

Clause 16 in Report No. 6 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on April 21, 2016.

16

Expanding Paramedicine in the Community Update

Committee of the Whole recommends adoption of the following recommendation contained in the report dated March 10, 2016 from the Commissioner of Community and Health Services:

1. Council receive this report for information.
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Report dated March 10, 2016 from the Commissioner of Community and Health Services now follows:

1. Recommendation

It is recommended that Council receive this report for information.

2. Purpose

The purpose of this report is to provide an update on the Expanding Paramedicine in the Community (EPIC) project that was approved by Council, through Clause 1 of Report No. 1 of the Community and Health Services Committee, on February 21, 2013. Patient enrollment into the EPIC program began on July 2, 2013 in partnership with Rescu, a research division at St. Michael's Hospital.

3. Background

The EPIC program is a collaborative approach to improving the health of patients with chronic diseases and decreasing the health system impacts of chronic medical conditions

EPIC is evaluating the impact of integrating expanded scope community paramedics into Family Health Teams and is aimed at improving the health of

patients with Diabetes Mellitus, Chronic Obstructive Pulmonary Disease and Congestive Heart Failure. Community Paramedics working in the EPIC program collaborate directly with patients, Family Health Team physicians, nurses, and pharmacists as well as other community health care providers to educate and empower patients to manage chronic disease.

The integration of the paramedics also ensures that timely communication between the patient and Family Health Team occurs and that patients have the support of their entire health care team in managing their condition.

Outcomes being measured in EPIC include both individual health and quality of life impacts as well as impacts to the health care system as a whole as summarized below:

- Rates of hospital admission, emergency department use and 911 responses to patients enrolled in the EPIC program
- Length of hospital stay if admitted to hospital
- Quality of life before and during enrollment in the EPIC program
- Patient, physician and paramedic satisfaction with the EPIC model
- Financial analysis of the EPIC model of care

Current health system partners collaborating in EPIC include 42 Primary Care physicians affiliated with the Health for All Family Health Team, Markham Family Health Team, Aurora-Newmarket Family Health Team and the Stouffville Medical Centre. Other health system partners include the Central Community Care Access Centre, Centennial College and Rescu, the emergency research group at St. Michael's hospital.

From July 2, 2013 to November 31, 2015, community paramedics provided over 1,300 routine and emergent home visits to patients enrolled in EPIC

In May, 2013, five Advanced Care Paramedics attended Centennial College in Toronto to complete a six-week training program covering the assessment and management of chronic diseases.

Starting in July of 2013, 268 patients were enrolled in the EPIC research study. Of the 268 patients enrolled, 136 patients were randomly placed into the intervention group and received care from their regular family physician and the community paramedics; 132 patients were placed into the control group receiving the standard care from their family physician only. By the end of the study, the intervention group had decreased from 136 to 119 patients due to attrition.

As part of the program, patients are visited by Community Paramedics in their home every three months regardless of their health status. If requested by the Family Health Team or by the patient themselves, Community Paramedics will visit patients experiencing difficulties in managing their conditions more frequently and work collaboratively with the patients Family Health Team to manage the issue in the home; decreasing the need for 911 responses, emergency department visits and hospitalization.

Typical home visits focus on chronic disease management, disease prevention, health promotion/teaching and monitoring of the patient's condition through in-home blood testing. Being in the patient's home also allows family members to participate so they can assist in promoting the health of EPIC patients.

Support for EPIC, and community paramedicine as a whole, has also been shown from political figures and the media

Current Federal Minister of Health, Dr. Jane Philpott, stated on Twitter that:

“EPIC is the best primary care innovation since [introduction] of FHTs (Family Health Teams)”

As part of his report, Living Longer, Living Well, released in January 2013, Dr. Samir Sinha discussed the need to support further research into the expansion of Community Paramedicine programs across Ontario as part of the Ontario Senior's Strategy

Dr. Sinha stated that:

“Over the last few years, we have witnessed the ability of Community Paramedicine programs in Ontario and beyond to leverage the talent of skilled paramedics to deliver better patient and system outcomes... This is a great day for older Ontarians and especially those wishing to age in place...”

At a recent Community Paramedicine Conference in December 2015, both Dr. Samir Sinha, Executive Lead of Ontario's Seniors Strategy and Dr. Jane Philpott, Federal Health Minister, spoke about the benefits of Community Paramedicine and the impact it has on the health of our communities. It allows for patients to age in place and provides better health outcomes for patients.

4. Analysis and Options

EPIC is the first step toward integrating Paramedic Services into the broader health care system in York Region

The development of the EPIC model of care is pivotal to the true integration of Paramedic Services into the health care system in York Region. EPIC is the first program in Ontario that has proven that paramedics are able to work with, and provide care under the direction of, family physicians. This collaborative approach provides a model that is scalable, flexible and adaptable to many other conditions.

Although the EPIC program focused on three specific chronic diseases, physicians, paramedics and other health system providers now see how the EPIC model can be adapted to assist in the management of other health conditions in our community such as:

- Providing urgent care of residents in long-term care facilities
- Diverting patients from emergency departments
- Providing care to patients receiving palliative care in the community
- Responding to mental health and addictions crisis
- Responding to and managing health condition changes in patients that are currently receiving remote home health monitoring of chronic disease through the Community Care Access Centre
- Responding to and managing deteriorations in HealthLinks patients in the community to decrease the need for hospitalization and keep them in their homes

For these reasons, EPIC has gained interest from the Central Local Health Integration Network (Central LHIN), the Ontario Ministry of Health and several sites internationally. The results will serve to guide future community paramedicine programs.

Analysis of the data collected during the EPIC project is now underway

On November 30, 2015, the research portion of EPIC concluded. Analysis of the data collected began in December 2015.

As part of the analysis, several aspects of the program are being evaluated including improvement of health outcomes for patients enrolled in the program,

health system impacts, patient and caregiver satisfaction, as well as financial analysis.

A key element of the analysis comes from data that is collected from the Institute of Clinical and Evaluative Sciences (ICES). ICES collects data on individual health care system usage. This data is critical to ensure the analysis of the EPIC project is complete as this will determine the impact the program had on the health care system as a whole.

At the end of each calendar year, ICES begins to collect and prepare the previous year's data. It is expected that data will be available to the research team in April 2016.

Staff will report back to Council in the fall of 2016 providing details on the outcome of the EPIC pilot project.

Patient satisfaction results demonstrate that patients are highly satisfied with the EPIC program

116 of 119 patients (97.5%) enrolled in the intervention arm of EPIC were offered patient satisfaction surveys and 21 were also selected for in-person interviews with a qualitative researcher to determine satisfaction and how they feel about this model of care.

Results of these surveys and interviews reveal that patients report:

- The program offers them security and a safety net
- They feel supported and have the ability to get quick care when they start to feel unwell
- They feel safe and more connected to health care with regular paramedic visits
- The program provides holistic care and empowers them to self- manage their condition

In reviewing satisfaction surveys, overall satisfaction scores (0 lowest to 5 highest) ranged from 4.3 - 4.9 and the EPIC Community Paramedics were seen as valuable, compassionate, knowledgeable and sensitive. Patients were highly satisfied with the services provided, would recommend the program to others and felt highly motivated to maintain or improve their own health and well-being.

Highlights of some of the comments received include:

“Better control of my diabetes and general health. Taught me about the diabetes and side effects that you can have. The working together of my health team with the EPIC team helped me to improve my sugars and side effects from the disease.”

“EPIC program is an most valuable & lifesaving program for me & my family. There are situations where I needed their help in urgent situations, EPIC was there. We truly love & value their support. [Paramedic names] have been our angels who saved my [family members]. I cannot imagine not having their support in our life as we have lot of medical issues.”

“It has been extremely beneficial to have caring, knowledgeable paramedics visit our home. We feel that we have received excellent care, advice and support. One strength is the fact that the paramedics are in constant touch with our family physician. There is a great sense of security knowing that the paramedics are aware of our health concerns and are able to visit on a regular basis. We sincerely believe that being a part of the EPIC program has been a major factor in keeping the patient out of the hospital.”

“Prevents an emergency room visit. Responds same day. Timely manner. During routine visits, they provide socialization re: shut-ins. Paramedics assess, observe client and offer suggestions re: care. They offer community partners (CCAC, ADP, Diabetes clinic) information as identified as needed/helpful. They have direct access to family GP/NP/Lab/ client info. Can assess impact of care giving on caregiver and discuss respite. Teach use of aerosol chambers. Paramedics are friendly faces in time of need!!”

A publication on the results of the qualitative and patient satisfaction data is being compiled and is expected to be ready for publication mid-2016.

Community Paramedics and Family Health Teams are working together to determine how best to support EPIC patients while the research is analyzed

Community Paramedics are continuing to provide care for the 119 patients from the treatment area while it is determined which patients should continue in the program and which patients can safely graduate from the program. Some patients have shown reluctance to graduate from the program, even though their family physician and the Community Paramedic both support this, as the patients have grown to rely on the services of the Community Paramedics.

Link to key Council-approved plans

This report directly contributes to supporting the 2015 to 2019 Strategic Plan objective to “Protect Public Health” through the Key Planned Regional Activity to “optimize the use of paramedic resources so residents have access to appropriate and timely health care”.

The report also directly supports the actions in the York Region Paramedic Services 10-Year Resources and Facilities Master Plan to “address the projected service demand increase of 47.8 percent over the next 10 years through community paramedicine/innovative approaches.”

5. Financial Implications

EPIC received funding from the Ontario Ministry of Health and Long-Term Care between 2014 and 2016

In January 2014, as part of a funding announcement from the Ontario Minister of Health and Long-Term Care, the Region will receive up to a total of \$419,100 in funding for the EPIC program. Table 1 summarizes the distribution of Provincial funding.

Table 1
Community Paramedicine Initiative

Year	Approved Provincial Subsidy
2014	\$123,583
2015	239,549
2016	55,968
Total	\$419,100

5. Local Municipal Impact

Currently, residents from the municipalities of Aurora, Markham, Newmarket and Whitchurch-Stouffville are the primary beneficiaries of the Expanding Paramedicine in the Community pilot project.

Now that the EPIC trial period has ended the key priority is to complete the evaluation of the EPIC pilot and continue to integrate the EPIC model into the existing health care system in order to provide the best care for patients.

Paramedic Services staff are working with the Central LHIN and local HealthLink programs to ensure that duplication of services is not occurring and resources are being maximized.

6. Conclusion

Through the EPIC program, patients were enrolled in an innovative and collaborative health care model aimed at improving the health of patients with chronic diseases and decreasing the health system impacts of chronic medical condition.

Lasting partnerships with community health providers were established during the pilot phase of the EPIC program and those continue to exist to improve the health of York Region residents.

Over the course of the EPIC trial, support for EPIC, and community paramedicine as a whole, has continued to grow from political figures, media and the Ontario Ministry of Health who provided \$6 million in one-time funding to support community paramedicine programs, including EPIC.

Analysis of the data collected during the EPIC project is now underway and patient satisfaction results are demonstrating that patients are highly satisfied with this model of care.

York Region Paramedic Services remains committed to developing options and dispositions that better meet the needs of our patients and continue to pursue opportunities to work with partners to develop initiatives which will help create enhanced, community-based paramedic services.

For more information on this report, please contact Norm Barrette, Chief and General Manager, Paramedic and Seniors Services at ext. 74709.

The Senior Management Group has reviewed this report.

March 11, 2016

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Accessible formats or communication supports are available upon request