

**University of Ottawa  
Institute for Population Health**

---

**“Just-in-Time Information”  
Librarian support at the point of  
service delivery for Family Health  
Networks**

The “**Just-in-time information**” project was designed to test whether or not a librarian consultation service can have a positive impact in Family Health Networks in terms of cost-effectiveness (saving time, workload issues) and improved access to information.

The objectives were to test whether a librarian consultation service can;

1. Save providers time
2. Improve clinical decision making

# Study participants

- 86 providers from 16 practice sites were involved in the study
- Physicians, second year residents and nurse practitioners

# JIT Service

- The service provided answers to reference questions answerable by standard resources (in 15 minutes or less)
- Service was available from 9-5; M-F
- Participants were trained to ask clinical questions using an evidence-based approach (PICO)

- **A detailed librarian flow chart was developed to assist librarians in selecting electronic evidence-based sources for answering questions.**

**JiT**

## Just in Time Librarian Consultation Service

[Home](#) [Help](#)
[Questions and Answers](#) [Login](#)

// Home // Support Home

### Just-in-Time Librarian Consultation Service News

- > [Common Clinical Questions Available!](#)
- > [Enter the subject](#)
- > [Asking Questions](#)

### Login


 Remember me until I log out manually

 [Lost Password?](#)

### Contact Information

*Jessie McGowan*  
Senior Information  
Scientist

### Questions and Answers

 Questions and Answers Search :  

### Ask a Question

### Site Information

Family physicians and members of the primary health care team have very busy practices. Each day they are confronted with many questions that arise from patient visits. Due to the large volume of patients that they see each day, there is very little time to find the answers to their questions. This project will demonstrate a librarian consultation service to Family Health Networks (FHNs) to answer short reference questions. By providing access to librarians, who are experts in information retrieval, it is anticipated that this service will provide valuable and timely information to the FHN. A librarian will teach members of the primary care team how to use this service, including which types of questions should be requested from the librarian. The questions will be answered within fifteen minutes to provide "just-in-time" information.

### Disclaimer Notice

The results of any database search are subject to the limits of the databases that are searched. Inaccuracies may occasionally exist in a citation and are beyond our control. Any searches done by the Just-in-Time librarians, are not meant to represent a comprehensive treatment of the topic. The Just-in-Time service and the University of Ottawa are not responsible or liable for, directly or indirectly, any damages resulting from the use/misuse of information it provides.

**QUESTION:**

*What is the evidence for risks associated with using SSRI's to treat depression during pregnancy?*

**ANSWER:**

A newly published (April 2006) study in the American Journal of Obstetrics and Gynecology assessed the safety of using SSRI's during Pregnancy.

**Study design:**

The authors “carried out a retrospective cohort study of 972 pregnant women who had been given at least 1 (SSRI) in the year before delivery and 3898 pregnant...”

**Results:**

“The risks of low birth weigh, preterm birth, fetal death, and seizures were increased in infants who were born to mothers with SSRI therapy...”

**Conclusion:**

The use of SSRI's in pregnancy “may increase the risks of low birth weight, preterm birth, fetal death, and seizures...”

**REFERENCE:**

Wen SW, Yang Q, Garner P, Fraser W, Olatunbosun O, Nimrod C, Walker M. Selective serotonin reuptake inhibitors and adverse pregnancy outcomes. Am J Obstet Gynecol. 2006 Apr;194(4):961-6. (pdf attached)

Thank you for participating in the Just-in-Time project.



# RCT Study results

- Overall, JIT answered **3,886** clinical questions between April 1, 2005 and March 31, 2006;
  - Answered in **less than 15 minutes** (mean = 13.58 minutes/question)

# Questions by Type

	#	%
<b>Diagnosis</b>	<b>475</b>	<b>22.6</b>
<b>Etiology</b>	<b>356</b>	<b>16.9</b>
<b>Prevention</b>	<b>263</b>	<b>12.5</b>
<b>Prognosis</b>	<b>54</b>	<b>2.6</b>
<b>Therapy</b>	<b>774</b>	<b>36.8</b>
<b>Other</b>	<b>181</b>	<b>8.6</b>
	<b>2103</b>	<b>100</b>

## **What did the Providers do to get their Own Answers**

- 40.5% were answered by clinicians, 7.2% asked a practice colleague, 4.6% discussed by phone with another physician, 1.7% had their patient return, and 3.4% arranged for a referral and 9.5% took other actions.

# Quality of Clinical Decision Making

Answer Type	High or Moderate Impact on Decision-making
Intervention	87.3%
Control	23.0%

## **TIME SAVED**

- The librarian saved 21 minutes of the FPs time

- if FPs saw one additional patient every second time they used the JIT, then they could see 101 extra patients per year.

- If this service was implemented across Ontario and if family physicians saw additional patients whenever the JIT service saved them time (two questions per month), then up to 20,000 extra patients could be seen annually.

## Cost implications

- It may be *cost-effective* to use a librarian service to serve a group of providers rather than have each individual primary care provider finding answers on their own.



**C.T. LAMONT PRIMARY HEALTH CARE RESEARCH CENTRE**

<b>Cost Component</b>	<b>Dollars</b>	<b>Percentage</b>
Training <sup>1</sup>	46.3	0.6%
Labor (Librarian, 2.5 FTEs, includes 10% benefits)	5769.4	74.7%
Equipment <sup>2</sup>	1407.1	18.2%
Project software and technical support	1009.9	13.1%
Handheld and wireless access	335.1	4.3%
Office supplies and information resources	20.4	0.3%
Other	41.8	0.5%
Administration	505.8	6.5%
Traveling	118.5	1.5%
Administrative Overheads	387.3	5.0%
<b>Total Direct Costs Per Month</b>	<b>7728.6</b>	<b>100.0%</b>
<b>Total Direct Costs Per Question in this study<sup>3</sup></b>	<b>38.2</b>	
<b>Total Direct Costs Per Question at Capacity<sup>4</sup></b>	<b>5.7</b>	

**Table 2: JIT cost data (in 2006 Canadian dollars):**

- Our results show that the cost per question for JIT was \$38.20 but could be as low as \$5.70 for a regular service.

- Implementing such a service across Ontario could happen quickly as the time required to train professional librarians to do this service is short, especially when compared to alternative ways of improving access such as setting up a new medical school.

**The concept, procedures and technology are all suitable and available for application to urban, rural and remote areas of Ontario.**

“It was nice to have someone else look up the answers to my questions. This saved time for me. I could see other patients while waiting for the answer.”