

# Abstract Submission Form 2019

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Salutation: \*

Dr.

First Name: \*

Maheswaran

Last Name: \*

Srivamadevan

Clinic/Company: \*

Oak Ridges Heart Clinic

Role: \*

Director

Phone Number \*

Email Address: \*

Type: \*

Concurrent Session

Salutation: \*

Dr.

First Name: \*

Maheswaran

Last Name: \*

Srivamadevan

Role: \*

Physician and Director

How long have you been using an EMR? \*

7 years

Salutation:

First Name:

Last Name:

Role:

How long have you been using an EMR?

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**Salutation:**

**First Name:**

**Last Name:**

**Role:**

**How long have you been using an EMR?**

**Who is your target audience? \***

New EMR Users  
Intermediate EMR Users  
Advanced EMR Users

**Abstract Title: \***

Advanced diagnostic and data integration of an EMR for the cardiologist and other specialists

**Learning Objectives: \***

1 Principles in customization of an EMR for cardiology into a stand-alone solution for cardiac diagnostics reporting and data-integration

2 Integration of evidence based Medical Algorithms into the EMR to optimize patient care

3 Learn how further development at our centre will integrate the EMR with artificial intelligence

**Abstract: \***

As director of the Oak Ridges Heart Clinic, I have progressively customized and integrated an open source EMR for our cardiology practice.

In the first 2 years, we developed customized E-Forms that we would use in the every day management of patients. These include Lab requisitions, hospital & diagnostics requisitions as well as the Letter application that is available as open source for our specialty.

In the last 2 years, we have been able to integrate data for cardiac diagnostic technology (echocardiography) right from acquisition into HL7 format and then databased within the EMR. Data is then manipulated for reporting, calculations and decision making. This innovation and subsequent successful application to date has saved valuable time in data transfer and was developed in house thereby saving an estimated \$30,000 per year when compared to commercially available solutions for the 3 cardiologists who use the system.

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Subsequently, we have integrated evidence based medicine into data collection and decision algorithms. Clinically important randomized control trials and guidelines are automatically checked for applicability to each patient pre and post encounters for enhancement of clinical decision making.

We have also customized the OBS/GYN data collection application for cardiac purposes. This has then been used to automatically generate the final consult and follow up letters. We have customized the application to call up the above mentioned algorithms during the patient consultation to allow for accurate real time evidence based decision making without unduly prolonging the consultation. This process has significantly shortened the time spent generating the consult and follow up letters.

At present, we are exploring the use of artificial intelligence techniques within our EMR. This would streamline all data collection as well as decision making thereby saving valuable time. This involves the development of appropriate interfaces between the various diagnostic technologies, HL7 data integration and the EMR.

**How did you hear about the Call for Abstracts \*** Email Invitation from OntarioMD

**Please Specify \***

**Who referred you? \***