**CareRightNow** Evaluating the Collaborative Emergency Centre Experience in Nova Scotia

## **SYNOPSIS DOCUMENT**



Prepared by Stylus Consulting (2014)

# **CEC EVALUATION SYNOPSIS**

In 2011, the first Collaborative Emergency Centre (CEC) opened in Parrsboro, Nova Scotia. This new model of care was introduced mainly in response to concern about how often small rural hospitals had to close their emergency department, usually because there was no doctor available to cover the shift. Commonly, there were family doctors working in the community, but it was becoming very difficult for them to tend to their regular family practice patients in their clinic as well as provide emergency care at the hospital.

If a doctor was on call overnight, they generally didn't book appointments for at least part of the following day so they could catch up on sleep. Having a frequent on-call schedule also made it very difficult to recruit doctors to the community because many new doctors want a better work/life balance. All this contributed to unpredictable access to emergency services and, very often, long waits for patients to get an appointment for primary health care services.

A CEC is intended to make access to emergency care a seamless part of primary health care. It provides enhanced access to high quality comprehensive primary health care and is also capable of dealing with unexpected illness or injury in a timely fashion. A CEC has three essential, formally linked components: [1] a primary health care team, [2] urgent care capacity, and [3] a plan/protocol for emergency care in collaboration with Emergency Health Services (EHS) and the District Heath Authorities (DHAs). The structure, design and staffing of CECs varies from site to site and is based on best practice and community need.

There are plans to open 14 CECs in total and currently CECs are open in 8 communities including: Parrsboro, Springhill, Tatamagouche, Annapolis Royal, Pugwash, Musquodoboit Harbour, Musquodoboit Valley and New Waterford<sup>1</sup>. In order to inform this work, the Nova Scotia Department of Health and Wellness (DHW) commissioned an evaluation of the CECs to understand the strengths and weaknesses of the model, impact on patients' access to primary and emergency care and impact on providers working in the CEC. A framework for the evaluation of CECs was developed in partnership with stakeholders, and then an external consultant (Stylus Consulting Inc.) was hired to collect and analyse data, report findings and make recommendations.

<sup>1</sup> Because New Waterford is such a new CEC site, it is not included in the data analysis although a focus group was held there to talk about their experience so far.

The evaluation team had access to data and documents from the DHW, the DHAs and Emergency Medical Care (EMC) based on the data sources identified in the evaluation framework. In addition to this information, focus groups were held at each CEC site (one for providers, and another one for managers) as well as with site managers and the CEC Provincial Advisory Team. An on-line survey was also open to everyone who had been invited to a focus group (whether or not they had been able to attend) as well as to all health care providers working at a CEC.

The evaluation framework was designed with an extensive list of questions, data sources and indicators to guide the assessment of strengths and weaknesses of the CEC model. These are all spoken to in detail in the body of the evaluation report. On a high level, there are four main areas that readers need to know about to understand the impact of the CEC model to date.

### 1. Has the CEC model improved access to primary health care?

Yes. At all CEC sites, patients have better access to primary health care services. This is because all sites are able to offer more hours of service to the community with extended evening hours and weekend appointments (usually 12 hours a day/7 days a week). Most sites have also been able to achieve the goal of having same day and next day appointments available for patients who need them. One way to evaluate this is to look at the change in the number of patients who are triaged as a CTAS 4 or 5 (which means they have a health concern that could be managed appropriately in a non-Emergency Department setting) before and after the CEC was established. Overnight, all CECs have seen a decrease in CTAS 4-5 presentations. This means that those patients were most likely able to get an appointment with their primary health care provider for their health concern during the extended daytime hours at the CEC.

While it's still too early to say for sure, many providers expect that better access to primary health care will result in improved chronic disease management and health outcomes. Patients with chronic illness are able to get in to see their primary health care provider in a timely way, preventing complications of their disease or, at least, catching them early. As important, patients can avoid having to use the emergency department for primary health care concerns because their family practice is available and open when an appointment is needed.

Better access to primary health care may be the most significant benefit of the CEC model. Essentially, it has shifted the hours of family doctors' work to the time of day that they are most needed. Involving a nurse practitioner or family practice nurse in the team enhances the ability of the practice to expand the range of services it offers to patients and families.

The CEC model's greatest benefit appears to have been improved access to primary health care. Eighty-two percent (82%) of survey respondents agree or strongly agree that the CEC model has resulted in community members having access to daytime primary health care service that is as good as or better than it was before.

All sites have seen a decrease in CTAS 4-5 presentations overnight ranging from a 37% to 74% decrease in average number of visits per quarter since the implementation of the CEC model. Ironically, primary health care component of the CEC model may become a victim of its own success. As people from surrounding communities learn that they can get an appointment to see a primary care provider in a fraction of the time they would need to wait for their own doctor, it would appear that more and more patients are traveling to CECs for their primary health care needs. While the size of this issue needs to be measured, it suggests that achieving 'same day/next day' access to primary health care services for all Nova Scotians should be the ultimate goal.

## 2. Has the CEC model improved access to high-quality emergency care appropriate for the needs of the community?

Yes. Since the CEC model was implemented, there has been a dramatic decrease in unplanned closures of local emergency departments. This has been due to the availability of registered nurses and paramedics at each site, supported by an emergency medicine doctor they can reach by telephone for advice managing a patient. More public education is needed so that community members don't expect to see a physician at the CEC during the overnight hours.

While it is widely agreed that access to emergency care has been improved, it is also observed that very few people have actually needed this service. On average, fewer than two people per night visit a CEC and up to 44% of the time, there are no patients at all. One consequence of such low rates of use – particularly of emergency services - is that clinicians have little opportunity to practice their skills. Providers at the CECs did observe that they are trained in some procedures that they have never had to perform, and that the standards should be reviewed to match with real need.

A key finding of this evaluation is that a wiser investment of resources would be in 'shoring up' 12 hour/day-7 day/week primary health care services (which is when the vast majority of people need access to this care) rather than continuing to fund the overnight hours (which is often not used at all).

On the matter of overnight emergency service, use of paramedics who can provide more services to patients without having to transfer them to hospital would address the need for timely response to a medical emergency as well as the concern about fees for ambulance trips when treatment can be provided within the community. In the model this evaluation suggests, treatment would actually be provided right in the patient's home. If this recommendation is implemented, it is strongly advised that the same careful attention to communication and planning that went into the introduction of the CEC model in each community be central to any change in service delivery approach. All sites have seen a dramatic reduction in the # of hours of unplanned overnight closures, ranging from a 90-100% reduction.

Very few people go to the CEC for emergency care overnight. Based on a three-month average, about 1 patient per night visits the CEC for care. Often there are no patients seeking care at the CEC overnight at all.

## 3. Has the CEC model demonstrated a patient-centered approach to care coordination and integration across the continuum?

Yes. The evaluation found that patients are far more likely to have access to the right provider, at the right time, in the right place than they did before the CEC was introduced. This is mainly because of the extended hours of primary health care services that are available to patients, and the team approach to care in addressing their needs.

The CEC model has made same-day and next-day appointments more available. Patients don't have to wait weeks to see their doctor or long hours in emergency waiting rooms for concerns that are non-urgent. Each CEC has taken a somewhat different approach to the pathway to care for patients. Some sites triage all patients who arrive, which means that a patient needs to be "discharged" from the CEC Emergency pathway to the Primary Health Care stream. At present, only a doctor can authorize this discharge and this can involve an unnecessary wait for the patient. The nurse-led discharge policy that will soon be implemented will solve this problem.

Other sites have the patient decide which pathway is right for them. Now that there is a good deal of experience with different patient pathway approaches, the CECs should get together and develop a best practice that will be used consistently across the province. All sites stressed the need for more public education about the role of the CEC, the types of services that are available, and when.

The "what" and "when" can vary from site to site due to the fact that each CEC built on the strengths and assets of the community health system prior to launch. One of the things that was grand-fathered into each local CEC model was the availability of laboratory and x-ray services (which at no site had staffing for the extended hours of the CEC). The lack of available laboratory and x-ray services during all the hours that the CEC is open means that the level of care a patient can expect on-site varies depending on what time they come for service.

While the transfer of care between the daytime and overnight hours CEC teams generally works well, providers reported that the lack of one integrated health information system creates inefficiency and potential risk when they need to enter data twice and in different forms. The hospital information systems do not 'talk' to the family practice Electronic Medical Record – and neither of those 'speak' to the electronic chart created by EHS. The 'one patient, one record' solution would resolve this issue.

There was feedback from providers that some patients have expressed concern about not always being able to see their own family doctor for a primary health care need. While it is felt that the ability to get an appointment sooner, either with another family doctor in the practice or with a nurse practitioner, is regarded to be a reasonable trade-off, a patient satisfaction survey will really be the most reliable measure of that opinion. This is part of the phase 2 evaluation plan.

A key theme in focus group feedback (and the story told in the utilization data) is that the CEC model makes health services available in the community during more hours, when most people need them.

#### 4. What has been the experience of providers in the CEC model?

Ninety-two percent (92%) of providers at CECs responding to the evaluation survey agree or strongly agree that the team approach to care is working well in the daytime shift. Sixty-nine percent (69%) of respondents said that they are satisfied or very satisfied with the overnight shift. The lower overnight rating is likely explained by the frustration expressed by nurses that paramedics were unable to help them care for inpatients as well as the dual workflow with patient records and registration (ePCR and Meditech/STAR).

An extremely high number of providers (98%) said that they believe their CEC provides quality care to patients. Overall, providers rate their professional satisfaction working with the CEC model favourably; 76% of providers rated the CEC as a "good" or "very good" place to work. That said, providers and management alike said that the staffing model (small teams, specialized skills, rural setting) is very fragile. Sick days, vacation or retirement is a weak link in the sustainability and predictability of services. Generally, nurses felt more confident working with paramedics with longer years of experience. At most sites, nurses in particular acknowledged some initial misgivings about the collaborative model with paramedics, but generally reported support for the team after experiencing how it worked. It is generally felt that once the nurse/ paramedic team has been given time to gel, both professional groups come to value each other's clinical skills and approach to care.

Family doctors generally reported that they like practicing at the CEC with 6 out of 8 rating it as a "good" or "very good" place to work. In the online survey, there were no doctors who said they did not like working at the CEC. While it was generally felt that the daytime team is usually quite busy, feedback in focus groups was that family doctors no longer having to cover the emergency department overnight makes it possible to provide extended daytime and weekend hours. Many also believe that this will make it easier to recruit doctors into rural communities.

**The key take away for policy makers** is that CECs have achieved what they set out to do. Before expanding the model to new sites on the rollout list, there are lessons to be learned from the first phase of implementation about how second-generation CEC models should develop.

Providers told us that the team approach to care is working well. The daytime shift received higher ratings (92%) than the overnight shift (69%).

Providers give the model extremely high marks, with 98% reporting that they believe their CEC provides quality care to patients.



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