

## What is CPCSSN?

### The Canadian Primary Care Sentinel Surveillance System (CPCSSN)

- Is Canada's **first nationwide chronic diseases surveillance project**
- uses data from multiple Electronic Medical Record Systems (EMRs).
- **11 Practice Based Research Networks (PBRNs) in 8 provinces across Canada**
- **10 different EMRs**
- **588 practices, and 756,000 patients**
- Data collection and processing is done **quarterly**
- Suitable for quality improvement projects, research and chronic disease surveillance

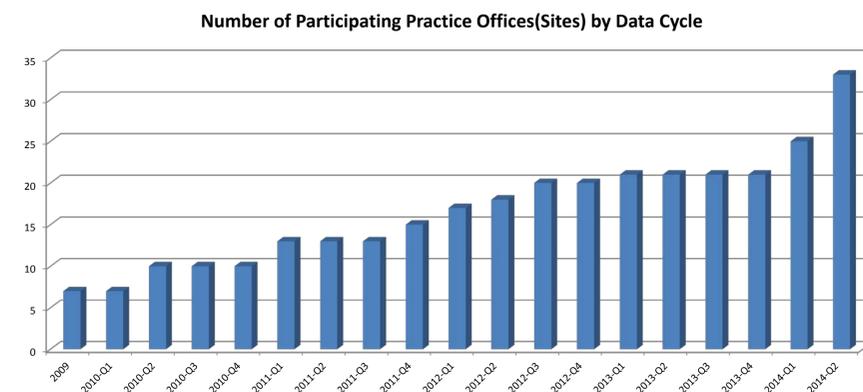
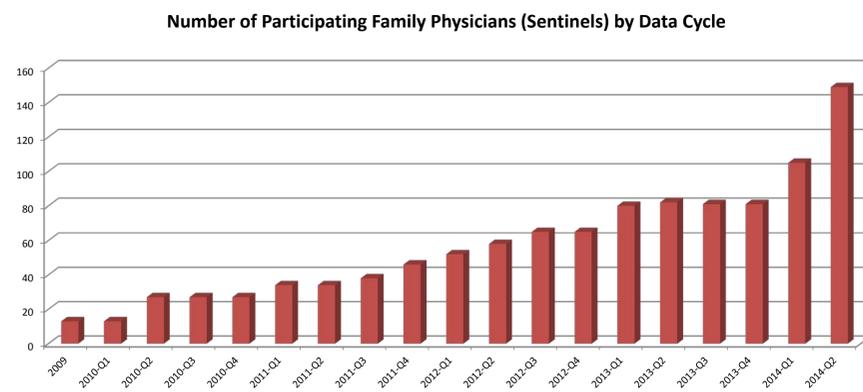
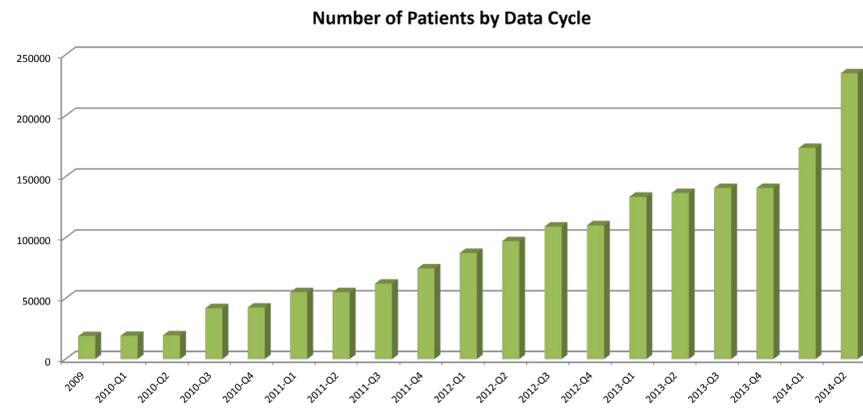
### Why is CPCSSN important and relevant to primary care?

- Adoption of electronic medical records (EMRs) within primary care is **growing rapidly**
- EMRs are a major **untapped source of data** for disease surveillance and research on chronic conditions.
- The full potential of EMRs for quality improvement and monitoring of chronic diseases has not yet been realized

### NorTReN, UTOPIAN and CPCSSN

- The North Toronto Primary Care Research Network (NorTReN) was one of the 7 initial PBRNs within CPCSSN.
- CPCSSN started in 2008
- It is funded by the Public Health Agency of Canada (PHAC)
- The number of NorTReN CPCSSN sentinels has increased **from 7 in 2009 to more than 150 sentinels in 2014**
- NorTReN is the **largest Network** in the national CPCSSN data repository.
- The **University of Toronto Practice-Based Research Network (UTOPIAN)** was founded in 2013.
- NorTReN has now become part of **UTOPIAN**

## CPCSSN UTOPIAN growth trends in the past 5 years



## Data extraction, processing and use for CPCSSN UTOPIAN

- Physicians sign an informed consent document
- After receiving permission, we then work with the IT person at the site to set up extraction processes; we extract **anonymous data** (no patient names, addresses etc)
- We make sure this process is seamless and has **no impact** on day to day activities of the clinic.
- CPCSSN data extraction processes for **three different EMRs** were developed in Toronto by the UTOPIAN data manager; these methods have been proven to be safe and efficient and have been adopted by several other CPCSSN networks
- After the initial data extraction, the data are processed, cleaned, coded and converted to the CPCSSN format.
- Data from various FHTs are combined into a **single database**. We use several **de-identification** methods to remove information such as patient names or health card numbers that could be in free text.
- Finally the data from all sites are combined and merged with data from all the other CPCSSN networks.
- Participating sentinels receive a **confidential report every three months** that reports certain statistics and quality indicators and compares them to their peers across the country.

### Current UTOPIAN CPCSSN Members by EMR, Number of Organizations, Sites and Sentinels

EMR	Local vs. ASP Server	Health Organization (FHT/FHO)	Practice Office (Site)	Physician (Sentinel)
Nightingale On-Demand (Nightingale)	Local	1	7	24
PS Suite EMR	ASP	5	11	57
(Telus Health Solutions)	Local	5	8	42
Bell EMR (Bell)	ASP	1	1	11
OSCAR (McMaster)	ASP	1	4	9
Total	Local	1	1	8
		13	32	151

## Putting the Power of Data in The Hands of Care Providers

- We have **returned cleaned, processed data to FHTs**, with the **Data Presentation Tool (DPT)**.
- DPT is a powerful **data mining tool** developed by CPCSSN
- It is used for running queries, generating reports, and conducting quality improvement projects.
- UTOPIAN was the first CPCSSN network to return CPCSSN data and DPT to participating primary care organizations.
- **DPT puts the power of EMR data in the hands of FHTs**
- For more information, please contact us: [www.cpcssn.org](http://www.cpcssn.org), or [chris@cpcssn.org](mailto:chris@cpcssn.org)