

GP adoption of electronic medical records

Recent PITO articles^{1,2} have focused on PITO's emerging program to expand support for specialist physician electronic medical record (EMR) and technology requirements. This month's article focuses on adoption and trends among general practitioners.

EMR adoption in Canada is often compared with other leading countries where it is reported to be close to 100%.^{3,4} Looking closely it becomes apparent that there are significant differences in the health care systems and the resulting information technology (IT) environments in those countries compared with Canada.

In many of those countries, specialists practise only or primarily in hospitals and do not use independent EMR systems; as such, they are ex-

cluded or represented differently in the statistics of EMR adoption. In other countries, GPs providing out-of-hours coverage work in specific out-of-hours clinics that have separate systems for documenting and communicating out-of-hours care. And in many countries with high EMR uptake, most GPs practise in larger group practices rather than solo practice.

Breaking down the EMR adoption statistics in Canada, and BC in particular, provides a significantly more useful understanding of EMR adoption and trends and gives rise to opportunities to focus efforts and tailor approaches.

For the purposes of analysis, we have identified three broad categories of clinics in which GPs commonly practise:

- Full-service family practice (FSFP) clinics (which may include an out-of-hours walk-in service).
- Purely or primarily walk-in/treatment centre clinics.
- Specialized GP and mixed GP/specialist clinics (such as mental health teams, sport medicine clinics, aesthetics clinics, etc.).

Full-service family practice

Dividing the FSFP practice category further provides a clear image of adoption in typical family practice clinics.

With existing EMR users and implementations currently underway, BC is at around 90% adoption of EMR among large FSFP clinics (six or more physicians in group practice), and growing. There are almost 150 such



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- 21% of Thoracic Surgeons
- 25% of Orthopaedic Surgeons
- 29% of Plastic Surgeons
- 35% of Gastroenterologists
- 42% of Nephrologists

clinics representing around one-third of the province's approximately 3700 FSFP GPs. This level of adoption is not surprising as these clinics are large enough to have physician champions among the group and a dedicated practice manager to coordinate the implementation on behalf of the physicians. They have a unique business case for EMR adoption due to their size and complexity, and they have an economy of scale.

Small and medium FSFP clinics (two to five physicians in group practice) have reached only around half of the level of adoption of the larger practices, currently approaching 50%. There are around 350 such clinics, again representing about one-third of the province's 3700 FSFP GPs. These clinics present some of the same characteristics as the larger practices, but not typically to the same extent. Furthermore, where in large practices there are often enough EMR champions to promote adoption of the EMR by the whole group, in smaller (two to three) physician practices it is common to see one physician who will not adopt an EMR, holding back their colleagues who want to make the change.

Adoption of EMR among solo FSFP physicians is extremely low—between 5% and 10%. Those who have adopted an EMR are typically in a community of practice, adopting EMR as part of a larger initiative to enhance patient care in a community. Solo physicians commonly report that they simply do not have the time or capacity to undertake an EMR implementation, being somewhat isolated in solo practice they likely have not had an opportunity to see the benefits of EMR in a practice environment, and a significant portion of solo GPs are nearing retirement and not aware of the benefits of adopting EMR during that transitional stage.

Across all three categories of FSFP clinics, there is also a clear differentiation between urban and rural/remote areas, particularly among solo

physician clinics. Adoption in rural/remote towns and communities is significantly higher than in larger urban settings. Physicians have suggested that this delineation is due to the local relationships and dependency on one another in smaller communities, the leadership of the community of practice groups in many of BC's smaller communities,⁵ and the difficulty in paper information flow in a distributed geography. Most striking is the very low uptake among solo FSFP GPs in the urban areas of the Lower Mainland and Victoria.

Walk-in and treatment centres

Adoption is also low among clinics that function entirely or primarily as walk-in or treatment centres. As these clinics do not typically maintain a full longitudinal chart or practice longitudinal chronic disease management, the typical value formula of an FSFP does not usually apply. In contrast, these clinics indicate that there would be significant value in interfacing solutions to view online medication lists and past laboratory and imaging results, send visit summaries to the primary GP electronically, send referrals to specialists, and submit electronic test requisitions. Some also see opportunity in reducing chart management costs due to the high volume of new charts. These clinics also have unique barriers regarding user training and licensing due to the often rotating and part-time physician staffing arrangements.

Specialized GP clinics

There are also many GPs who practise in joint clinics with specialists focused on specific specialized programs such as mental health, sport medicine, and aesthetics. Adoption in these groups is also lower than in FSFP clinics but is growing, particularly in certain types of clinics such as sport medicine. Some categories, however, such as GP-psychiatrist mental health teams,

operate in different environments, often with close ties to health authorities, which provide distinct and tailored regional information systems that obviate the need for an EMR.

Tailoring PITO support

In the coming months, PITO will be looking for opportunities to tailor support for the categories of clinics identified above that do not experience the full benefit of regular EMR adoption due to their type of practice, or are experiencing greater barriers to adoption and require focused support, including in particular:

- Solo FSFP GP clinics (particularly in urban centres—Vancouver, Fraser Valley, Victoria, Kelowna).
- Small FSFP GP clinics (also particularly in urban centres).
- Walk-in/treatment centres.
- Specialized joint GP-specialist clinics.

We welcome suggestions from physicians in these practice types regarding how EMR solutions and support programs can be tailored to support their type of clinic. Please contact your local relationship manager or local physician champion (www.pito.bc.ca under Contact Us) or e-mail info@pito.bc.ca.

—**Jeremy Smith**
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