinic physicians were given the opportunity to choose assessments they would prefer PHNs to complete, prior to them seeing the client. All FP physicians agreed with having PHNs complete blood pressure measurements, Pap test eligibility, RUCS screening and pregnancy testing. FP physicians were less supportive of PHNs performing STI and birth control counselling. Both STI physicians were supportive of PHNs performing symptom review, sexual health history, sexual health risk factor and STI counselling. A complete list of assessments and physician responses are summarized in Table 7.3.

**Table 7.3: Assessment to be performed by PHNs**

Type of assessment	# of FP Physicians	# of STI Physicians
Blood Pressure measurement	7	
Pap test eligibility	7	
Birth control counselling	3	
Symptom review	6	2
Sexual Health history	6	2
Smoking	6	1
Alcohol/Drug use	6	1
RUCS screening	7	1
Sexual health risk factor	5	2
Pregnancy testing	7	None
STI counselling	3	2
Other	<ul style="list-style-type: none"> <li>▪ On time for Depo-Provera</li> <li>▪ Provide post STI counselling &amp; extra counselling for new birth control starts</li> </ul>	<ul style="list-style-type: none"> <li>▪ Counselling regarding HIV testing</li> </ul>

## Medical Directives

Currently, there are some medical directives (i.e. ECP) in place that nurses practice under. To determine whether physicians were in support of expanding nurse's scope with medical directives, all clinic physicians were asked which services they were supportive of nurses carrying out under medical directive. Responses were only provided by FP physicians. 6 FP physicians were supportive of nurses carrying out pregnancy testing and dispensing the emergency contraceptive pill under the medical directive. Physicians were less supportive of nurses performing Depo-Provera injections and 3-month pill starts under the medical directive (Table 7.4). One FP physician did not select any of the listed medical directives, but noted that they would support "nurses ordering pregnancy tests, emergency contraception, urine STI vs swabs".

Both STI physicians did not choose any of the listed medical directives. STI physicians noted that having nurses perform these services would reduce the need for physicians in the clinic, and that nurses are already busy during clinics.

**Table 7.4: Number of FP physician supportive of nurses performing the following medical directives**

Medical Directives for:	# of FP Physicians
Pregnancy testing	6
Emergency contraceptive pill	6
STI treatment for positive Chlamydia & Gonorrhea	5
Hepatitis A and Hepatitis B injections	5
Depo-Provera injections	2
STI testing in asymptomatic clients	3
3-month pill starts	2

## **Sexual Health Clinic Best Practices**

A large number of the clinic physicians did not respond to the question regarding sexual health best practices that could be used more consistently in the clinic. Only two physicians responded, of which both were from the FP Clinic. The physicians suggested the clinic promote HPV vaccines and move toward evidence-informed guidelines. Although none of the STI physicians responded to this question, one indicated that they did not understand the question. A discussion to determine sexual health clinic best practices will be held at a later date.

## **Electronic documentation**

Four out of the nine clinic physicians either agreed or strongly agreed that using electronic documentation would provide significant benefits to The Clinic. The remaining five clinic physicians (three FP and two STI) either disagreed or strongly disagreed with electronic documentation having significant benefits to The Clinic.

One FP physician was unsure and four FP physicians were supportive of moving toward electronic documentation in The Clinic. The remaining two FP physicians and both STI physicians either strongly disagreed or disagreed with moving toward electronic documentation. STI and FP physicians had similar reasons for not supporting the move to electronic documentation. Physicians indicated that the current layout of the clinic room will not comfortably accommodate the client and EMR and that introducing electronic documentation may result in longer clinic visits. If The Clinic were to shift to a model where most/all documentation was electronic, one FP physician and both STI physicians indicated needing training/resources.

## **Healthcare provider outreach**

Three FP physicians indicated a need for the Health Unit to actively engage in outreach with community healthcare providers. All the FP physicians who indicated this expressed an interest in being involved with outreach work. Three FP physicians and one STI physician were not sure if there was a need for outreach, however two (one FP and one STI) physicians were interested in being involved with outreach. The STI physician also commented that a needs assessment survey could help determine if this service is warranted by community healthcare providers. In contrast, one FP physician and one STI physician did not think there was a need for healthcare provider outreach. Both physicians were not sure if they would be interested in being involved and commented that outreach initiatives for healthcare providers are already done by the Health Unit.

## **Satisfaction with physical working conditions**

Five FP physicians were satisfied with their physical working conditions. The remaining two were not satisfied, both commented on the need to increase space as a means to improve their physical working conditions. In addition, one STI physician stated that they were not satisfied with their physical working conditions and the other STI physician did not respond. Both physicians noted that an enlargement to the physician's working area will improve their working conditions.

## VIII. Client Satisfaction Survey

### Key Findings

#### Family Planning Clinic

- The overall quality of service provided in the FP Clinic was rated as very good or excellent by 87.9% (269/306) of respondents
- Over half (57.7%, 188/326) of the respondents chose The Clinic to meet their needs either because they could not get an appointment with their health care provider (HCP), did not have a HCP or did not want to talk about their sexual health with their HCP
- The current location of The Clinic was reported to be accessible by 95.0% (303/319) of FP respondents
- The most valued aspect of The Clinic was the staff, with over half (58.9%, 151/260) of the respondent indicated this
- Nearly half (47.5%, 77/162) of the respondents noted that no changes needed to be made to The Clinic. Extending clinic hours and reducing wait time between seeing nurse and doctor were some of the comments for improvement provided by a small number of respondents.

#### Sexually Transmitted Infection Clinic

- The overall quality of service provided in the STI Clinic was rated as very good or excellent by majority (88.1%, 280/318) of respondents
- Over half (54.3%, 204/376) of the STI respondents chose the STI Clinic to meet their needs because they could get here easily
- STI clients preferred the drop-in clinics, with 56.5% (205/363) of respondents indicating a preference for this model
- The location of The Clinic was reported to be accessible by 96.2% (354/368) of the STI respondents
- Similar to FP clients, STI clients noted that staff were the most valued aspect of The Clinic, followed by the speed and convenience of the service.
- Nearly a third of respondents (56/173) indicated that no changes needed to be made to The Clinic. Improvements to wait times, longer clinic hours and the clinic environment were suggested by a small number of respondents.

Client satisfaction surveys are a component of quality assurance, as reported by the *MOHLTC's Sexual Health Clinical Services Guidance Document* (Ontario, 2010). The Clinic conducted a client satisfaction survey in 2010 and obtained valuable feedback, which helped inform decisions to improve clinic services. Given that the previous survey was conducted five years ago, it was deemed appropriate to reassess client satisfaction.

The objectives of client satisfaction survey were to:

- Determine clients' accessibility to The Clinic and their preference for clinic structure, hours and appointment booking styles
- Gather clients' perspective on the quality of service and interaction with clinic staff
- Gather feedback on the strengths of The Clinic and areas for improvement

## Methodology

### Sampling strategy and data collection

A convenience sample was used for this survey. All clients accessing services at the STI and FP Clinics between May 20 and June 15, 2015 were invited to participate in the survey by the Clinical Team Assistants, at the time of registration. Those agreeing to participate were given a lip balm, as a small token of appreciation. The number of surveys distributed and the number of clients refusing to participate were tracked on a log sheet. The demographic characteristics of those who declined and their reasons for declining to participate were not recorded.

The estimated sample size was 367 for the STI Clinic and 362 for the FP Clinic. Sample size was calculated using the sample size calculation reported by Krejcie & Morgan (1970) (Table 8.1):

$$\text{Sample Size} = \frac{X^2 * N * P * (1 - P)}{(d^2(N - 1)) + (X^2 * P * (1 - P))}$$

**Table 8.1: Sample size calculation for FP and STI Clinics**

Clinic	Total # of client visits in 2014 (Population size , N)	X <sup>2</sup> (df=1, 95% CI)	Population proportion (P) assumed	Degree of accuracy (d)	Estimated sample size
Family Planning	6474	3.84	0.5	0.05	362
STI	8363	3.84	0.5	0.05	367

Respondents were instructed to complete the first component of the survey (Questions 1 through 13) in the waiting room prior to seeing the nurse/doctor. The second component, focusing on their interaction with clinic staff, overall rating of clinic service and basic demographic information were to be completed in the exam room after their appointment with the nurse and doctor. Respondents were asked to place the survey in a box at the front of the clinic as they exited.

### Data analysis

Survey responses were entered into FluidSurveys by the team's Administrative Assistant. Quantitative data was analyzed in FluidSurveys and reported as frequency data. Qualitative data was analyzed for commonality and reported based on underlying themes. Survey findings are reported based on the clinic as different services are provided in the STI and FP Clinics.

## Results

### Family Planning Clinic Clients

Surveys were conducted over the 25 FP Clinics in order to reach the estimated sample size. 11% (46/416) of FP clients who were asked to participate in the survey declined. The demographic characteristics of clients who declined and their reasons for declining were not recorded. For the purpose of this section, only responses from female respondents are reported, as services provided in the FP Clinics are largely utilized by females. There were a total of 370 surveys completed in the FP Clinics, of which 42 responses were excluded from the analysis for this report. Majority (92.9%, 39/42) of responses were excluded because respondents did not specify their gender and a small portion (7.1%, 3/42) of responses were excluded because respondents were male. There were a total of 328 female FP respondents.

A comparison between the demographic characteristics of clients attending the FP Clinic in 2014 and the survey sample highlighted that females 15 to 19 years of age were slightly underrepresented in the sample and females 30 to 39 years of age were slightly overrepresented in the sample. The demographic characteristics are summarized in Table 8.2.

19.7% (64/325) of the survey respondents were new clients and the remaining 80.3% (261/325) of respondents were returning clients. Among these returning respondents, 49.8% (130/261) had been to the FP Clinic, 8.4% (22/261) had been to the STI Clinic and 28.0% (73/261) had been to both FP and STI Clinics in the past.

**Table 8.2: Demographic characteristics of female FP respondents and female clients attending FP Clinics in 2014**

Age range	% of female respondents (#)	% of female clients attending FP Clinics in 2014 (#)
<15 years old	0.3% (1)	0.6% (28)
15 - 19 years old	12.8% (42)	16.0% (783)
20 - 24 years old	31.4% (103)	32.9% (1608)
25 - 29 years old	27.4% (90)	27.3% (1334)
30 - 39 years old	22.9% (75)	18.2% (891)
≥40 years old	5.2% (17)	5.1% (248)
<b>Total</b>	<b>328</b>	<b>4892</b>

### Hearing about the clinic

Promotion of The Clinic and increasing awareness of its services in the community is done through various platforms. To determine how clients hear about The Clinic and its services, a question pertaining to this was asked in the survey. A complete summary of the reported responses are presented in Table 8.3.

Word of mouth was reported by more than half of the respondents (57.4%, 187/326). This was followed by 37.4% (122/326) of respondents who heard about The Clinic through the Middlesex-London Health Unit Website. Similarly among respondents who were new to the FP Clinic, word of mouth was also the most commonly cited response, with nearly half (48.4%, 31/64) of new clients reporting this. This was followed by the Health Unit website, which was reported by nearly a third (31.3%, 20/64) of new respondents.

**Table 8.3: Responses to “How did you hear about The Clinic?”**

Response	% of FP respondents
Word of mouth (friend, family etc.)	57.4% (187/326)
Middlesex-London Health Unit website	37.4%(122/326)
Referred by doctor, clinic or emergency department	12.0% (39/326)
Clinic poster or ad	10.4% (34/326)
Other (i.e. Google/Internet, used other MLHU services)	8.6% (28/326)
Referred by school nurse	4.6% (15/326)
Community presentation	3.7% (12/326)
Facebook	2.8% (9/326)
Twitter	0% (0/326)

**Note:** Percentages were calculated based on the total number of respondents (n=326). Because respondents were able to choose multiple options, the sum of the percentages exceeds 100%.

### Purpose of Clinic Visit

Nearly all (99.4%, 326/328) FP respondents specified the purpose of their visit to The Clinic (Table 8.4). Low cost birth control was the purpose of visit for half of the respondents (50.6%, 165/326). The least cited reason for visit was to obtain free condoms, with only 1.8% (6/326) of respondents who indicated this. Apart from the options provided, nearly a fifth (18.1%, 59/326) of the respondents provided other



reasons for their clinic visit. 66.1% (39/59) of the other reasons reported by respondents were birth control related consults (i.e. IUD removal, side effects and refill on scripts).

**Table 8.4: Responses to “Why did you come to The Clinic today?”**

Response	# of FP respondents
Low cost birth control	50.6% (165/326)
Other reason	18.1% (59/326)
PAP test	17.5% (57/326)
Annual exam	15.3% (50/326)
Testing or checking for infection	14.4% (47/326)
Counselling or information	12.6% (41/326)
Pregnancy Test	8.9% (29/326)
Free treatment	5.5% (18/326)
Morning After Pill (Emergency Contraceptive Pill)	4.0% (13/326)
Free condoms	1.8% (6/326)

**Note:** Percentages were calculated based on the total number of respondents (n=326). Respondents were able to choose multiple options; hence the sum of the percentages exceeds 100%.

### Reasons for choosing The Clinic

There 326 respondents who provided reasons for why they chose The Clinic to meet their needs (Table 8.5). More than half (57.7%, 188/326) of these respondents indicated that they chose The Clinic because they did not have a health care provider (HCP), could not get an appointment with their regular HCP or did not want to talk about their sexuality with the regular HCP. None of the FP respondents indicated not having a health card as the reason for their visit to The Clinic.

**Table 8.5: Responses to “Why did you choose The Clinic instead of somewhere else?”**

Response	Total
I do not have a HCP/ I do not like to talk about my sexuality with my regular HCP/ I was not able to get an appointment with my regular HCP	57.7% (188/326)
I can get here easily	49.7% (162/326)
I trust the nurses and doctors here	38.3% (125/326)
I cannot get the service I need anywhere else	12.3% (40/326)
Other reason (i.e. women’s only clinic, fast, affordable)	10.4% (34/326)
I was referred here by someone (i.e. friend/family, healthcare centre/professional)	8.3% (27/326)
I do not want my parents/guardian/partner/others to know that I need sexual health services	6.4% (21/326)
I do not have a Health Card	0% (0/326)

**Note:** Percentages were calculated based on the total number of respondents (n=326). Respondents were able to choose multiple options; hence the sum of the percentages exceeds 100%.

## Accessibility of The Clinic location

The current location of The Clinic was reported to be accessible by majority (95.0%, 303/319) of the FP respondents. 5.0% (16/319) of the respondents indicated that The Clinic was not easily accessible to them. Among these respondents, 10 specified areas in London that would be the most accessible to them, with 60% (6/10) preferring the Northeast London region.

These results need to be interpreted with caution as there is a potential for bias. As this survey used a convenience sample, there is a potential for over-representation or under-representation. Although respondents from our sample reported that the clinic was accessible, this may not truly reflect the responses of clients who did not complete the survey.

## Preferred clinic model and preferred method of booking appointments

The current FP Clinic model of booked appointments was preferred by more than half (52.0%, 169/325) of the respondents. For 38.8% (126/325) of the respondents, the clinic model did not matter to them. The remaining 9.2% (30/325) of respondents preferred drop-in FP Clinics.

Majority (86.4%, 273/316) of the respondents preferred to book appointments via telephone. This was followed by nearly a third (32.9%, 104/316) of respondents who preferred to book appointments on-line and 27.8% (88/316) of respondents who preferred to book appointments in-person. Email (22.8%, 72/316) and text (20.3%, 64/316) was the least preferred method to book appointments, with approximately a fifth of respondents preferring this. A cross tabulation between the preferred method of book appointments and the preferred clinic model highlighted that booking appointments by telephone continued to be the most preferred irrespective of the clinic model preferred.

**Note:** Respondents were able to select multiple methods to book appointments; hence the sum of the percentages exceeds the number of the respondents.

## Clinic Type

Clients were asked the type of clinic (i.e. Female-only Clinics, Male-only Clinics) they would feel most comfortable attending, and if they had a preference to be seen by a female or male physician (Table 8.6). Over half (58.3%, 189/324) of the respondents indicated that the type of clinic did not matter to them.

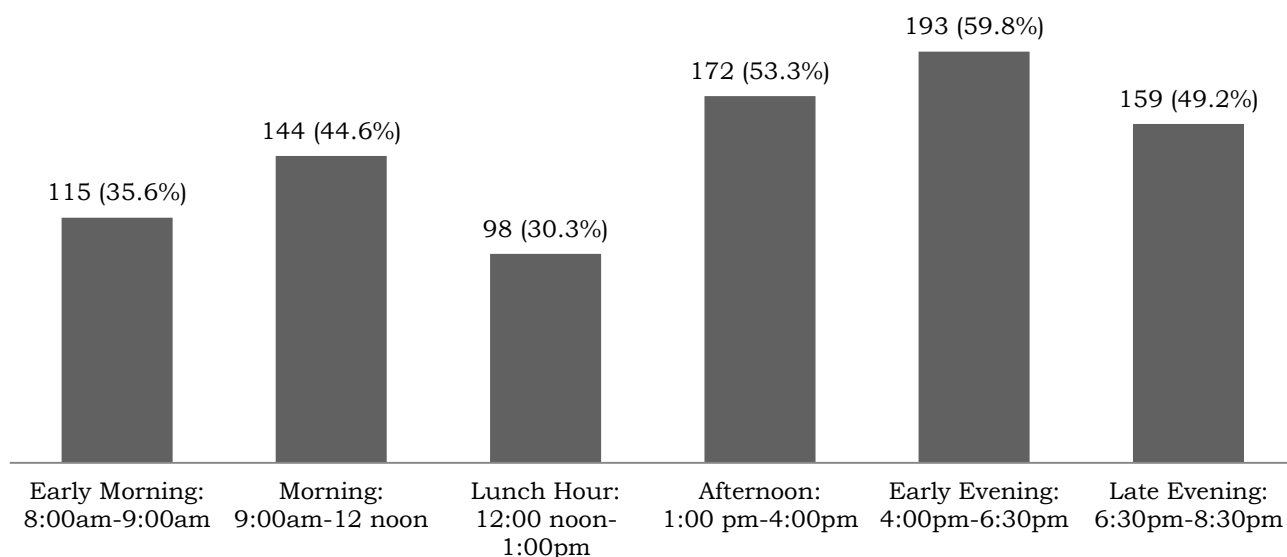
However, a large percentage (69.1%, 224/324) of respondents indicated a preference to be seen by a female physician

**Table 8.6: Clinic type vs gender of physician providing care**

		Preferred gender of physician			Total
		Female doctor # (column %)	Male doctor # (column %)	Does not matter to me # (column %)	
Type of Clinic	Female-only Clinics	114 (50.9%)	0 (0%)	10 (10%)	124
	Male-only Clinics	0 (0%)	0 (0%)	0 (0%)	0
	Female & Male Clinics	6 (2.7%)	0 (0%)	5 (5%)	11
	Does not matter to me	104 (46.4%)	0 (0%)	85 (85%)	189
	Total	225	0	100	

## Clinic hours

Clients were asked their preference for FP Clinic hours. A list of hours were provided and respondents were asked to indicate their first, second and third choices. Nearly all (98.5%, 323/328) of the respondents indicated their preference. A summary of the responses (Figure 8.1) and the ranks of the top three choices (Table 8.7) are provided below.

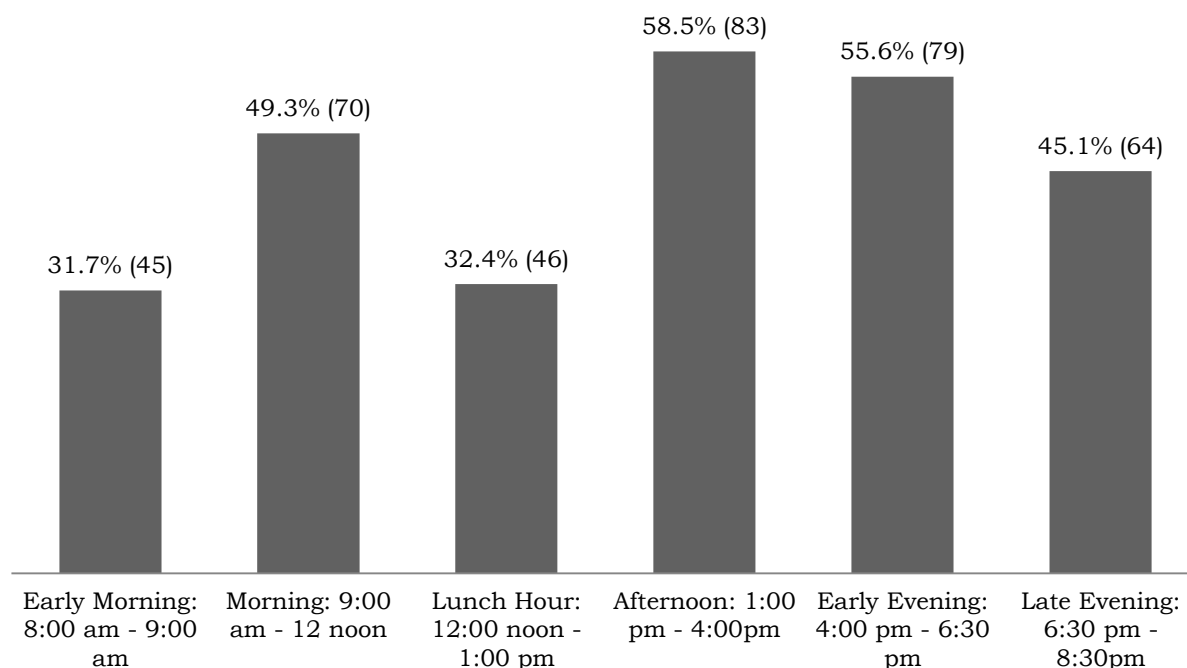
**Figure 8.1: Preferred clinic hours by female FP respondents****Table 8.7: Female respondent's preference and rank for FP Clinic hours**

	First Choice % (#)	Second Choice % (#)	Third Choice % (#)	Did not specify preference % (#)	Total
<b>Afternoon (1:00pm to 4:00pm)</b>	32% (55)	19.8% (34)	32% (55)	16.3% (28)	172
<b>Early Evening (4:00pm to 6:30pm)</b>	32.6% (63)	27.5% (53)	22.3% (43)	17.6% (34)	193
<b>Late Evening (6:30 to 8:30pm)</b>	13.8% (22)	38.4% (61)	27.0% (43)	20.8% (33)	159

These findings need to be interpreted with caution as there is a potential for bias. Cross-tabulating the preferred clinic hours with the clinic the respondent attended highlighted that 47.7% (92/193) of respondents who preferred early evening clinic also completed the survey while attending an early evening clinic. Similarly, 60.5% (104/172) of respondents who indicated a preference for afternoon clinics completed the survey while attending an afternoon clinic. As currently late evening clinics are not offered, none of the respondents who indicated a preference for late evening clinics attended a late evening clinic.

### Clinic hours – Youth (15-24 years old)

Further analysis was conducted to determine the FP clinic hours preferred by youth, a population identified as a priority population for sexual health services (Table 8.8). Nearly all (97.9%, 142/145) of the FP respondents between the ages of 15 and 24 indicated their preference. More than half (58.5%, 83/142) of these respondents indicated that they preferred the afternoon clinic hours (Figure 8.2). This was followed by 55.6% (79/142) who preferred the early evening clinic hours and 49.2% (70/142) of respondents who preferred the morning clinic hours.

**Figure 8.2: Preferred clinic hours by FP respondents between 15-24 years****Table 8.8: Female youth's preference and rank for FP Clinic hours**

	First Choice % (#)	Second Choice % (#)	Third Choice % (#)	Did not specify preference % (#)	Total
<b>Morning (9:00am to 12 noon)</b>	37.1% (26)	22.9% (16)	28.6% (20)	11.4% (8)	70
<b>Afternoon (1:00pm to 4:00pm)</b>	38.6% (32)	19.3% (16)	30.1% (25)	12.0% (10)	83
<b>Early Evening (4:00pm to 6:30pm)</b>	31.6% (25)	30.4% (24)	25.3% (20)	12.7% (10)	79

These findings need to be interpreted with caution as there is a potential for bias. Cross-tabulating the preferred clinic hours with the clinic the respondent attended highlighted that 60.2% (50/83) of youth who preferred afternoon clinic hours, also completed the survey while attending an afternoon clinic. Similarly, 49.4% (39/79) of respondents who preferred early evening clinic hours completed the survey during an early evening clinic and for those who preferred morning clinic hours, 22.9% (16/70) completed the survey in a morning clinic.

## Reception

Nearly all (99.1%, 319/322) FP respondents indicated that they were greeted politely while checking in for their visit. The wait time between check-in and seeing the nurse was less than 15 minutes for 82.6% (256/310) of respondents who reported their wait time. 14.5% (45/310) of FP respondents indicated waiting between 15 and 30 minutes to see a nurse and the remaining 2.9% (9/310) of respondents waited more than 30 minutes.

In addition to the wait times, the survey sample was asked whether they were okay with the time they waited to see the nurse. For majority (96.2%, 302/314) of the respondents the wait time to see a nurse was acceptable. However, 3.8% (12/314) of the respondents were not okay with the length of time they waited to see the nurse. The wait times reported by these 12 respondents varied from 15-30 minutes to more than 45 minutes.

## Interaction with Nurse and Doctor

Respondents were provided with a set of statements regarding their interaction with the nurse and doctor. Responses for these statements are provided in Table 8.9. Majority of respondents either agreed or strongly agreed with the statements provided. A little over 6% of respondents either disagreed or strongly disagreed with each statement for their interaction with the nurses and doctors. These responses were further reviewed to determine if there were any concerns specified throughout the survey. All respondents who strongly disagreed or disagreed rated the overall quality of service as good, very good or excellent. Language barriers and literacy levels are possible explanations for this discrepancy.

**Table 8.9: Interaction with the Nurse and Doctor**

	Nurse					Doctor				
	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
<b>The nurse/doctor listened to my concerns</b>	<b>6.6%</b> (21/ 318)	<b>0</b>	<b>0.6%</b> (2/ 318)	<b>18.6%</b> (59/ 318)	<b>74.2%</b> (236/ 318)	<b>6.3%</b> (18/ 286)	<b>0</b>	<b>1.0%</b> (3/ 286)	<b>21.3%</b> (61/ 286)	<b>71.3%</b> (204/ 286)
<b>The nurse/doctor treated me with respect</b>	<b>7.0%</b> (22/ 316)	<b>0</b>	<b>0</b>	<b>14.9%</b> (47/ 316)	<b>78.2%</b> (247/ 316)	<b>6.3%</b> (18/ 286)	<b>0</b>	<b>0</b>	<b>17.8%</b> (51/ 286)	<b>75.9%</b> (217/ 286)
<b>The nurse/doctor was helpful</b>	<b>6.7%</b> (21/ 313)	<b>0</b>	<b>1.6%</b> (5/ 313)	<b>16.9%</b> (53/ 313)	<b>74.8%</b> (234/ 313)	<b>6.4%</b> (18/ 280)	<b>0</b>	<b>1.1%</b> (3/ 280)	<b>17.5%</b> (49/ 280)	<b>75%</b> (210/ 280)
<b>The nurse/doctor gave me the information I needed to make the best decision</b>	<b>6.6%</b> (21/ 316)	<b>0</b>	<b>4.4%</b> (14/ 316)	<b>19.3%</b> (61/ 316)	<b>69.6%</b> (220/ 316)	<b>6.25%</b> (18/ 288)	<b>0</b>	<b>1.7%</b> (5/ 288)	<b>21.5%</b> (62/ 288)	<b>70.5%</b> (203/ 288)
<b>I had enough time to discuss my concerns and questions with the nurse/doctor</b>	<b>6.7%</b> (21/ 315)	<b>0</b>	<b>1.0%</b> (3/ 315)	<b>20.3%</b> (64/ 315)	<b>72.1%</b> (227/ 315)	<b>6.0%</b> (17/ 285)	<b>0.4%</b> (1/ 285)	<b>1.4%</b> (4/ 285)	<b>20%</b> (57/ 285)	<b>72.3%</b> (206/ 285)

## Phlebotomy Services

As phlebotomy services are not currently offered in FP Clinic, clients were asked where they would prefer to have it completed, if they required bloodwork. 4.9% (14/288) or respondents needed phlebotomy services during their visit. Among these respondents, more than half (57.1%, 8/14) indicated a preference to have the blood work completed on-site. 14.3% (2/14) preferred an off-site lab and for the remaining 28.6% (4/14) respondents the location did not matter.

## Quality of FP Clinic Service

The overall quality of service was rated as excellent or very good by 87.9% (269/306) of FP respondents. 11.4% (35/306) of respondents reported receiving good service and less than 1% (2/306) reported receiving fair service. Suggestions for improvement were retrieved for the two respondents who indicated receiving fair service. Among the two, only one provided a comment for improvement. The comment was in reference to the respondent's specific FP appointment and not related to the overall FP Clinic.

Clients were asked to report what they liked or valued most about The Clinic. Responses were categorized based on common themes. Over half (58.1%, 151/260) of FP respondents valued the staff at The Clinic. 42.3% (110/260) of respondents valued the service, and commented on the confidential and non-judgemental nature of the clinic. A fifth (20.7%, 54/261) of the respondents also valued the convenience and speed of the services offered at The Clinic.

Suggestions for improvement were completed by 162 respondents, among which 47.5% (77/162) noted that no changes needed to be made. Other comments for improvements were made in small numbers. 11.7% (19/162) of respondents commented on having longer clinic hours and 10.5% (17/162) of respondents commented on improving wait times (between seeing the nurse and doctor).

## STI Clinic

A total of 380 respondents completed the survey over 10 STI Clinics. 17.2% (79/459) of STI clients who were asked to participate in the survey declined. The demographic characteristics of clients who declined and their reasons for declining were not recorded.

91.1% (346/380) of the STI respondents reported their gender and 91.6% (348/380) reported their age range. There were fairly equal numbers of female and male respondents, with a slightly higher number of respondents identifying as male. The demographic characteristic of the STI respondents are summarized in Table 8.10. A comparison between the demographic characteristics of clients attending the STI Clinic in 2014 and the survey sample highlighted that females and males in the 15-19 year age group were underrepresented in the survey sample. Additionally, females between the ages of 25 and 29 years were slightly overrepresented in the sample.

**Table 8.10: Demographic characteristic of STI Clinic respondents**

	Female % (n)	Male % (n)	I do not wish to answer	Total
<15 years old	0	0.6% (1)	0	<b>1</b>
15 - 19 years old	9.5% (16)	4.6% (8)	0	<b>24</b>
20 - 24 years old	38.7% (65)	29.1% (51)	33% (1)	<b>117</b>
25 - 29 years old	27.4% (46)	22.9% (40)	33% (1)	<b>88*</b>
30 - 39 years old	17.3%(29)	24% (42)	0	<b>72*</b>
≥40 years old	6.5% (11)	18.3% (32)	0	<b>45*</b>
I do not wish to answer	0	0	33% (1)	<b>1</b>
<b>Total</b>	<b>168</b>	<b>175</b>	<b>3</b>	

\* Total included respondent(s) who did not indicate their gender, but provided their age group

**Note:** In 2014, approximately 18% of the clients attending the STI Clinic were females between the ages of 15 and 19 years, and 8% of STI Clinic clients were males between the ages of 15 and 19 years. Additionally, in 2014 a fifth of the STI Clinic clients were females aged 25 to 29 years.

37.2% (139/374) of the STI respondents were new clients and the remaining 62.8% (235/374) of respondents had previously been to The Clinic. Among the returning respondents, 68.5% (161/235) had been to the STI Clinic, 11.9% (28/235) had been to both the STI and FP Clinics and 9.4% (22/235) had previously been to the FP Clinic. The remainder (10.2%, 24/235) of the respondents did not specify which clinics they had previously attended.

## Hearing about The Clinic and purpose of clinic visit

Similar to FP respondents, over half (54.7%, 208/380) of STI respondents heard about The Clinic through word of mouth. Facebook and Twitter were the least common sources through which the respondents heard about The Clinic. There were 8.7% of respondents who noted other modes through which they heard about The Clinic - Google and other community organizations/events were some of the reported sources. (Table 8.11)

Nearly all (99.2%, 377/380) STI respondents provided the reason for their visit. Testing or checking for infection was the most commonly reported, as 78.8% (296/377) respondents specified this as the reason for their visit. A fifth (18.6%, 70/377) of the respondents visited the STI Clinic for free treatment and 9.8% (37/377) of respondents visited for an annual exam which would include a breast exam and Pap test. The least cited reason for visit was for the morning after pill (Plan B), with only 1.3% (5/377) of respondents visiting the STI clinic for this.

Table 8.11: Response to “How did you hear about The Clinic?”

Response	# of clients
Word of mouth (friend, family etc.)	54.7% (208/380)
Middlesex-London Health Unit website	43.4% (165/380)
Clinic poster or ad	8.7% (33/380)
Other	8.7% (33/380)
Community presentation	6.1% (23/380)
Referred by doctor, clinic or emergency department	5.5% (21/380)
Referred by school nurse	3.9% (15/380)
Facebook	1.8% (7/380)
Twitter	0.3% (1/380)

**Note:** Percentages were calculated based on the total number of respondents (n=380). Respondents were able to choose multiple options; hence the sum of the percentages exceeds 100%.

## Reasons for choosing The Clinic

Majority (98.9%, 376/380) of the survey respondents specified their reason(s) for choosing The Clinic to meet their needs (Table 8.12). Among these respondents, the most commonly reported reason was being able to get to The Clinic easily (54.3%, 204/376). Not having a health card was the least commonly cited reason for choosing The Clinic, with 2.7% (10/376) of respondents indicating this. In addition, 10.4% (39/376) of respondents specified other reasons for choosing The Clinic. The most common other reasons specified among these respondents were receiving great service in the past (43.6%, 17/39) and the convenience and speed of service (43.6%, 17/39).

Table 8.12: Responses to “Why did you choose The Clinic instead of somewhere else?”

Response	% of clients (#)
I can get here easily	54.3% (204/376)
I trust the nurses and doctors here	29.5% (111/376)
I do not like to talk about my sexuality with my regular health care provider	24.7% (93/376)
I do not have a family doctor or other health care provider	15.2% (57/376)
I do not want my parents/guardian/partner/others to know that I need sexual health services	13.6% (51/376)
I was not able to get an appointment with my doctor or regular health care provider	11.4% (43/376)
Other	10.4% (39/376)
I cannot get the service I need anywhere else	9.3% (35/376)

I was referred here by someone (i.e. Friend, Healthcare Centre/professional)	4.5% (17/376)
I do not have a Health Card	2.7% (10/376)

**Note:** Percentages were calculated based on the total number of respondents (n=376). Respondents were able to choose multiple options; hence the sum of the percentages exceeds 100%.

### Accessibility of The Clinic location

The location of The Clinic was reported to be accessible by majority of the STI respondents. 96.2% (354/368) of respondents indicated that the location of The Clinic was easy for them to get to. The remaining 3.8% (14/368) of respondents reported that The Clinic was not easily accessible to them. Of these respondents, 71.4% (10/14) indicated areas on the map that would be the most accessible to them. Majority (42.9%, 6/14) of the respondents preferred locations in Southwest and Southeast London. This is contrary to the areas requested by FP respondents, as most (60%, 6/10) FP respondents indicated Northeast London as being most accessible to them.

These results need to be interpreted with caution as there is a potential for bias. As this survey used a convenience sample, there is a potential for overrepresentation or underrepresentation. Although majority of the STI respondents reported that the clinic was accessible, this may not truly reflect the responses of STI clients who did not complete the survey. It is possible that the accessibility of the clinic is overrepresented.

### Preferred clinic model and preferred method of booking appointments

Drop-in clinics were the most preferred, as 42.3% (159/376) of STI respondents indicated a preference for this model. This was followed by over a third (36.2%, 136/376) of respondents who reported that the clinic model did not matter to them. Booked appointment clinics were the least preferred (21.5%, 81/376) clinic model by STI respondents.

Overall, the majority (56.5%, 205/363) of STI respondents preferred to book appointments via telephone. This was followed by 43.0% (156/363) who preferred to book appointments in-person and 35.8% (130/363) who preferred to book appointments online. A small percentage (2.75%, 10/363) of STI respondents chose “other”, of which majority (70%, 7/10) of the responses indicated that they preferred walk-in and no booked appointments.

### Clinic Type

98.9% (376/380) of the respondents specified the type of clinic (i.e. female-only, male-only clinic) they preferred and 97.9% (372/380) of respondents specified the gender of the physician they prefer to be seen by (Table 8.13). For a large percentage (73.1%, 275/376) of STI respondents, the type of clinic did not matter to them. Similarly the gender of the physician providing care also did not matter to more than half (57.3%, 213/372) of the STI respondents.

**Table 8.13: Preference for clinic type vs gender of physician providing care**

		Preferred gender of physician			
		Female doctor # (% column)	Male doctor # (% column)	Does not matter # (% column)	Total
Type of Clinic	Female-only Clinics	49 (38.6%)	0 (0%)	11 (5.2%)	60
	Male-only Clinics	2 (1.6%)	9 (28.1%)	0 (0%)	11
	Female & Male Clinics	8 (6.3%)	6 (18.8%)	16 (7.5%)	30
	Does not matter	68 (53.5%)	16 (50%)	184 (86.4%)	275*
	Total	127	32**	213**	

\* Total includes respondents who indicated the type of clinic but did not indicate the gender of the physician they prefer to see

\*\* Total includes respondents who indicated that the gender of the physician they prefer to see but did not indicate the clinic type they are most comfortable with

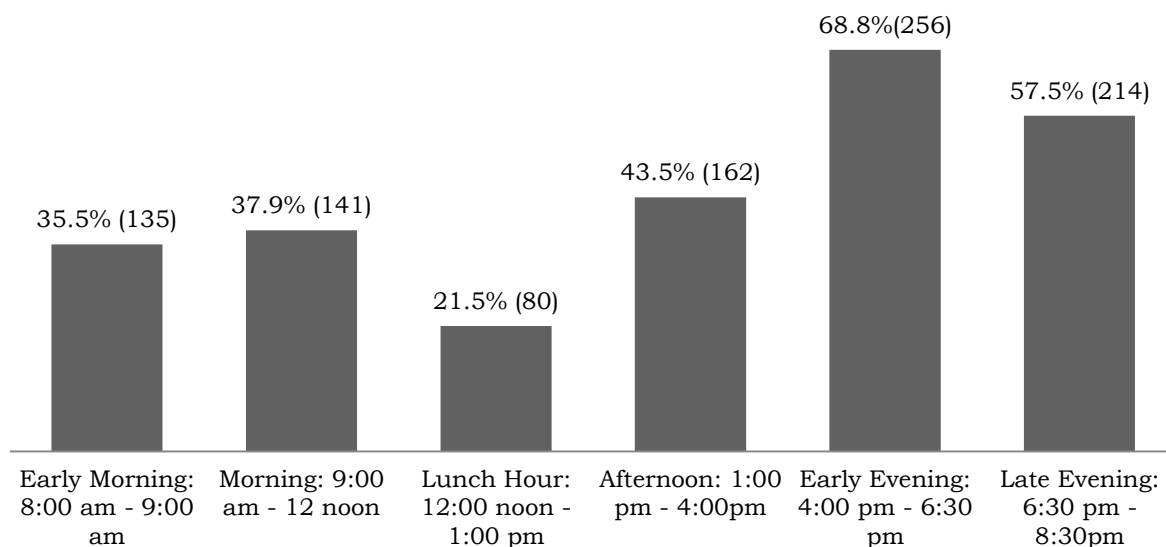


**STI Clinic hours**

A list of hours was provided for respondents to specify their preference for STI Clinics. Nearly all (97.9%, 372/380) STI respondents indicated their preference. A summary of these responses (Figure 8.3) and a tally of the ranks (Table 8.14) are provided below.

These findings need to be interpreted with caution as there is a potential for bias. Cross-tabulating the preferred clinic hours with the clinic the respondent attended highlighted that 84.4% (216/256) of respondents who preferred early evening clinics completed the survey while attending an early evening clinic.

**Figure 8.3: Preference for STI Clinic hours**



**Table 8.14: Ranks of top three clinic hours preferred by STI Clinic respondents**

Clinic hours	1 <sup>st</sup> choice % (#)	2 <sup>nd</sup> choice % (#)	3 <sup>rd</sup> choice % (#)	Did not specify a rank % (#)	Total
Afternoon (1:00pm-4:00pm)	24.1% (39)	17.3% (28)	49.4% (80)	9.3% (15)	162
Early Evening (4:00pm-6:30pm)	29.7% (76)	41.4% (106)	15.6% (40)	13.3% (34)	256
Late Evening (6:30pm-8:30pm)	34.6% (74)	30.4% (65)	23.4% (50)	11.7% (25)	214

**Reception**

97.3% of STI respondents (365/375) indicated that they were greeted politely when they checked-in for their visit. The remaining 2.7% (10/375) respondents indicated that they were not greeted politely during check-in.

The wait time from check-in to the time the client met with the nurse was less than 30 minutes for 79.0% (274/347) of STI respondents. For more than 90% (321/350) of respondents the wait time to see the nurse was okay, while the remaining 8.3% (29/350) of respondents did not find the wait time okay. Wait times reported by these respondents varied between 15-30 minutes to more than 45 minutes.

## Interaction with Nurse and Physician

Majority of respondents either agreed or strongly agreed with the statements regarding their interaction with the nurse and physician. Similar to the FP Clinic results, a small percentage of STI respondents disagreed or strongly disagreed with the statements (Table 8.15). These responses were further reviewed to determine if there were any concerns specified throughout the survey. All respondents who strongly disagreed or disagreed rated the overall quality of service as good, very good or excellent. Language barriers and literacy levels may be potential explanations for this discrepancy.

**Table 8.15: Interaction with the Nurse and Doctor**

	Nurse					Doctor				
	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
<b>The nurse/doctor listened to my concerns</b>	5.7% (19/ 336)	0.3% (1/ 336)	1.5% (5/ 336)	20.2% (68/ 336)	72.3% (243/ 336)	6.5% (18/ 279)	0	2.9% (8/ 279)	24.0% (67/ 279)	66.7% (186/ 279)
<b>The nurse/doctor treated me with respect</b>	6.0% (20/ 335)	0.6% (2/ 335)	0.3% (1/ 335)	13.7% (46/ 335)	79.4% (266/ 335)	6.7% (19/ 282)	0.4% (1/ 282)	1.4% (4/ 282)	15.2% (43/ 282)	76.2% (215/ 282)
<b>The nurse/doctor was helpful</b>	6.0% (20/ 332)	0	0.6% (2/ 332)	19.0% (63/ 332)	74.4% (247/ 332)	6.6% (18/ 274)	0	1.5% (4/ 274)	20.8% (57/ 274)	71.2% (195/ 274)
<b>The nurse/doctor gave me the information I needed to make the best decision</b>	6.0% (20/ 331)	0.3% (1/ 331)	3.3% (11/ 331)	19.6% (65/ 331)	70.7% (234/ 331)	5.8% (16/ 276)	0.7% (2/ 276)	2.2% (6/ 276)	20.3% (56/ 276)	71.0% (196/ 276)
<b>I had enough time to discuss my concerns and questions with the nurse/doctor</b>	6.0% (20/ 331)	1.2% (4/ 331)	0.9% (3/ 331)	18.7% (62/ 331)	73.1% (242/ 331)	6.5% (18/ 279)	1.1% (3/ 279)	2.2% (6/ 279)	21.5% (60/ 279)	68.8% (192/ 279)

## Phlebotomy Services

60.5% (184/304) of STI respondents needed phlebotomy services during their visit. Among these respondents, 67.8% (122/180) preferred to have bloodwork completed on-site and for 32.2% (58/180) of respondents the location did not matter. 2.2% (4/184) of respondents who reported needing bloodwork did not specify where they would prefer to have it completed.

## Quality of STI Clinic service

83.7% (318/380) of STI respondents completed the question regarding the overall quality of service. Majority (88.1%, 280/318) of these respondents rated the quality of service as very good or excellent. 10.7% (34/318) of respondents reported receiving good service and a little over 1% (4/318) of respondents noted receiving fair or poor service. Suggestions for improvement were retrieved for those who reported receiving poor or fair service. Among

these respondents, two did not provide any comments for improvement. Of the remaining two respondents, one mentioned that The Clinic was not accessible by wheel-chair and another respondent suggested improving the wait times for bloodwork.

STI respondents most valued the staff at the clinic, with 44.4% (115/259) of respondents who reported this. The second most valued aspect was the speed, convenience and easy of the service, with over a third (34.7%, 90/259) of respondents who reported this. This was closely followed by 30.1%, (78/259) of respondents who valued the confidential and non-judgmental nature of the clinic. Other aspects of the clinic that were valued were reported in small numbers and include the location, affordability, hours, and clinic environment.

Less than half (45.8%, 174/380) of the STI respondents provided suggestions for improvement. Among these respondents nearly a third (32.2%, 56/174) noted that The Clinic did not need any changes. Suggestions were made in small numbers. A fifth (35/174) of the suggestions were around improving wait times and 16.7% (29/174) of the comments were regarding longer clinic hours. Other suggestions for improvement include improving the clinic environment (offering coffee/snacks, waiting room) and location.

### *Implications for Family Planning STI Clinic Practice*

Overall, a majority (88.0%) of The Clinic respondents (n=624) rated the quality of the services received in both the STI and FP clinics as excellent or very good. Most respondents indicated that the nurse and doctor listened to their concerns, treated them with respect, was helpful and provided the information needed to make the best decision. This was further iterated in the comments provided by clients, where the most commonly valued aspect of The Clinic was the staff.

Although majority of the respondents indicated that changes did not need to be made, a small number suggested improvement related to decreasing wait times and extending clinic hours. Most respondents preferred the current clinic model of drop-in for STI Clinics and booked appointments for FP Clinics. For booked appointments in FP Clinics, a majority of respondents preferred to booked appointments via telephone, however a fairly large number also expressed interest in booking appointments online. Hence exploring online tools to book appointments may need to be considered.

### **Limitations**

- Respondents for this survey were selected using a **convenience sampling strategy**. This was deemed appropriate for the purpose of this survey; however a convenience sample may not be truly representative of all the clients who access The Clinic.
- **Seasonal variations** in clinic users may exist. As the survey was administered between May and June, it is possible that clients accessing services in other time periods have different opinions/feedback about the quality of the service.
- **Self-selection bias** is also a potential limitation. There were a total of 125 STI and FP clients who declined the survey. The reasons for declining the survey were not recorded. Due to clients self-selecting themselves into the survey, the preferences of those who did not complete the survey may be different from those that completed the survey.
- **Non-response bias** is also a possible limitation to consider. Some questions (i.e. nurse/doctor interaction, areas for improvement) were not completed by respondents. The reasons for skipping these questions are unclear; hence respondents who did not answer these questions may have had a different opinion.
- Surveys were not formally piloted, validated or tested for reliability. The survey was not tested to determine whether questions measured what was intended and if the responses are reproducible and consistent.
- The survey did not capture the opinions and perspectives of those who currently do not utilize The Clinic but are in need of FP and STI services.

## IX. Recommendations

The following recommendations are proposed given the information gathered for this program review. Recommendations are provided using the principles of the Ontario Public Health Standards: Need, Impact, Capacity, Partnership and Collaboration.

### **Recommendation: Provide phlebotomy services on-site at both STI and Family Planning Clinics**

**Need:** On-site access to phlebotomy services is currently only available during STI Clinics. For FP clients phlebotomy requisitions are provided to complete at an external lab. Consistent delivery of phlebotomy services in both STI and FP clinics was identified as a need as MLHU was the only health unit among its comparator that did not offer phlebotomy services to FP clients. This need was further re-iterated in the client satisfaction survey, where over half of the FP clients who needed bloodwork during their visit indicated that they would prefer to have it completed on-site. Additionally, the physician survey and discussion highlighted that offering this service on-site would increase client access to phlebotomy services.

**Impact:**

- Increase completion of phlebotomy requisitions among FP clients by reducing barriers (i.e. transportation costs, time)

**Capacity:** The current layout of the clinic will accommodate this recommendation, as phlebotomy services are already offered during STI Clinics. Upon determining the staff(s) involved with performing phlebotomy during FP Clinics, additional training/resources may need to be considered.

**Partnership and Collaboration:** None currently identified.

*Possible indicators to consider for monitoring:*

- # of phlebotomy requisitions completed on-site
- # of phlebotomy requisitions provided
- Rate of completion in clients who choose to have phlebotomy requisition completed at an external lab

### **Recommendation: Maximize the value of PHN practice to ensure the full extent of knowledge and expertise is utilized, and services are provided as efficiently as possible**

**Need:** There is a need to increase the PHNs scope of practice to increase access to clinic services. Currently clinical services such as pregnancy testing can only be accessed during physician led clinics. This is a barrier for clients who seek time-sensitive services (i.e pregnancy testing, ECP), as they have to return to The Clinic at a later time/day or attending another health clinic. In addition, the physician survey highlighted that the physicians were supportive of expanding the PHN's scope of practice with medical directives for pregnancy testing, ECP, STI treatment for positive Chlamydia and Gonorrhea cases and Hepatitis A and Hepatitis B injections.

**Impact:**

- Increase clinic service availability to clients, as they will no longer need to book to see a physician unless client needs are outside the scope of the PHN.

**Capacity:** Currently there are some medical directives in place for the PHNs to work under. Following the implementation of additional medical directive, the capacity for this recommendation will need to be reassessed to determine if additional training will be needed to meet competency requirements.

**Partnership and Collaboration:** None currently identified

*Possible indicators to consider for monitoring:*

- # of clients seen by PHNs for pregnancy testing, ECP and Depo-Provera related purposes
- # of clients who were referred to see a clinic doctor after being seen by the nurse under medical directive.

**Recommendation:** Review clinic services offered at the Strathroy office to determine whether the current services appropriately address the sexual health needs of the clients

**Need:** Limited clinics are offered to clients at the Strathroy office, as clinics with a physician are only available on the third Thursday of each month by appointment and nurse only clinic the other three Thursdays of the month. This limits timely access to sexual health and harm reduction services (i.e. ECP, pregnancy testing, birth control, needle exchange). Clients utilizing services at the Strathroy office have also expressed a need to increase services during interactions with clinic staff. It is recommended that the clinic services in Strathroy be reviewed, to ensure that the needs of clients are appropriately addressed.

**Impact:**

- Improve sexual health outcomes by increasing timely access to sexual health services
- Reduce the transmission of STI/BBI, by increasing access to harm reduction supplies

**Capacity:** There is limited capacity for physicians as they are only available on-site on the third Thursday of each month. PHNs in The Clinic have medical directives to provide specific sexual health services. Hence capacity can be increased by exploring clinic models where PHN provide specific sexual health services under their medical directives and refer clients beyond their scope to physicians during physician-led clinics. This model has been utilized by other health units to increase capacity and meet client needs.

**Partnerships and Collaboration:** None currently identified

*Possible indicators to consider for monitoring:*

- # of client visits during nurse-led clinics
- # of clients referred by PHN to physician
- # of birth control dispensed
- # of ECP dispensed
- # of STI tests administered
- # of STI treatments dispensed

**Recommendation:** Identify strategies to increase access and utilization of clinic services by persons without a health card

**Need:** A health card is requested for services offered through the FP Clinics, resulting in clients without health cards having limited to no access to FP services. This was identified as a need by The Clinic team, as there have been instances where young clients in need of FP services do not have a health card as their parents hold on to it. Also PHNs who attend the Elgin-Middlesex Detention Centre have received feedback from inmates who have indicated that they may not have a fixed address to obtain a health card, making it difficult to utilize these services. Populations that have expressed this need are vulnerable populations in need of sexual health services. This recommendation will help address this need by identifying, assessing and determining the strategy that would be most effective in increasing access to populations without a health card.

**Impact:**

- Increase access to sexual health services for populations without a health card (priority population)
- Reduce unplanned pregnancies, teen pregnancies rates, and abortion rates
- Improve health outcomes, by increasing coordination of care to other required services on a need basis (i.e. primary care, support services)

**Capacity:** There is capacity to provide care to clients without a health card in The Clinic. In the physician survey and discussion, four out of seven FP physicians indicated that they were willing to see clients without a health card, and provided percentages varying from <3% to 10%. In efforts to address this need and ensure clinic services are accessible to all individuals in the community, the billing model for The Clinic was reviewed. The outcome of the review was to shift from a fee-for-service model to a blended model. With this model, physicians in the FP clinic will be provided with an hourly rate. The shift to a blended billing model aligns services with the MOHLTC's Clinical Services Guidance Document. In addition to ensuring closer alignment with Ministry guidelines, this billing model is intended to increase access to those without a health card, as many of the services offered in the FP Clinics will no longer require a health card.

**Partnerships and Collaboration:** Collaborate with community organizations that offer services (i.e. support services, housing support, primary care services) to refer populations without a health card to appropriate services as needed.

*Possible indicators to consider for monitoring:*

- # of clients without a health card who use clinic services

**Recommendation:** Train all physicians in IUD/IUS insertions, to expand the availability of this service across all Family Planning clinics. In addition, develop a written protocol to determine whether referral to a specialist for insertion is needed.

**Need:** MLHU offers copper IUD for emergency contraception consistent with best practice guidelines. It is the most effective method of emergency contraception if inserted within five days after an unprotected intercourse. Commonly used emergency contraceptive pills (e.g. Plan B) have reduced effectiveness in women weighing between 75-80 kg and lack of effectiveness in women weighing over 80kg and over. Copper IUD is the only effective emergency contraceptive option for overweight and obese women. Considering high obesity prevalence in Canada especially in vulnerable populations, such as low SES and Aboriginal women, there is a need to increase timely access to effective emergency contraception. Additionally, The Society for Obstetrician and Gynecologists of Canada recently recommends intrauterine devices as first line contraceptive agent for adolescents.

**Impact:**

- Reduction in unplanned pregnancies and abortion; reduction in teen pregnancy rates
- Higher client satisfaction due to long-term contraception
- Decreased number of visits due to emergency contraception and pregnancy testing

**Capacity:** Currently, the clinic has limited capacity to provide IUD insertions. Two work regular clinics and able to insert one IUD per clinic. There are IUD only clinics offered three times a month with 4-5 IUD insertion per clinic. In 2014, 56 clients had IUD insertions in the clinic and 117 clients were referred to other providers. Available appointments for IUD/IUS insertion services are filled quickly and wait times may be longer than desirable. This recommendation will help the clinic to meet the increasing demand for IUD/IUS insertions.

**Partnership and collaboration:** We will be sharing physician best practice guidelines regarding IUD insertions for emergency contraception with community physicians during physician outreach.

*Possible indicators to consider for monitoring:*

- # of IUD request/consults
- # of IUDs inserted
- # of failed IUD insertions
- # of clients who have IUD removed after 6 months post insertion
- # of IUDs referred to community providers
- # of IUDs inserted for Emergency Contraception

**Recommendation:** Increase availability for clients to purchase other forms of birth control and vaccines (not covered) through various payment methods (i.e., credit).

**Need:** Cash and debit are the only methods of payment accepted at The Clinic. This presents a barrier to those who prefer to pay via credit, specifically for large amounts, where the client leaves the site to withdraw cash for the purchase. This barrier was identified during the staff consultations as clients have increasingly expressed a preference to pay by credit. A need to expand the availability of birth control and vaccines options was also identified. The community organization environmental scan highlighted that the Health Unit was one of the only organizations that offered low cost contraceptives and emergency contraception. Medical Clinics in the community provide a prescription for birth control/emergency contraception for clients to fill. Filling the prescriptions at pharmacies can be expensive for clients without coverage. Hence there is a need to ensure that the birth controls options stocked in the clinic align with the client's requests. Additionally, expanding the vaccine options (covered and not covered) need to be explored as clients who request to have specific vaccines (non-publicly funded Hepatitis B vaccines, Tdap for STI and IDU clients, Gardasil) have to visit the Immunization clinic to purchase the vaccine.

The clinic hours between the Immunization Clinic and the Sexual Health Clinic don't always overlap and pose a barrier for clients.

**Impact:**

- Decrease unplanned pregnancies; decrease adolescent pregnancy rates
- Increase client access by offering various affordable birth control options that align with their needs
- Increase accessibility to vaccines (publicly funded and non-publicly funded) for clients who request this

**Capacity:** Capacity to expand the payment methods will need to be determined by the team in collaboration with the Finance department. In addition, the capacity to increase the availability of birth control options and vaccines will also need to be assessed once consults with pharmaceutical companies have occurred and the associated cost of increasing birth control options have been discussed.

**Partnerships and Collaboration:** A relationship with pharmaceutical companies will need to be established to determine the cost associated with increasing birth control options.

**Recommendation: Determine the reach and utilization of sexual health clinic services by priority populations**

**Need:** The Ontario Public Health Standards mandates that health units provide sexual health services for priority populations and ensure that priority population have the capacity to adopt behaviours for healthy sexuality and the prevention of STI/BBIs. Priority populations for sexual health have been well researched and defined by the Public Health Agency of Canada. The extent to which these populations utilize clinic services in Middlesex-London is currently unclear. Although the clinic team has an idea of the populations that utilize sexual health service, due to limited data collection, the level of reach cannot be accurately reported. Hence, a need to collect pertinent data to accurately determine the reach and utilization of services is recommended. This recommendation will assist future clinic programming to determine populations that underutilize sexual health services and identify approaches to tailor service provision accordingly.

**Impact:**

- Inform clinic programming by identifying evidence-informed strategies to deliver and increase utilization of sexual health services by priority populations that are not reached with the current clinic model
- Tailoring services to align with the sexual health needs of priority populations will increase access – ultimately improving sexual health outcomes within these populations by reducing unplanned pregnancies, teen pregnancies and transmission of STI/BBIs.

**Capacity:** Need to consider the capacity of the Hampson Client Management system to electronically capture data pertaining to priority populations. The PHNs in The Clinic have started to collect additional information (i.e. no health care provider, unstably housed) during client consultations. Once adequate time has elapsed, analysis of this information will help inform programming focuses.

**Partnerships and collaborations:** Consider collaborating with organizations that offer services to the priority populations to determine the need and gather input and feedback on approaches/strategies to address the need.

**Recommendation: Assess and identify the needs of the local population (including priority populations) who have sexual health needs but currently do not access any sexual health related services**

**Need:** The Clinic services are accessed by a large number of clients, many of whom are returning clients. In 2014 over 50% of the total clinic visits (15,795, includes FP and STI clinics) were by returning clients. This was also evident in the client satisfaction survey, where >60% of STI clients and >80% of FP clients had previously been to The Clinic for either STI or FP services. Despite the large volume of clients, it is unclear whether the services are accessible to non-clients in need of FP and STI services. Further, the community environmental scan highlighted sexual health services were available in varying degrees locally. Given the current programming of the Clinic and the current availability of local services, it is unclear whether this is sufficient to meet the sexual health needs of the community. This was further iterated in the physician survey. Physicians highlighted that the needs of the community need to be identified prior to determining whether the current model of The Clinic is sufficient or if additional clinic locations is warranted.

**Impact:**

- Improve the sexual health outcomes (reduce unplanned pregnancies, decrease transmission of STIs/BBIs, reduce long-term impacts of untreated STIs/BBIs) of populations with sexual health needs by identifying the gaps and barriers that contribute to the non-utilization of services
- Improve the provision of services by tailoring services to align with population needs

**Capacity:** Capacity for this recommendation would need to be determined upon identifying the approach (i.e. focus group) that will be utilized to assess the need within the community. Based on the approach, training will need to be provided to ensure data collection is conducted in a systematic manner.

**Partnership and Collaboration:** Consider collaborations with community organizations (i.e. RHAC) to gather information from various target populations.

**Recommendation:** Enhance partnership with community physicians and identify strategies (i.e. fax updated STI guidelines, phone discussion and targeted academic detailing workshops with physicians who have poor compliance to the updated guidelines) to ensure physicians providing care to STI cases are aware and feel supported to provide STI treatments as per the updated guidelines

**Need:** The Health Unit offers free provincially funded STI medication to community physicians, upon their request. MLHU's Health Care Provider Outreach Coordinator relays information regarding the availability of this service to community health care providers. With the current approach, 19 community physicians request free STI medication from The Clinic. Among these physicians, requests continue to be made for Gonorrhea medication (Cefixime) that is not the recommended first line of treatment, as per STI Guidelines. Further to this, discussions with physicians during STI follow-up have revealed that misinformation is communicated to clients regarding the appropriate testing and treatment. The Sexual Health Protocol also states the need to consult with community health care providers to ensure cases of STI receive the appropriate testing and treatment as recommended by Canadian Guidelines on Sexually Transmitted Infections, 2006 Edition (or as current)

**Impact:**

- Enhancing partnerships will ensure that treatment for STIs are provided in accordance with the STI Guidelines.
- Consistently prescribe medication as per the updated STI Guidelines
- Increase the communication of accurate sexual health information to clients
- Increase the number of requests made for free STI treatments – thereby reducing barriers (i.e cost of medication) and increasing access to STI treatments

**Capacity:** There is capacity within the Clinic to enhance partnerships with community physicians. An interest in being involved in health care provider outreach was expressed by four physicians that completed the clinic survey.

**Partnerships and Collaborations:** Partnerships will be made with community physicians through the MLHU Health Care Provider Outreach Coordinator to identify strategies most effective in ensuring physicians are aware of the updated guidelines and feel supported to provide recommendations treatments.

*Possible indicator for evaluation*

- # of physicians who do not comply with STI treatment guidelines retrieved from iPHIS
- # and types of STI medication distributed to health care provider
- Test of cure results

**Recommendation:** Make enhancements to the current electronic database.

**Need:** Limitations with the current electronic database were identified during staff consultations. The database is used for basic data collection. It was identified that enhancements to ensure data quality of the reports generated by the database and the overall usability would be beneficial. Enhancements would also allow pertinent data regarding clinical services to be collected to assist in future monitoring and evaluation projects.



The long term sustainability of the electronic database was identified to be limited. Hence, if feasible, consideration needs to be given to shifting to an EMR. This shift would be beneficial in maintaining consistent documentation. The clinic chart audit (Appendix B) identified inconsistencies in the date format and the types of abbreviations used. The shift to a paperless system would allow data collection fields to be validated and ensure consistent documentation across all clinic charts. In addition, shifting to an EMR would provide the capacity to directly download laboratory results to the database and minimize the potential for transcription errors.

**Impact:**

- Collect indicators (i.e. number of IUDs referrals made, number of PHN referrals to clinic doctor in nurse-led clinics, priority populations that access clinic services) for on-going monitoring and future evaluations

**Capacity:** Collaborations between the Manager and host provider to implement the identified enhancements

**Partnership and Collaborations:** None currently identified

**Recommendation:** Develop a logic model for each pilot program and develop and monitor indicators for projects

**Need:** Pilot projects have been planned as a result of this Program Review. To help determine if the pilot projects are having the intended impact, there is a need for on-going monitoring of indicators and evaluations, as needed. The development of a logic model is highly recommended to ensure that the planned activities of the pilot projects are clearly linked with the intended outcomes. Further, this will aid the monitoring and evaluation of the pilot projects to identify challenges/areas for improvement and assess the overall effectiveness.

**Impact:** Align with the client-centred approach and deliver high-impact services – thereby improving the population's sexual health outcomes

**Capacity:** Assistance would be required from The Clinic staff to collect data for the indicators identified in the project logic model. Support from the Program Evaluator and Epidemiologist will also be required to develop the logic model, develop and monitor program indicators and evaluate outcomes.

*Partnerships and Collaborations:* None currently identified.

## References

- BCCDC. *Best practices for British Columbia's harm reduction supply distribution program*. (2008). BC Harm Reduction Strategies and Services Committee. Retrieved from <http://www.bccdc.ca/NR/rdonlyres/17E7A2C8-5070-4A29-9971-55210F781B58/0/BestPractices.pdf>
- Blank S, Gallagher K, Washburn K & Rogers M. (2005). Reaching out to boys at bars: utilizing community partnerships to employ a wellness strategy for syphilis control among men who have sex with men in New York City. *Sexually Transmitted Diseases*, **32**(10):S65-S72.
- Buhrer-Skinner M, Muller R, Menon A & Gordon R (2009). Novel approach to an effective community-based chlamydia screening program within the routine operation of a primary healthcare service. *Sexual Health*, **6**(1):51-56
- Canadian Nurses Association (CNA) / Canadian Association of Nurses in HIV/AIDS Care (CANAC). (2012). *Joint position statement on Harm Reduction*. Retrieved from [https://www.cna-aic.ca/~media/cna/page-content/pdf-en/jps\\_harm\\_reduction\\_2012\\_e.pdf](https://www.cna-aic.ca/~media/cna/page-content/pdf-en/jps_harm_reduction_2012_e.pdf)
- Chacko MR, Cromer BA, Phillips SA & Glasser D. (1987). Failure of a lottery incentive to increase compliance with return visit for test-of-cure culture for Neisseria gonorrhoeae. *Sexually Transmitted Diseases*, **14**(2):75-8.
- Currie MJ, Schmidt M, Davis BK, Baynes AM, O'Keefe EJ, Bavinton TP, McNiven M, Martin SJ & Bowden FJ. (2010). 'Show me the money': financial incentives increase chlamydia screening rates among tertiary students: a pilot study. *Sexual Health*, **7**(1):60-5.
- Demel, G. Heywood, D., Lampkin, H., Leonard, L., Lebounga Vouma, J., Lockie, L., Millson, P., Morissette, C., Nielsen, D., Petersen, D., Tzemis, D., Zurba N. (2013). *Best Practice Recommendations for Canadian harm reduction programs that provide service to people who use drugs and are at risk for HIV, HCV, and other harms: Part 1*. Working Group on Best Practice for Harm Reduction Programs in Canada. Retrieved from [http://www.catie.ca/sites/default/files/BestPracticeRecommendations\\_HarmReductionProgramsCanada\\_Part1\\_August\\_15\\_2013.pdf](http://www.catie.ca/sites/default/files/BestPracticeRecommendations_HarmReductionProgramsCanada_Part1_August_15_2013.pdf)
- Emerson C, McCarty E, Fyfe J, Wilson Y & Cullen B. (2010). Reaching men in saunas. *HIV Medicine*, **11**:100.
- Geringer WM, Hinton M. (1993). Three models to promote syphilis screening and treatment in a high risk population. *Journal of Community Health*, **18**(3):137-51.
- Gold J, Hocking J & Hellard M. (2007). The feasibility of recruiting young men in rural areas from community football clubs for STI screening. *Australian and New Zealand Journal of Public Health*, **31**(3):243-246.
- Grimley DM, Annang L, Lewis I, Smith RW, Aban I, Hooks T, Williams S, Hook EW & Lawrence JS. (2006). Sexually transmitted infections among urban shelter clients. *Sexually Transmitted Diseases*, **33**(11):666-669
- Haukoos JS, Witt MD, Coil CJ & Lewis RJ. (2005). The effect of financial incentives on adherence with outpatient human immunodeficiency virus testing referrals from the emergency department. *Academic Emergency Medicine*, **12**(7):617-21
- Hayter M. (2005). Reaching marginalized young people through sexual health nursing outreach clinics: evaluating service use and the views of service users. *Public health nursing*, **22**:339-46
- Hengel B, Jamil SM, Mein JK, Maher L, Kaldor JM & Guy, RJ. (2013). Outreach for chlamydia and gonorrhoea screening: a systematic review of strategies and outcomes. *BMC Public Health*, **13**:1040
- Kong FYS, Hocking JS, Link CK, Chen MY & Hellard ME (2009). Sex and sport: Chlamydia screening in rural sporting clubs. *BMC Infectious Diseases*, **9**(73).
- Lee R, Cui RR, Muessig KE, Thirumurthy H & Tucker JD. (2014). Incentivizing HIV/STI testing: a systematic review of the literature. *AIDS and Behavior*, **18**(5):905-912

- Lister NA, Smith A, Tabrizi S, Hayes P, Medland NA, Garland S & Fairley CK. (2003). Screening for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* in men who have sex with men at male-only saunas. *Sexually Transmitted Diseases*, 30(12):886-889
- Lister NA, Smith A, Tabrizi SN, Garland S, Hayes P & Fairley CK. (2005). Comprehensive clinical care on-site in men-only saunas: confidential STI/HIV screening outreach clinic. *International Journal of STD & AIDS*, 16(12):794-798.
- Lorimer K, Reid ME & Hart GJ (2009). Willingness of young men and women to be tested for *Chlamydia trachomatis* in three non-medical settings in Glasgow, UK. *Journal of Family Planning and Reproductive Health Care*, 35(1):21-26
- Malotte CK, Ledsky R, Hogben M, Larro M, Middlestadt S, St Lawrence JS, Olthoff G, Settlege RH & Van Devanter NL. (2004) Comparison of methods to increase repeat testing in persons treated for gonorrhea and/or chlamydia at public sexually transmitted disease clinics. *Sexually Transmitted Diseases*, 31(11):637-42.
- Marrazzo JM, Ellen JM, Kent C, Gaydos C, Chapin J, Dunne EF & Rietmeijer CA. (2007). Acceptability of urine-based screening for *Chlamydia trachomatis* to asymptomatic young men and their providers. *Sexually Transmitted Diseases*, 34(3):147-153
- Middlesex-London Health Unit (2013). A profile of people who inject drugs in London, Ontario: Report on the Public Health Agency of Canada I-Track Survey, Phase 3, Middlesex-London, 2012. London, Ontario
- Ministry of Health and Long-Term Care. Sexual health clinical services manual. Toronto, ON: Queen's Printer for Ontario; 2002.
- Morris SR, Bauer HM, Chartier M, Howard H, Watson S, Yokotobi J, Taylor AF, Bolan G. (2010). Relative efficiency of chlamydia screening in non-clinical settings in two California counties. *International Journal of STD & AIDS*, 21(1):52-56
- National Collaborating Centre for Methods and Tools (2010). *Health Evidence: Evidence-Informed Decision Making in Public Health*. Hamilton, ON: McMaster University. Retrieved from <http://www.nccmt.ca/registry/view/eng/66.html>
- Ontario. Ministry of Health and Long-Term Care. Ontario public health standards. Toronto, ON: Queen's Printer for Ontario; 2008 [revised 2014 May 1]. Available from: [http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/ophs\\_2008.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/ophs_2008.pdf)
- Strike, C., Leonard, L., Millson, M., Anstice, S., Berkeley, N., Medd, E. (2006). *Ontario needle exchange programs: Best practice recommendations*. Toronto: Ontario Needle Exchange Coordinating Committee. Retrieved from: [http://www.health.gov.on.ca/english/providers/pub/aids/reports/ontario\\_needle\\_exchange\\_programs\\_best\\_practices\\_report.pdf](http://www.health.gov.on.ca/english/providers/pub/aids/reports/ontario_needle_exchange_programs_best_practices_report.pdf)
- Rusch ML, Shoveller JA, Burgess S, Stancer K, Patrick DM & Tyndall MW. (2008). Demographics, sexual risk behaviours and uptake of screening for sexually transmitted infections among attendees of a weekly women-only community clinic program. *Canadian Journal of Public Health*, 99(4):257-261.
- Vancouver STOP Project. (2013). Bathhouse and “Know On The Go” Mobile HIV Testing Projects. Catie’s Source for HIV and Hepatitis C information. Retrieved from: <http://www.catie.ca/en/printpdf/pc/elements/kotg>

## Appendix A: OPHS Requirements & Team

	OPHS Standard	Clinic Activities
Assessment and Surveillance	<u>Requirement #1:</u> The board of health shall report data elements on sexually transmitted infections and blood-borne infections in accordance with the Health Protection and Promotion Act and the Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008 (or as current).	Full-time PHNS input data r/t reportable STIs to iPHIS reports created by OHCDSh Epidemiologist
	<u>Requirement #2:</u> The board of health shall conduct surveillance of: <ul style="list-style-type: none"> <li>• Sexually transmitted infections;</li> <li>• Blood-borne infections;</li> <li>• Reproductive outcomes;</li> <li>• Risk behaviours; and</li> <li>• Distribution of harm reduction materials/equipment in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current) and the Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008 (or as current).</li> </ul>	<ul style="list-style-type: none"> <li>• Surveillance done by OHCDSh Epidemiologist based on data obtained at The Clinic and external reportable cases</li> <li>• Needle Exchange stats RHAC</li> </ul>
	<u>Requirement #3:</u> The board of health shall conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends, and priority populations, in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current).	<ul style="list-style-type: none"> <li>• Done by OHCDSh Epidemiologist</li> </ul>
Health Promotion and Policy Development	<u>Requirement #4:</u> The board of health shall increase public awareness of the epidemiology, associated risk behaviours, risk factors, and risk reduction strategies related to healthy sexuality, sexually transmitted infections, and blood-borne infections by: <ol style="list-style-type: none"> <li>a. Adapting and/or supplementing national and provincial health communications strategies; and/or</li> <li>b. Developing and implementing regional/local communications strategies.</li> </ol>	<ul style="list-style-type: none"> <li>• Sexual Health Promotion Campaigns</li> <li>• General Web/Social Media updates (i.e. Adventures in Sex City)</li> </ul>

OPHS Standard	Clinic Activities
<p>Requirement #5: The board of health shall use a comprehensive health promotion approach to increase the community capacity regarding the promotion of healthy sexuality, including the prevention of adolescent pregnancies, sexually transmitted infections, and blood-borne infections, by:</p> <ol style="list-style-type: none"> <li>Collaborating with and engaging community partners and priority populations;</li> <li>Mobilizing and promoting access to community resources;</li> <li>Providing skill-building opportunities; and</li> <li>Sharing best practices and evidence.</li> </ol>	<ul style="list-style-type: none"> <li>Pride Week: involve LGBTQ youth group, develop a float, march in parade, survey at clinic display</li> <li>Members of LGBTQ Community Coalition</li> <li>Member of Homophobia, Biphobia, Transphobia Coalition</li> <li>Facilitate Trans Health Working Group</li> <li>Member of Fanshawe College Resident Advisor Training Planning Committee</li> <li>Collaborate with Young Families Team to provide/session on Birth Control in series of Teen Prenatal Classes</li> <li>Triple P: Committee Member-sexual health content expert.</li> <li>Collaborate with RHAC to plan for World AIDS Day.</li> <li>STI Guinness Testing post-secondary campaign</li> <li>Facilitate Positive Space Training</li> <li>Update and develop fact sheets for website to increase access to sexual health information for clients</li> <li>Nurse provides education at EMDC</li> </ul>
OPHS Standard	Clinic Activities
<p>Requirement #6: The board of health shall collaborate with community partners, including school boards, to create supportive environments to promote healthy sexuality and access to sexual health services.</p>	<ul style="list-style-type: none"> <li>Teen Pregnancy Prevention-community coalition</li> <li>Knowledge exchange activities with Child Health and Young Adult Teams</li> <li>Education to Post-Secondary students at Althouse Teacher College Program</li> <li>Facilitating focus groups for engage in needs assessment of teachers: on-line Homophobia education resources for teachers</li> <li>Clinic PHN provided 3-month pill starts PRN</li> <li>Young Adult Team provide ECP and pregnancy tests in schools</li> </ul> <p><b>GAPS:</b> consult with Sexual Health Promotion Team</p>

	OPHS Standard	Clinic Activities
Disease Prevention/Health Protection	<p><u>Requirement #7:</u> The board of health shall provide clinical services for priority populations to address contraception, comprehensive pregnancy counselling, sexually transmitted infections, and blood-borne infections. For further information, refer to the Sexual Health Clinic Services Manual, 2002 (or as current).</p>	<ul style="list-style-type: none"> <li>• Sexual Health Clinics available in City and County</li> <li>• STI clinics confidential, free counseling, testing and treatment</li> <li>• Hep A &amp; B free vaccination</li> <li>• Referrals to pregnancy Options Clinic</li> <li>• Medical Directive for 3-month pill starts</li> <li>• Low cost contraceptives</li> <li>• IUD/IUS insertions</li> <li>• ECP available to client or third party</li> <li>• IUD's for emergency contraception</li> <li>• Pap tests provided</li> <li>• Alcohol and RUCS screening, smoking cessation counselling,</li> <li>• Free Condoms</li> <li>• Harm Reduction (naloxone)</li> <li>• Develop a video (and/or supplementary written information to be disseminated in multiple ways) which will show the process of coming to "The Clinic" (STI)</li> </ul> <p><b>GAPS:</b> Priority populations have not been clearly defined for the Sexual Health team</p>
	<p><u>Requirement #8:</u> The board of health shall ensure that the medical officer of health or designate receives reports of sexually transmitted infections and blood-borne infections and responds in accordance with the Health Protection and Promotion Act and the Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008 (or as current).</p>	<ul style="list-style-type: none"> <li>• Adhere to the MOHLTC Gonorrhea Accountability Agreements</li> <li>• All cases entered into iPHIS</li> <li>• PHNS provide case management of all reportable STI's in the clinic and community.</li> <li>• Section's for HIV as needed.</li> </ul>
	<p><u>Requirement #9:</u> The board of health shall provide or ensure access to provincially funded drugs for the treatment of sexually transmitted infections, at no cost to clients, in accordance with the Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008 (or as current).</p>	<ul style="list-style-type: none"> <li>• Free STI testing and treatment available. Government pharmacy STI medications provided to community physicians.</li> <li>• Free medications at STI Clinic PHNS can provide treatment for GC and CT at no cost to clients who have difficulty attending clinic.</li> </ul> <p><b>GAPS:</b> A very small number of community physicians access government pharmacy STI medications. Could increase use of these medications among community physicians.</p>
	<p><u>Requirement #10:</u> The board of health shall communicate and coordinate care with health care providers to achieve a comprehensive and consistent approach to the management of sexually transmitted infections and blood-borne infections.</p>	<ul style="list-style-type: none"> <li>• Share updated MOHLTC guidelines to treat Gonorrhea to reduce resistance with health care providers.</li> <li>• Follow-up care of STI's i.e. Syphilis treat with Bicillin</li> <li>• Some information shared through MLHU's Health Care Provider Outreach initiative</li> </ul> <p><b>GAPS:</b> Limited engagement with and concerns regarding lack of use of STI best practices among community physicians. Could provide more education regarding best practices and more effectively communicate MLHU role</p>

OPHS Standard	Clinic Activities
<p><u>Requirement #11:</u> The board of health shall engage community partners and priority populations in the planning, development, and implementation of harm reduction programming.</p>	<ul style="list-style-type: none"> <li>• Opioid Overdose Prevention Program (naloxone).</li> <li>• RHAC mobile van</li> <li>• Community Drug Strategy Initiative (pending)</li> </ul>
<p><u>Requirement #12:</u> The board of health shall ensure access to a variety of harm reduction program delivery models which shall include the provision of sterile needles and syringes and may include other evidence-informed harm reduction strategies in response to local surveillance.</p>	<ul style="list-style-type: none"> <li>• Recently added: Safer Inhalation Kits.</li> <li>• Harm Reduction Services offered at 5 fixed sites.</li> <li>• RHAC mobile van</li> </ul>
<p><b>Other Clinic Activities:</b> <b>Knowledge Exchange and Continuous Quality Improvement</b></p>	<ul style="list-style-type: none"> <li>• Audit of Client Charts and Pending Test (outstanding tests results not entered)</li> <li>• Computer Program Upgrade for The Clinic to collect metrics and SDOH data</li> <li>• Regular visits by PHN's of 50 King Street staff to Strathroy site to continue to build upon knowledge exchange and CQI opportunities and thereby enhancing consistencies/CQI between 50 King Street/Strathroy locations</li> <li>• Quarterly meetings with whole SH team to engage in knowledge and CQI activities Re: team projects/initiatives</li> <li>• In-services by physicians; shared learnings from staff attending conferences</li> <li>• Professional Practice – Review Physician License and Canadian Medical Protection Association Status annually</li> <li>• RIMP for SHP Team (Org standards)</li> <li>• Protocol updates (e.g., processing/dispensing external birth control scripts (Org standards)</li> <li>• Presentation/Health Fair criteria assessment tool – database upgrade.</li> <li>• In-services from drug companies when introducing a new birth control method</li> </ul>

## Appendix B: Audit Summary Report to MLHU Documentation Committee

---



**Service / Team: The Clinic**

**Manager: Shaya Dhinsa**

**Date Audit(s) Completed: December 18, 2014-Jan 29, 2015**

**Common Themes to be addressed** (e.g. gaps in program standards, policies/guidelines, non-compliance issues, etc.)

- Audit performed by Jacqueline Eckert, Pam Hamilton and Natalie Meade, Public Health Nurses in the Clinic
- 23 charts 2012 and newer were randomly pulled from shelves (only examined documentation after audit March 23, 2011).
- 7 Strathroy, 6 STI, 10 FPC

### Gaps/Non Compliance Issues

- Inconsistencies in method of dating, some charts indicating Month/Day/Year, some using words vs. numbers to indicate month. Date stamp for STI chart is month, day, year which can contribute to confusion
- Notice of Collection done and documented at initial visits but not at subsequent visits
- Use of abbreviations not from clinic approved list in most charts
- Smoking cessation counselling not always documented in FPC charts

### Strengths

- Improvement in the number of charts indicating the time an interaction occurred over last audit
- Improvement with indicating the end of an entry with a line.
- All notes are legible and signed with designation
- HIV pretest counselling documented consistently

### Priorities For Action

- Disseminate audit results to staff and manager
- Update audit tool to reflect unambiguous dating that is consistent with practice and Standards
- Update abbreviation list with current regularly used abbreviations
- Update audit tool to include more electronic documentation relevant to current practice
- Develop documentation committee within service area to ensure more consistent practice.

Next audit planned for:



## Appendix C: Literature Review Flow Chart

Question: “What are effective models/strategies for the delivery of sexual health clinic services?”  
Search Strategy

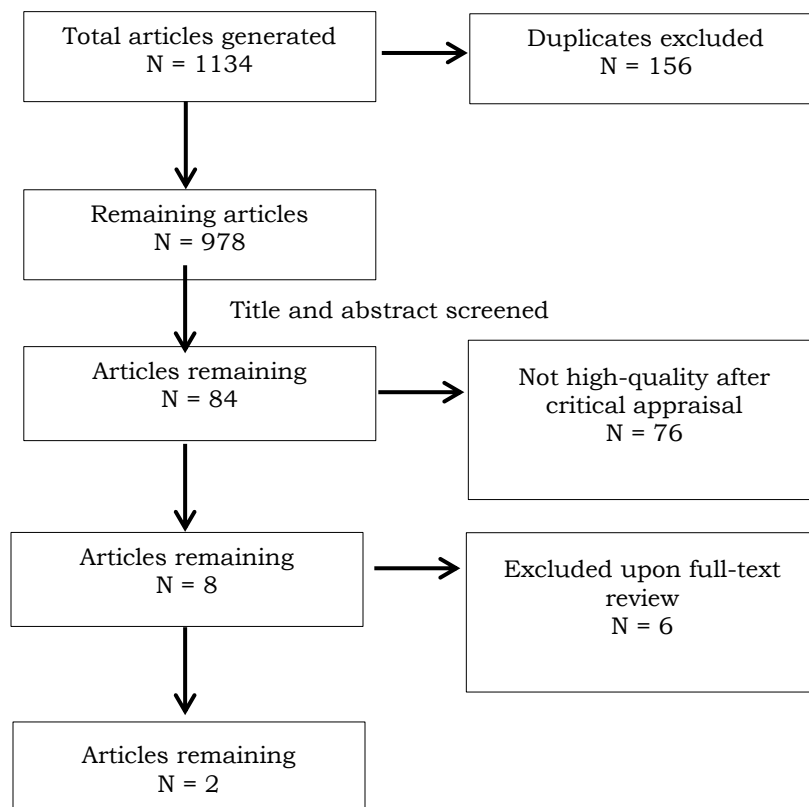
(Sexual health OR family planning OR Sexually transmi\* infection\* OR STI testing OR STI/HIV testing OR Sexual\* transmi\* disease\* OR STD testing OR STD/HIV testing) AND clinic AND delivery

**Limits:**

Language: English

Year: 2000-current

Database searched	Total articles
EBSCO	430
OVID – EMBASE, Medline, HealthStar	498 – (duplicates) = 376
Cochrane	80
PubMed	124 – duplicates = 90
Canadian Best Practices Portal	1
Public Health Grey Literature Database	1



## **Appendix C**

### **Sexual Health Recommendations**

- 1) Review overall workflow in the clinics to ensure there is not duplication and efficient services are provided to the client.
- 2) Complete ongoing client satisfaction surveys and consider involvement of clients in quality improvement efforts. Determine any unmet needs and/or benefits to expansion of clinic hours/locations.
- 3) Regularize documentation and supervision processes for health care professional trainees, jointly, with their educational institutions, and issue photo identification cards for all contracted physicians and trainees.
- 4) Review the existing contract documentation for physicians working in the clinic and ensure relevant licensure and malpractice insurance documentation is provided to the health unit annually, and explicitly document responsibilities for the medical director managing the physician workforce.
- 5) Examine clinic billing practices to ensure alignment with MOHLTC guidelines.
- 6) Consider offering a workshop for staff from STI clinics in different public health units to exchange learnings and support innovation.
- 7) Provide phlebotomy services on-site at both STI and Family Planning Clinics.
- 8) Maximize the value of the Public Health Nurse practice to ensure the full extent of knowledge and expertise is utilized, and services are provided as efficiently as possible.
- 9) Review clinic services offered at the Strathroy office to determine whether the current services appropriately address the sexual health needs of the clients.
- 10) Identify strategies to increase access and utilization of clinic services by persons without a health card.
- 11) Train all physicians in IUD/IUS insertions, expand the availability of this service across all Family Planning clinics, In addition, and develop a written protocol to determine whether referral to a specialist for insertion is needed.
- 12) Increase availability for clients to purchase other forms of birth control and vaccines (not covered) through various payment methods (i.e. credit).
- 13) Determine the reach and utilization of sexual health clinic services by priority. Assess and identify the needs of the local population (including priority populations) that have sexual health needs but currently do not access any sexual health related services.
- 14) Enhance partnership with community physicians and identify strategies to ensure physicians providing care to STI cases are aware and feel supported to provide STI treatments as per the updated guidelines.
- 15) Make enhancements to the current electronic database.
- 16) Identify and monitor indicators.

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health

DATE: 2016 September 15

## HEALTH UNIT GOVERNANCE STRUCTURES

### *Recommendation*

*It is recommended that Report No. 053-16 re: Health Unit Governance Structures be received for information.*

### **Key Points**

- The Middlesex-London Health Unit (MLHU) and Hamilton Public Health Services (HPHS) governance structures were compared on the basis of responsiveness to provincial funding increases.
- It is hypothesized that autonomous health units were able to utilize provincial increases to enhance public health capacity more than municipally-integrated health units.
- Board structure and funding advantages could be dependent on where the primary source of funding (municipal or provincial) originate.
- The study had limitations, including that it was based on only two health units, and that it focused on budget at the exclusion of issues such as program quality and collaboration with municipal partners.

### **Background**

In a recent study conducted by Joseph Lyons, an Assistant Professor at the University of Western Ontario, the governance models of two Ontario Public Health Units (PHU) and the impact of these models on independence from municipal decision-making and ability to fulfil their legislative mandates was explored.

The Middlesex-London Health Unit (MLHU), an autonomous board of health, and Hamilton Public Health Services (HPHS), a municipally-integrated board of health were chosen for this study. He chose these two PHUs because they had similar social, demographic, and economical characteristics (housing affordability, population, # of food premises, and # of nursing homes). They were examined on the basis of spending growth at a time of changes to the provincial/municipal funding mix and a focus on increasing the capacity of Ontario public health units.

### **Key Findings**

The main finding of the paper was the difference in municipal levy's between MLHU and HPHS. MLHU kept its municipal levy stable between 2003 and 2014 and took greater advantage of the increase in provincial funding to increase its total cost-shared budget by 68.2%. HPHS saw significant reductions in its municipal levy from 2005 to 2007 and chose to offset provincial increases with corresponding municipal decreases. They saw a total cost-shared funding increase of 51%.

	MLHU		HPHS	
	<i>City of London Levy</i>	<i>Total Cost-Shared Funding</i>	<i>City of Hamilton Levy</i>	<i>Total Cost-Shared Funding</i>
2003	\$5,869,765	\$13,984,470	\$10,761,000	\$21,522,006
2014	\$6,095,059	\$23,518,593	\$8,123,287	\$32,493,148
Δ	+ 3.8%	+ 68.2%	- 24.6%	+ 51.0%

It is postulated that autonomous health units are better able to use provincial funding increases and maintain municipal contributions rather than using the provincial increases to reduce municipal contributions due to their independence from the municipalities.

Also of relevance was the opinion that autonomous health units may be worse off when a municipal funding share is a larger proportion of the budget. This was noted with the comparison of per capita funding of in 2006 (MLHU \$44.43 per capita, HPHS \$53.38 per capita) and 2011 (MLHU \$51.55 per capita, HPHS \$59.33 per capita).

### **Limitations**

This study was narrow in scope, comparing the spending growth of only the MLHU to the HPHS between 2003 and 2014. Additional areas of interest that were not explored include how integration with municipal governments enhances or limits efficiency and collaboration with other municipal departments.

There were also exclusions that would be of interest to MLHU, namely: a summary of the Middlesex County levy in addition to that of the City of London, description of the 100% funded programs budget changes and municipal-provincial funding mix.

Also of relevance for health unit governance and impact on the community would be whether or not health unit structure influences the ability to ensure quality programs and enact policy change, which are major contributors to the overall health of the community.

### **Next Steps**

This study provides a framework to show how health unit governance structures may influence budgetary decisions. Despite the autonomous nature of the MLHU, there are political realities that face our autonomous budgetary process. It is in the best interest of MLHU to respect the fiscal environments from which municipalities operate while also ensuring adequate public health capacity.

Public health agencies need to be strong fiscal stewards regardless of whether they are faced with expansions or contractions to public health resources. Understanding this, MLHU has instituted budgetary processes including program budget templates, variance reporting and program budget marginal analysis (PBMA) to demonstrate our commitment to using public resources in the most impactful way.

The recently released provincial funding formula recognizes fiscal constraints and historical funding inequalities among boards of health. The review looked at a needs-based approach to public funding and improving responsiveness to the factors that influence service needs. Through this review, the MLHU was identified a health unit that could see an increase in provincial funding.

This report was prepared by Mr. Jordan Banninga, Manager of Strategic Projects.



Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health

DATE: 2016 September 15

## MEDICAL OFFICER OF HEALTH ACTIVITY REPORT – SEPTEMBER

### **Recommendation**

*It is recommended that Report No. 054-16 re: Medical Officer of Health Activity Report – September be received for information.*

The following report highlights activities of the Medical Officer of Health (MOH) for the period of July 11, 2016 to September 7, 2016.

The MOH attended the Masters of Public Health Showcase at Western University on August 24<sup>th</sup> and helped officially launch the 2016 Western MPH Casebook. The new book, which includes 2 cases from the Middlesex London Health Unit (MLHU), will contribute to linkages between academia and public health practice. The MOH also talked about the relationship between the Health Unit and Western.

The Medical Officer of Health and CEO also attended the following events:

- July 11      Attended 2 meetings for Youth Opportunities – Housing First Initiative and Board member interviews
- July 12      Participated in the COMOHE Executive teleconference
- July 13      Participated on a teleconference with the alPHA Standards Review Committee  
Attended the Community Health Collaborative meeting at LHSC
- July 14      Enjoyed lunch at the staff summer wellness event held in the 50 King courtyard
- July 15      Met with Brian Lester, Executive Director for Regional HIV/AIDS Connection
- July 18      Attended a Canadian Nurse-Family Partnership Education (CaNE) Steering Committee teleconference meeting  
Met with London City Councillor Tanya Park  
Participated in the staff lunch hour yoga wellness session
- July 19      Was interviewed by Lisa Brandt, CJBK in regards to sugary drinks  
Attended and presented at the Community and Protective Services Committee meeting  
Attended the Northeast Community Conversations Group (NECC) planning meeting
- July 20      Was interviewed by Jennifer O'Brien, London Free Press regarding the cost of poverty
- July 21      Attended the July Board of Health meeting
- July 22      Had a phone meeting with Laura Elliot, Thames Valley District School Board in regards to the Fluoride Varnish Program and the LMHU location project

- July 25 Met with Scott Courtice, Executive Director, London InterCommunity Health Centre  
Met with Community Health Collaborative members, Jennifer Von Ruczicki and Andrew Lockie
- July 26 Met with Bill Rayburn, CAO Middlesex County to provide updates on the relocation project  
Was interviewed by Al Coombs, CJBK in regards to changes to opioid listing on provincial formulary
- July 27 Was interviewed by Al Coombs, CJBK in regards to the Minister's announcement of changes to LCBO ordering/home delivery
- July 28 Met with United Way reps to review activities and stats from 2015 and moving forward with 2016 campaign  
Met with Health Unit staff to discuss and identify areas of alignment and ongoing collaboration in the areas of HIV, injection drug use and the Community Drug and Alcohol Strategy
- August 3 Was interviewed by Rob Ross, MyFM in regards to tax on sugary drinks
- August 24 Met with Janette MacDonald, CEO and General Manager, Downtown London
- August 26 Presented on safe injection sites at the London InterCommunity Health Centre  
Hosted a meeting of the Community Health Collaborative  
Met with Dr. Jane Thornton and Joanne Simpson, PHN to discuss a research proposal in regards to links between physical activity and chronic disease (Prescribing Exercise)  
Met via a phone call with Anne Simard, Ontario Agency for Health Protection and Promotion (OAHPP) to talk about Locally Driven Collaborative Projects (LDCP) and strategic alignment
- August 29 Met with Linda Sibley, Executive Director, Addiction Services of Thames Valley to discuss many items including; drug/alcohol strategy, mental health incubator, HIV, location project  
Participated in a telephone conference call to discuss outcome funding re the Nurse Family Partnership
- August 30 Met with Michael Barrett, CEO, Local Health Integration Network to discuss the Community Drug and Alcohol Strategy and work to date on the Health Unit's relocation project
- August 31 Attended a provincial Accountability Committee meeting in Toronto
- September 1 Attended the Finance and Facilities Committee meeting
- September 7 Attended a meeting with Youth Opportunities Unlimited in regards to the London Life Young Leaders Program Agency Recruitment

This report was prepared by Lynn Guy, Executive Assistant to the Medical Officer of Health.



Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health

DATE: 2016 Sept 15

---

## **VACCINE PREVENTABLE DISEASES STANDARD COMPLIANCE 2016-2017 AND PROGRAM CHANGES**

### **Recommendations**

*It is recommended that the Board of Health receive information about the following Vaccine Preventable Disease program changes:*

- *Prioritization of assessment and suspension requirements under the Immunization of School Pupils Act for the 2016-2017 school year.*
- *Expansion of the publicly funded Human Papillomavirus Virus (HPV) program.*

### **Key Points**

- MLHU will assess immunization records for all students in the 2016-2017 school year according to the Immunization of School Pupils Act. Suspensions, if needed will be prioritized for the 7 and 17 year old age groups.
- Publicly funded Human Papillomavirus Virus (HPV) will be offered to all Grade 7 students through school-based immunization clinics beginning in September 2016

### **Immunization of School Pupils Act: Assessment and Suspension Requirements**

As a result of implementation of Panorama and revisions to the Immunization of School Pupils Act (ISPA) in 2014, the Vaccine Preventable Diseases program has been non-compliant with requirements to assess student records for the past two school years. [Report No. 021-15](#) at the March 2015 Board of Health meeting and [Report No. 046-15](#) at the July 2016 Board of Health meeting describe this. In the 2015-2016 school year, the following activities were carried out:

- Immunization records for all secondary school students were assessed, students were notified if they were missing vaccines and school-based immunization clinics were held to offer students an opportunity to receive missing immunizations. The process did not include suspension of students from school if records were not complete.
- The immunization records for students in Grades 2 and 8 were screened and followed-up to ensure the immunization information record was complete or an appropriate exemption was on file at the Health Unit. Students whose information was not complete at the end of the process received suspension notices and were suspended from school until the information was received by the Health Unit. Immunization records for the remainder of students in the elementary school could not be screened.

Many of the issues (eg. back of data entry, resolution of duplicate records for school aged children and youth) related to Panorama implementation should be resolved by the end of 2016; however the changes to the ISPA continue to cause workload challenges because of the volume of records missing information. There is no additional Ministry funding available to meet this challenge.

Although MLHU is not able to meet the ISPA requirements fully, vaccine records for all school students aged 4-17 years will be assessed in the 2016-2017 school year and parents/students will be notified if immunization information is missing. Suspension activities will be prioritized for students ages 7 and 17 years. This ensures students starting school and leaving school are fully protected. The Ministry, through the Accountability Indicators, targets these two age groups.

### **Expansion of Human Papillomavirus (HPV) Publicly Funded Program**

Ontario is expanding its publicly funded immunization program to offer HPV vaccine to boys as well as girls. Currently the HPV vaccine is offered free of charge in Ontario schools to Grade 8 girls. Under the expanded program, the vaccine will be offered to all students in Grade 7 through school-based clinics. Female students in Grade 8 will also be offered the vaccine in the transitional 2016-2017 school year. Hepatitis B vaccine and the quadrivalent meningococcal (Menactra) vaccine will continue to be offered to Grade 7 students.

The publicly funded HPV program has also been expanded to include males up to the age of 26 years of age who identify as gay, bisexual, transgendered or men who have sex with men.

This report was prepared by Marlene Price, Manager, Vaccine Preventable Diseases Team; Stephen Turner, Director of Environmental Health and Infectious Diseases; and Dr. Gayane Hovhannisyan, Associate Medical Officer of Health.



Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health

<p><b>This report addresses</b> the following requirement(s) of the Ontario Public Health Standards: Vaccine Preventable Diseases Standard, requirements # 7 and # 13.</p>
--



TO: Chair and Members of the Board of Health  
FROM: Christopher Mackie, Medical Officer of Health  
DATE: 2016 September 15

---

## INTRODUCTION OF VIDEO DIRECT OBSERVATION THERAPY (VDOT)

### **Recommendation**

*It is recommended that Report No. 057-16 re “Introduction of Video Direct Observation Therapy” be received for information.*

### **Key Points**

- Direct Observation Therapy (DOT) is the best practice whereby clients with Tuberculosis (TB) are watched while they ingest their medication.
- Clients with TB must take medications daily for nine to 24 months; DOTs become logistically challenging, tiresome for clients and expensive.
- Video DOT (vDOT) is a cost effective solution for established DOT clients that uses a secure and private online connection for clinical staff to observe clients with TB take their medication.

### **Direct Observation Therapy for clients with Tuberculosis**

Tuberculosis (TB) is a bacterial illness that is spread by the airborne route, and highly infectious. Recognizing the risk posed by TB, all medications for TB are provided free of charge to everyone. In order to ensure maximal benefit from treatment and to decrease drug resistance, all active cases of TB are watched by MLHU staff as they ingest their medication. This process is termed Direct Observation Therapy (DOT).

MLHU sees an average of 9 active TB cases per year. A case of active TB may require daily DOTs for anywhere from 6-24 months with each home visit from a public health nurse taking about one hour of staff time (including travel). Moreover, after a trusting client-clinician relationship has been formed, clients often complain that being visited daily is intrusive and may impact on their sense of privacy.

### **Introduction of Video Direct Observation Therapy (vDOT)**

Video DOT (vDOT) is a technological solution whereby client and clinician connect online via the secure Ontario Telemedicine Network (OTN) for a web-cam enabled appointment. This is an encrypted web portal that does not store or record any data. Clients without access to the internet or a web-cam enabled device will be provided with a data-enabled iPad Mini for the duration of their vDOT treatment.

With each interaction expected to only take approximately 10 minutes to complete, vDOTs will enable Infectious Disease Control (IDC) Team staff to connect with well-established DOT clients in a manner that is secure, private, mutually convenient and cost effective.

This report was prepared by Tristan Squire-Smith, Manager, Infectious Disease Control Team.



Christopher Mackie, MD, MHSc, CCFP, FRCPC  
Medical Officer of Health