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# **Hants Satellite Dialysis Review Report for the Deputy Minister**

September 2014

Prepared by: Nova Scotia Renal Program

Final

# Hants Satellite Dialysis Review

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## EXECUTIVE SUMMARY

A provincial dialysis service delivery plan has been in place since 2011. The plan does not include Windsor as a location for a new satellite dialysis unit. There have been a number of requests for satellite dialysis services to be located in the Hants Community Hospital in Windsor since 2011.

During the fall 2013 session of the House of Assembly, the Minister of Health and Wellness agreed to have the decision reviewed. The Nova Scotia Renal Program (NSRP), a provincial program of the Department of Health and Wellness, facilitated the review of the feasibility and appropriateness of establishing a satellite dialysis unit in Windsor. NSRP engaged the Provincial Dialysis Review Committee to review and deliver evidence informed recommendations to the Minister by September 2014.

The Nova Scotia Renal Program prepared the evidence and data to ensure an informed process. The Provincial Dialysis Review Committee reviewed the evidence, data and rationale for the previous decision. Updated data on current volumes and anticipated demand were compared to that used for the previous recommendations. Principles and criteria previously used for decision making were validated through external consultation and revised and used to guide this process. Implications for other components of the renal service delivery system were identified. Consultation with patients and families, health system leadership and community stakeholders was conducted and incorporated into the review. Population data, socioeconomic and geographical information was used to assess if there were any unique circumstances in Hants County that should be considered. Multiple options were identified, and risks, benefits and resource implications for each were assessed.

The following recommendations were developed by the Provincial Dialysis Review Committee to be considered by the Minister of Health regarding the feasibility and appropriateness of locating a satellite dialysis unit in the Hants Community Hospital.

### **Recommendation #1**

**Explore the feasibility of implementing subsidized transportation for Nova Scotia residents travelling for facility based hemodialysis services in Nova Scotia.**

In addition to benefitting Hants County patients, subsidized transportation would benefit all Nova Scotians attending facility based hemodialysis and would alleviate a long standing issue (financial burden) for many patients travelling to hemodialysis services.

### **Recommendation #2**

**Ensure Kentville satellite dialysis unit planning and construction meets target deadlines.**

The Kentville satellite dialysis unit is the right size to meet current and future demands for the catchment area, including Windsor. The unit will alleviate capacity issues in Capital Health, replace the Berwick unit and provide care closer to home for individuals from the Windsor area. Planning is well underway for this unit and should continue on schedule for the same reasons as identified in the Provincial Service Delivery Plan: Report and Recommendations to the Deputy Minister.

### **Recommendation #3**

**Establishing a satellite dialysis unit in Windsor is not recommended at this time.**

The current demand data and future projections for Hants County do not support a satellite dialysis unit in Windsor. In addition, when compared to the provincial dialysis service delivery system future

plans, having a satellite in Windsor would not provide benefit to the system as a whole or align with provincial planning principles and priorities.

#### **Recommendation #4**

**Explore the feasibility of implementing a home hemodialysis assistance pilot project in Hants.**

Although Hants County has a high home dialysis rate, additional support for home hemodialysis for those individuals where travel is a significant burden would be beneficial. A pilot project would enable more patients to select that treatment modality and would alleviate the travel burden for more individuals. Information gathered by evaluating the pilot project would help identify barriers and support required to encourage uptake of both home hemodialysis and peritoneal dialysis provincially.

#### **Recommendation #5**

**Continue to review the Provincial Dialysis Service Delivery Plan annually using county and community level data.**

The Provincial Dialysis Services Review Committee should continue to review the provincial plan annually to ensure the evidence still supports the plan and to determine whether changes are required. As the Nova Scotia Renal Program prepared the data for this review, it became evident that data at both the county and community level should be used (patient volumes, travel patterns for healthcare services, travel distances, etc.) in order to make evidence informed decisions.

The Committee indicated that the top priority, the one that would benefit the most people, is to explore the feasibility of implementing subsidized transportation for Nova Scotia residents travelling for facility based hemodialysis services in Nova Scotia.

## INTRODUCTION

The Nova Scotia Renal Program (NSRP), a provincial program of the Department of Health and Wellness, has a mandate to improve the renal health and care of all Nova Scotians. The program carries out its mandate by developing/adopting and recommending standards and service delivery models; working with District Health Authorities and clinicians in providing education; and recommending implementation strategies to support the uptake of standards and service delivery models. NSRP also provides program evaluation and monitoring of the standards.

In 2009, the Department directed the NSRP to develop a provincial satellite dialysis implementation plan that would align all satellites with a consistent service delivery model and to recommend the location and sizing of satellite services throughout the province. The program formed a steering committee with representatives from all District Health Authorities, the Canadian Kidney Foundation and patient representation.

Eight focus groups were held with patients and families across Nova Scotia in Berwick, Yarmouth, New Glasgow, Sydney, Halifax, Amherst and Liverpool to obtain an understanding of the factors most important to identifying locations throughout the province for satellite dialysis services. Advice gathered from these consultations included locating satellites where most people would travel the shortest distance to decrease the financial, emotional/psychological burden, and to consider the highway versus secondary roads as not all areas in Nova Scotia are equally accessible. The Steering Committee considered the feedback from patient/family consultations, criteria for establishment of a satellite unit including renal population data; travel distances; required human resources; and strategies to support implementation. The plan was submitted to the Deputy Minister of Health for consideration.

In August 2010, in response to the implementation plan, the Deputy Minister requested a more comprehensive review and recommendations that included the three in-centre dialysis services (main dialysis units) located in Halifax, Sydney and Yarmouth. NSRP organized the Dialysis Services Review Committee to review the satellite dialysis planning process, priorities, recommendations, and the challenges facing the in-centre dialysis programs to develop a provincial renal service delivery plan that would address current and future demand.

The report, submitted to the Deputy Minister in November 2010, presented an analysis of the provincial satellite dialysis plan, highlighted the challenges of the in-centre hemodialysis programs and recommended a prioritized provincial plan that would deliver a consistent approach to services.

Annually since 2011, government has supported the priorities recommended in the 2010 and 2012 reports to the Deputy Minister on Provincial Dialysis Services. The provincial approach to dialysis service delivery planning is based on the following criteria: stakeholder input; renal population demographics; current resources; and costing for centre-based and home-based therapies.

### **Request for Satellite Dialysis Services in Windsor**

In August 2011 the Hants Community Hospital Foundation requested that a satellite dialysis unit be established in Hants Community Hospital in Windsor as the Foundation was engaged in fundraising for dialysis machines. The Foundation also requested that DHW approve funding for renovations and operations. Capital District Health Authority senior administration and Acute & Tertiary Care staff met with the Foundation indicating that a satellite in Windsor could not be supported, and subsequently CDHA followed up with a letter to Hants County dialysis patients summarizing their decision. The letter explained that identification of new satellite sites must consider a number of factors and criteria, including the number of patients that require dialysis in a given community and

across the province, available space, ventilation, drainage and electrical requirements, construction/renovations required, and availability and sustainability of human resources.

In December 2011 the Deputy Minister and Acute and Tertiary Care staff members presented information on provincial programs at Public Accounts. During the presentation, a request was made for a satellite unit in Hants and the Deputy Minister indicated that the Department could not support this request.

During the 2013 fall session of the House of Assembly, MLA Chuck Porter requested that the Minister reconsider the decision regarding satellite dialysis services in Windsor made by the previous government. The Minister agreed to have the issue reviewed.

The Nova Scotia Renal Program was requested by the Department to take the lead in facilitating the review of the feasibility and appropriateness of establishing a satellite dialysis unit in Windsor. NSRP engaged the Provincial Dialysis Review Committee to review and deliver evidence informed recommendations by September 2014.

## APPROACH and OBJECTIVES

The Nova Scotia Renal Program engaged the Provincial Dialysis Review Committee to complete the analysis of information and data required to determine the feasibility and appropriateness of establishing a satellite dialysis unit in Windsor. The Provincial Dialysis Review Committee consists of Directors, Medical Directors and Managers of Renal Programs in CDHA, CBDHA and SWNDHA, representation from Acute and Tertiary Care, DHW and Nova Scotia Renal Program staff. A delegate from the Kidney Foundation of Canada was added as an invited guest for this review.

### Approach

The Committee took a multi-pronged approach to the review including:

- key informant interviews,
- data analysis to understand the current burden and anticipated demand over the next 10 years, and
- consideration of any unique requirements of the Hants population.

### Objectives

Information and data was collected and presented to the Committee in order to meet the following objectives:

- Establish principles and criteria for decision making.
- Review the data, criteria and rationale for the previous decision.
- Review current data and anticipate future demand.
- Identify implications of the approved satellite dialysis unit in Kentville.
- Identify implications on demand at Capital Health.
- Identify any unique requirements for the population and geography in Hants County.
- Identify options for renal patients.
- Provide a report with findings and recommendations to the Minister.

The Committee met on two occasions to develop the plan and review the information and data. A consultant from Research Power Incorporated was engaged to complete the stakeholder interviews which included patients/families, CDHA and Hants Community Hospital senior leadership, CDHA Renal Program leadership and Hants Community Hospital Foundation.

## Planning Assumptions and Criteria

Overall planning assumptions, criteria for establishing a satellite unit and criteria for identifying provincial priorities guided the Steering Committee's approach to reviewing the feasibility of locating a satellite unit in Windsor. To ensure consistency and that a provincial approach was used in reviewing the Hants decision, the committee revisited the existing planning assumptions used to develop the provincial service delivery plan. The Committee agreed to have other Canadian renal programs review the criteria as a method to confirm that the existing planning assumptions and criteria were reasonable.

The Planning Assumptions include:

- Finite health resources (the province does not have unlimited resources for renal services, so services should be located based on the greatest need, equity and established criteria)
- Competing health needs (the province has other healthcare needs that may take priority)
- Review of current and credible evidence including:
  - Literature (international evidence on best practice)
  - Benchmarks (national and international evidence on best practice)
  - Standardized methodology (consistent process to review requests for new satellite dialysis units)
- Cost effective alternatives (all alternatives and costs must be considered)
- Phased implementation plan (the plan should be prioritized based on need, access, safety and quality).

Feedback on the planning assumptions and satellite dialysis criteria was obtained from other Canadian renal service delivery programs in Alberta and Manitoba, as well as provincial renal programs in British Columbia, Ontario and Newfoundland. The feedback supported the Nova Scotia planning assumptions and criteria and provided some additional areas to consider. Other provinces did not support the one hour travel time criteria, as it was felt it would create demand for more units than the province could afford and sustain. Some provinces thought the critical mass numbers of 8-10 current dialysis patients was too low and would not lead to a sustainable satellite dialysis unit. The Committee discussed the feedback provided and decided to continue with the existing planning assumptions and satellite dialysis criteria with the addition of *access to public transportation* as another criterion for consideration.

Criteria for Establishment of a Satellite Dialysis Unit (see *Appendix 1*) were used to assess the Hants Community Hospital. The Hants Community Hospital met the current criteria in regard to having the right support services on site including a 24/7 emergency department and laboratory services. However, the criteria must be used in the context of the overall planning assumptions described above.

In addition, the previously established criteria for identifying priorities within the provincial dialysis service delivery plan (*Appendix 2: Dialysis Services Planning Criteria for Establishing Priorities*) were used by the Committee to evaluate whether Windsor should be identified as an additional satellite dialysis site and where it would rank in the current list of priorities.

The criteria for establishing provincial priorities include:

- a critical mass of current and future patients
- potential for the largest gains



- sustainability
- fairness and equity
- cost efficiency and
- travel time.

These criteria and the planning assumptions were used to assess the information and data presented throughout the remaining analysis.

## **Data Analysis**

### **Key Informant Interviews**

Key informant interviews were conducted by Research Power with six patients/family members, CDHA and Hants Community Hospital senior leadership, CDHA Renal Program leadership and the Hants Community Hospital Foundation.

The most important issue facing renal patients and families is the travel burden. They described the long, exhausting, stressful days and the significant financial impact. A number of individuals indicated “we have already spent our retirement money” or “we have had to remortgage our house” to cover transportation costs. All stakeholders interviewed suggested that funding for transportation should be considered. Patients/families indicated that “government may not be able to set up satellite dialysis units in rural communities due to cost or staffing issues, but they could support funding for transportation”. Although travel was the main issue for patients and families they interviewed, they agreed that the issues in Hants were no different than other areas in the province.

Patients and families, Hants Community Hospital leadership and the Hants Community Hospital Foundation provided feedback on factors that should be considered when determining locations for dialysis services: the number of current and future patients, existing space, funding, staff availability, cost efficiency and maximum travel distance of 20-30 minutes (patients and families). Patients questioned the credibility of the numbers provided by the health system and felt that there were many more patients. Their perception was that there was a conference room available in Hants Community Hospital where the dialysis unit could be located, that the Foundation had raised funding for dialysis machines and that there were staff willing to work in Hants Community Hospital.

Capital Health leadership provided rationale for the previous decision of not locating a satellite in Windsor, feedback on their capacity to operate another satellite dialysis unit and on engagement of patients and families. Capital Health used an evidence informed decision making process which included reviewing patient volumes, minimum criteria to provide safe and quality care, travel time target, cost efficiency and support for the provincial plan. Capital Health indicated that it does not have the resources to engage in planning a new satellite dialysis unit in Hants, due to the current dialysis infrastructure projects, including Kentville and the HI site. Finally Capital Health believes that the local community had been engaged in discussions for not recommending a satellite unit in Hants Community Hospital.

The Hants Community Hospital leadership provided information to help assess whether their facility met the established criteria for a satellite dialysis unit. The hospital leadership indicated that there were sufficient human resources capacity to provide satellite dialysis services.

There are a number of Foundations within CDHA which function independently of one another and support their local facilities. Foundations typically raise funds to support priority healthcare needs within their catchment area. The Hants Community Hospital Foundation identified their role as going beyond fund raising to include advocacy for services, which is different than the QEII Foundation who works with Capital Health to determine priorities and health authority needs.

A consistent theme surfaced from health services leadership stakeholders which indicated that the review should be based on evidence and data, following the established process to determine locations based on need and critical mass. Health services leadership stakeholders also cautioned that the Steering Committee should be cognizant of the provincial implications of their recommendations.

### **Current Data and Future Demand**

The patient data from the 2009 and 2010 plans focusing on Hants County and the surrounding area was compared to the current dialysis and pre-dialysis data to determine percentage changes in numbers of patients that have occurred. There has been an 11% decline in dialysis patient volumes in Hants County since 2008, whereas there has been a 17% increase provincially. Numbers of patients change frequently, so all numbers should be considered as a point in time representation. At the time of the review:

- Hants County had 24 patients on dialysis.
- 15 of these patients were on facility based hemodialysis.
- 9 of the 24 were on home dialysis (excellent uptake of home dialysis, well above the 20% provincial target).
- Additionally there were 48 people from Hants County being followed with significant chronic kidney disease (<30 eGFR).
- Approximately 25 of these 48 individuals were from the Windsor area.
- Predictions indicate that approximately 6 of the 25 will require hemodialysis in the next 3-5 years.
- Some will be lost due to transplant and death in the next 3-5 years, so incremental growth will likely only be 1-2 patients for a total of approximately 17 patients on hemodialysis from the Windsor area in the next 3-5 years.
- Some patients will not meet the criteria to be treated in a satellite dialysis unit, and will be required to travel to Halifax for services.

### **Provincial Comparison**

The total number of dialysis patients by rate and age category in Hants County is comparable to the surrounding counties of Kings, Lunenburg, Colchester, Pictou and Cumberland with higher volumes in Cape Breton and Halifax counties. The average age for both pre-dialysis and dialysis patients is one year lower in Hants than the provincial average (pre-dialysis average age is 72 and dialysis average age is 65).

Diabetes data was reviewed to determine if rates of diabetes in Hants County could cause future rates of kidney disease to significantly increase. Data from the Diabetes Care Program of Nova Scotia registry indicated that diabetes rates in Hants County were relatively low compared to the rest of the province and that the percentage of diabetics with significant kidney disease was also low.

Windsor and Hants County were compared to other communities and counties in the province with respect to population density, population under and over 45 years old, projected population growth, socioeconomic status and highway/road infrastructure, to determine if there were unique circumstances in Windsor/Hants to support recommending a satellite dialysis unit. There were no unique circumstances that would support Hants over other areas in the province. The review noted that Hants County has more dialysis facilities in close proximity than other areas of the province.

### **Drive Times and Travel Burden**

The geography of Hants County and typical travel patterns for specific communities within Hants County were presented to the Committee and discussed. Travel patterns by community suggest that preferred travel could be to Kentville or Windsor (40%), Halifax (20%) and Dartmouth or Truro (40%)

for hemodialysis services (*Appendix 3: Hants County Map with Dialysis Units*). Due to the impact of travel patterns on selection of preferred hemodialysis facility, data was prepared by both county and community for review and consideration.

Drive times and travel burden in Hants County were compared to other areas of the province. It should be noted that drive time information was based on ideal circumstances and did not consider the impact of traffic or weather conditions. Maps of 60 and 30 minute drive times from all dialysis facilities in the province were reviewed (*Appendix 4: 60 and 30 Minute Drive Time Map*). The patient/family's request for a 20-30 minute drive time to all dialysis facilities would leave large areas of the province with unmet needs and would require significant investment in infrastructure to build more satellite dialysis units that may not be sustainable. Sixty minutes drive time to dialysis services can and is being met for over 90% of all hemodialysis patients in the province. Other provinces indicated that the 60 minute drive time target is potentially unsustainable. The BC Renal Agency has established a drive time target of 90 minutes to the nearest satellite dialysis unit.

The 60 and 30 minute drive times to Windsor were mapped and indicated that Windsor is within the set target of a 60 minute drive time and for some a 30 minute drive provides access to a dialysis unit. (*Appendix 5: One Hour and 30 Minute Travel Distances to Hants Community Hospital*). The average drive time for Hants County patients on hemodialysis is thirty-eight minutes to their current dialysis unit (minimum 27 minutes, maximum 50 minutes); well within the 60 minute drive time target.

The change in drive time from the current treatment locations to the proposed Windsor location for 15 hemodialysis and 48 pre-dialysis patients from Hants County was analyzed. Individuals travelling to Halifax for dialysis services that reside in the Windsor area would have an average of seventeen minutes less travel to access dialysis services if they were located at Hants Community Hospital. A portion of the Hants County patients will continue to receive dialysis services in Halifax, Dartmouth and Truro due to where they reside. Some patients receiving treatment in Halifax will transfer to Kentville when it opens. Therefore; fewer than ten current dialysis patients would use a satellite in Windsor and approximately six more patients would potentially use a site in Windsor over the next 3-5 years. With attrition due to transplantation and death, numbers would potentially be much smaller. Sustainability of a unit with such small numbers would be difficult.

Drive time analysis was completed for all patients living within 45 minutes of Windsor. This data indicated that Lower Sackville would be a better location than Windsor, based on meeting the greatest need and keeping within the drive time target. The data indicates that there are 30 hemodialysis patients in the Bedford/ Sackville and surrounding area that could be served in Lower Sackville within an average drive time of 30 minutes. Also, looking into the future there are approximately 58 pre-dialysis patients that could be served.

Upon further analysis (using assumptions on preferred driving patterns from the South Shore and other areas on the outskirts of HRM), a total of 33 patients on hemodialysis in Halifax and Dartmouth and 210 pre-dialysis patients may prefer a Lower Sackville location to the Halifax or Dartmouth location. Establishing a satellite in Lower Sackville would eliminate travel into the downtown core and the resulting impact on traffic, travel time and parking challenges, and would free up spaces for individuals on the peninsula.

## **Implications**

The establishment of a satellite dialysis unit in Windsor would have system implications on current and planned satellite dialysis units, as well as establishing a precedent which does not meet the current 60 minute driving distance criteria/standard. The satellite dialysis unit that was announced in 2012 for Kentville is in the design stage and has the capacity to accommodate the patients currently in Berwick, those waitlisted for Berwick receiving services in Halifax and Hants patients in the

Windsor area (total of 43), as well as projected future demands. If a satellite dialysis unit was approved for Windsor, the Kentville satellite would need to be redesigned for a smaller population which would delay the project that is well underway. Furthermore, the Kentville site was chosen to produce economies of scale with 12 treatment chairs to accommodate increased volumes in the future. Additional capacity would be available in Halifax to service Halifax County, as well as provide provincial tertiary services for the province, when either a Kentville and/or Windsor satellite dialysis unit opens.

Establishing a satellite dialysis unit in Hants would greatly decrease the number of individuals selecting home dialysis, a more independent therapy which supports self-management, demonstrates certain clinical benefits and maintains continued employment. Experience in Nova Scotia has demonstrated that as more satellite dialysis units are established fewer people select home dialysis. Nova Scotia had a home dialysis rate of over 40% prior to establishing satellites in Nova Scotia. Currently, the home dialysis rate is 17%, well below the target of 30% established by most provinces in Canada and the current Nova Scotia target of 20%.

Establishing a precedent of 30 minutes travel time to satellite dialysis services could subject the province to re-examining the provincial dialysis service delivery plan, adding approximately ten additional satellites and cost significantly more to provide infrastructure and maintain operations. With a minimum of \$4M to construct a six station satellite dialysis unit, locating satellite dialysis units across the province within 30 minutes driving distances would be costly, impractical and would negatively impact the selection of home dialysis in Nova Scotia.

## **Options**

A number of options were explored by the Committee including: status quo, enhancing efforts to increase home dialysis, fast tracking the Kentville satellite dialysis unit planning and construction, establishing a self-care dialysis unit in Windsor, establishing a satellite dialysis unit in Windsor, establishing a satellite dialysis unit in Lower Sackville and providing financial assistance for transportation for hemodialysis patients. The Committee considered the risks, benefits and resource implications (*Appendix 6: Resource Implications*) of each option.

### **1. Status Quo**

Maintaining status quo is not an option.

### **2. Enhance efforts to increase home dialysis rates**

- May not be possible due to the current rate of uptake.
- Establishing a satellite unit would negatively impact home dialysis.
- Many Hants renal patients have already tried or are not interested in peritoneal dialysis.
- Providing additional homecare assistance for those interested in home hemodialysis may encourage more individuals to select that treatment option.
- This would lead to less infrastructure requirements and operational requirements as well as improved outcomes for some patients.
- Resource implications per patient for home dialysis are significantly lower than facility based hemodialysis.
- The Committee proposed a pilot project in Hants to provide support for home hemodialysis for those patients having difficulty with travel. Lessons learned from this pilot could be used to support patients in other areas of the province.

### **3. Fast track Kentville satellite dialysis unit planning and construction**

- The Kentville satellite dialysis unit is scheduled to open in 2016.
- Attempts to fast track the planning and construction will most likely not make a significant difference in timing of the opening.

- Any shortening of the timeline would decrease the travel burden for patients that travel to Halifax and alleviate capacity pressures in Capital Health.
- No additional cost was attributed to this option.

#### **4. Establish a self-care dialysis unit in Hants Community Hospital, Windsor**

- A self-care hemodialysis unit in Windsor would positively impact travel and self confidence for patients from the Windsor area and would provide support for local dialysis services.
- Due to the low patient volumes in Hants, as well as the low interest in self-care (as indicated in the consultations), eventually capacity pressures will most likely force conversion to full satellite dialysis services.
- Infrastructure and operational costs are the same as establishing a satellite dialysis unit, so there are no savings, unless patients start on self-care and then recognize that they can do it at home and change to home dialysis.

#### **5. Establish a satellite dialysis unit in Hants Community Hospital, Windsor**

- A satellite dialysis unit in Windsor would benefit a small number of individuals for whom services would be closer to home, thus reducing the stress and financial burden.
- The local community and Foundation would be pleased that their request was approved.
- The establishment of a satellite unit in Windsor would decrease the number of individuals that would receive care in Kentville and the Kentville facility would not fully utilize the capacity for which it is being built.
- The satellite dialysis unit would be new construction and would far exceed the space identified by patients/families and the funds raised (estimate: \$4,533,103 for construction, capital and first year operations), in order to meet dialysis facility standards.
- Construction and related costs of a satellite unit in Windsor may impact the approval of the remaining components of the Provincial Dialysis Services Plan.
- Changing the drive time standard to thirty minutes will have provincial implications. Other jurisdictions will request satellite dialysis units and the province will have difficulty supporting and sustaining the number of incremental units required to meet thirty minute drive times throughout the province.

#### **6. Establish a satellite dialysis unit in Lower Sackville**

- According to the analysis, a satellite dialysis unit in Lower Sackville may be a better location, if additional satellite dialysis sites were to be considered.
- Due to the close proximity to the renal program in Halifax, a satellite in Lower Sackville would function as an extension of the Halifax program, the same as the Dartmouth dialysis unit, and would not be considered a rural satellite. Criteria, hours of operation and central support differ in urban locations, due to proximity to the central program.
- The drive time analysis shows that this location would benefit a larger number of individuals and more likely lead to a sustainable service. It would provide a shorter drive time for Windsor area patients currently traveling to Halifax, would benefit the Bedford/Sackville area, and would reduce travel/traffic in the Halifax downtown core. Patients travelling into Halifax from towards the South Shore and Colchester may also prefer this location for the same reasons. Average travel times for all Hants County patients to Windsor or Lower Sackville are comparable.
- Current physician resources in Capital Health would make it difficult to support a satellite in Lower Sackville, however; this could be revisited in the future, if the provincial plan changed. Costs, implications on home dialysis and impact on the provincial plan would be the same as establishing a satellite dialysis unit in Windsor.

## **7. Provide assistance with transportation**

- The most difficult issue for many patients on hemodialysis is the travel burden. The Committee recognizes that travel for specialized medical services is required for many health conditions; however, patient/families and the Committee believes that dialysis patients are unique because the travel is three times per week and for many it is for the rest of their lives. Stories of financial ruin due to travel expenses are common among dialysis patients.
- This will not eliminate the mental or physical impact of the travel, but it will address the financial concerns, while demonstrating that government understands the burden.
- Transportation assistance might help mitigate the impact of not recommending a satellite dialysis unit in Hants.
- Working with municipalities and other partners to provide accessible and affordable transportation would address other concerns brought forward by patients and families. The Kidney Foundation might be positioned to facilitate this work.
- There will be cost implications and the program would have to extend across the province; however, the cost will be less than the cost of additional dialysis infrastructure.

Newfoundland provides transportation assistance to those required to travel for medical services when that travel is over 2500 kilometers annually. Based on the Newfoundland policy, the estimated maximum cost for reimbursement of the current 521 patients that travel more than 2500 kilometers annually for facility based hemodialysis in Nova Scotia is approximately \$ 690,000 annually. A government policy, including qualification criteria to determine eligibility, detailed cost analysis and provincial implications, would need to be completed prior to approval and implementation. In addition there may be opportunity to explore transportation issues for other specialized programs that have financial burdens on individuals travelling to access them.

## RECOMMENDATIONS

The following recommendations were developed by the Provincial Dialysis Review Committee to be considered by the Minister of Health regarding the feasibility and appropriateness of locating a satellite dialysis unit in the Hants Community Hospital.

### **Recommendation #1**

**Explore the feasibility of implementing subsidized transportation for Nova Scotia residents travelling for facility based hemodialysis services in Nova Scotia.**

In addition to benefitting Hants County patients, subsidized transportation would benefit all Nova Scotians attending facility based hemodialysis and would alleviate a long standing issue (financial burden) for many patients travelling to hemodialysis services.

### **Recommendation #2**

**Ensure Kentville satellite dialysis unit planning and construction meets target deadlines.**

The Kentville satellite dialysis unit is the right size to meet current and future demands for the catchment area, including Windsor. The unit will alleviate capacity issues in Capital Health, replace the Berwick unit and provide care closer to home for individuals from the Windsor area. Planning is well underway for this unit and should continue on schedule for the same reasons as identified in the Provincial Service Delivery Plan: Report and Recommendations to the Deputy Minister: the unit will be located where the greatest number of people reside and will serve the vast majority of individuals from the Annapolis Valley, it will meet infrastructure standards, and it will be located in a regional hospital with emergency services which will provide opportunities for collaboration between nephrology and local specialists.

### **Recommendation #3**

**Establishing a satellite dialysis unit in Windsor is not recommended at this time.**

The current demand data and future projections for Hants County do not support a satellite dialysis unit in Windsor. In addition, when compared to the provincial dialysis service delivery system future plans, having a satellite in Windsor would not provide benefit to the system as a whole or align with provincial planning principles and priorities.

### **Recommendation #4**

**Explore the feasibility of implementing a home hemodialysis assistance pilot project in Hants.**

Although Hants County has a high home dialysis rate, additional support for home hemodialysis for those individuals where travel is a significant burden would be beneficial. A pilot project would enable more patients to select that treatment modality and would alleviate the travel burden for more individuals. Information gathered by evaluating the pilot project would help identify barriers and support required to encourage uptake of both home hemodialysis and peritoneal dialysis provincially.

### **Recommendation #5**

**Continue to review the Provincial Dialysis Service Delivery Plan annually using county and community level data.**

The Provincial Dialysis Services Review Committee should continue to review the provincial plan annually to ensure the evidence still supports the plan and to determine whether changes are required. As the Nova Scotia Renal Program prepared the data for this review, it became evident that data at both the county and community level should be used (patient volumes, travel patterns for healthcare services, travel distances etc.) in order to make evidence informed decisions.

The Committee indicated that the top priority, the one that would benefit the most people, is to explore the feasibility of implementing subsidized transportation for Nova Scotia residents travelling for facility-based hemodialysis services in Nova Scotia.



## CONCLUSION

The Provincial Dialysis Review Committee has completed the review of the feasibility and appropriateness of locating a satellite dialysis unit in Windsor. Led by the Nova Scotia Renal Program, the Committee reviewed current information and data and used established service delivery planning assumptions and criteria to guide their assessment and recommendations. Feedback from patients and families, health system leadership and community stakeholders was obtained and incorporated into the review. Implications on other components of the renal service delivery system were considered. Renal and general population, socioeconomic and geographical information was assessed to assess whether there were any unique circumstances in Hants County that should be taken into account. Multiple options were identified, risks and benefits assessed, resource implications reviewed and recommendations proposed.

The Nova Scotia Renal Program and the Provincial Dialysis Review Committee has provided five recommendations for the Minister of Health to consider, including recommendation #3 which does not support a satellite dialysis unit in Windsor at this time. The Committee has identified and recommended exploring the feasibility of subsidized transportation for this segment of the population as a top priority as this recommendation is one that would benefit the most people, those who are travelling three times a week for dialysis services in Nova Scotia.

## Appendix 1 Criteria for Establishment of a Satellite Dialysis Unit in Nova Scotia

The standard of service will include:

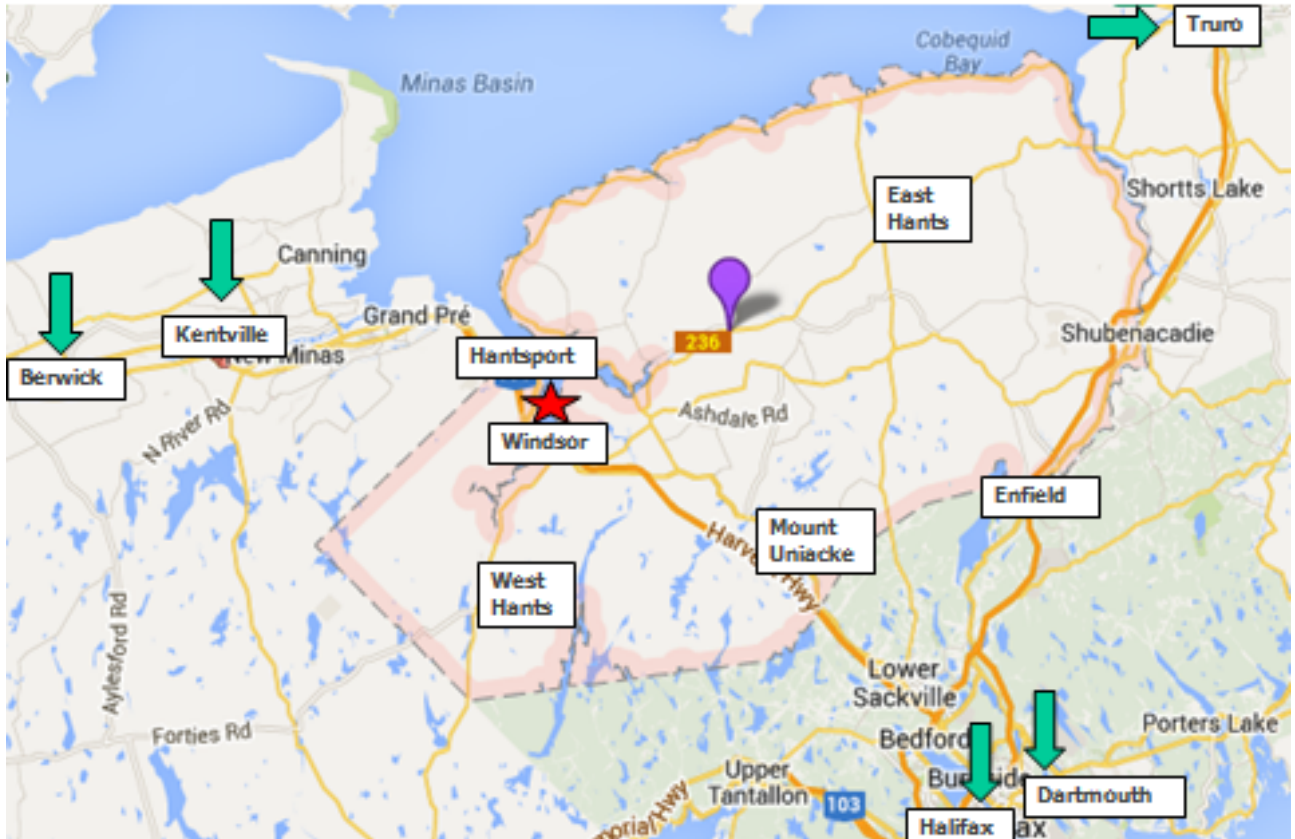
- A lab on site or a well established process readily available (e.g., a cost effective process in place to get the specimen to a lab and/or point of care testing)
  - Pharmacy support to the Satellite Dialysis Unit (does not have to be onsite but a process for pharmacy support is required such as a community pharmacy supporting the Satellite Dialysis Unit); staffed by a pharmacist or a pharmacy technician
  - A comprehensive Emergency response plan applicable to the complexity of the patients
  - Allied Health and Support services (e.g., nutrition, social work, infection control, housekeeping, maintenance) - with the recognition that these services will not be available 24 hours a day in all sites
- A process to ensure that patients can be transferred between the Central Dialysis Program and Satellite Dialysis Units in an expedited fashion
  - When opening a new Satellite Dialysis Unit there needs to be sufficient current patient volumes (eight to 10 patients) and/or a critical mass of pre-renal patients to help ensure sustainability. Ideally there will be the ability to expand without major renovations in multiples of three (i.e., a six station to a nine station Unit) – an expandable footprint where possible.
  - Maximum one hour travel time for patients wherever possible.
  - New Units will not be more expensive to operate than in-centre hemodialysis.
  - Adequate information technology infrastructure to support an Electronic Health Record (EHR), data and information management, and telehealth.
  - Ability to integrate the Satellite Dialysis Unit with other programs and provide services such as chronic disease management, home care, etc. to ensure comprehensive and integrated care across chronic diseases.
  - Sustainable human resource plan.
  - When assessing the sustainability of a SDU, decisions will be based on the current and potential number of renal patients, staff and patient safety, a sustainable human resource plan, fiscal responsibility, as well as an assessment of the above criteria.

**NOVA SCOTIA RENAL PROGRAM  
DIALYSIS SERVICES  
CRITERIA for ESTABLISHING PRIORITIES**

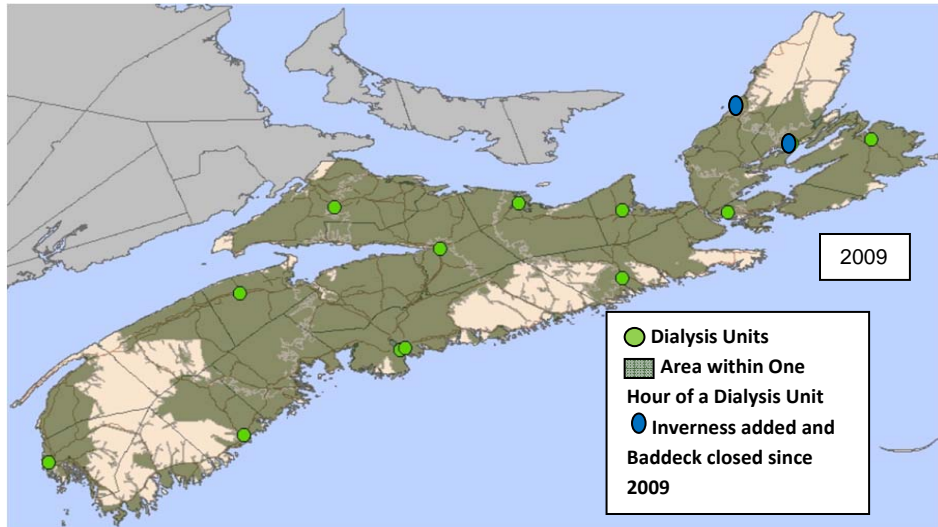
The Dialysis Services Review Committee will use the following criteria to assist in establishing priorities within the provincial service delivery plan and making recommendations for the Deputy Minister:

1. Service Delivery demands/patient volumes
  - a. Hemodialysis volumes (In-centre and satellite)
  - b. Satellite waitlist data
  - c. Peritoneal dialysis volumes
  - d. Home hemodialysis volumes
  - e. Projected pre-renal volumes
2. Ability to deliver patient care
3. The community's ability to access the service (meets drive time goal)
4. Sustainability
5. Fairness/equality across the province
6. Balance of benefits and burdens
7. Potential for the largest gains/return on investment
8. Cost savings/cost avoidance
9. Transparency in decision making

# HANTS COUNTY

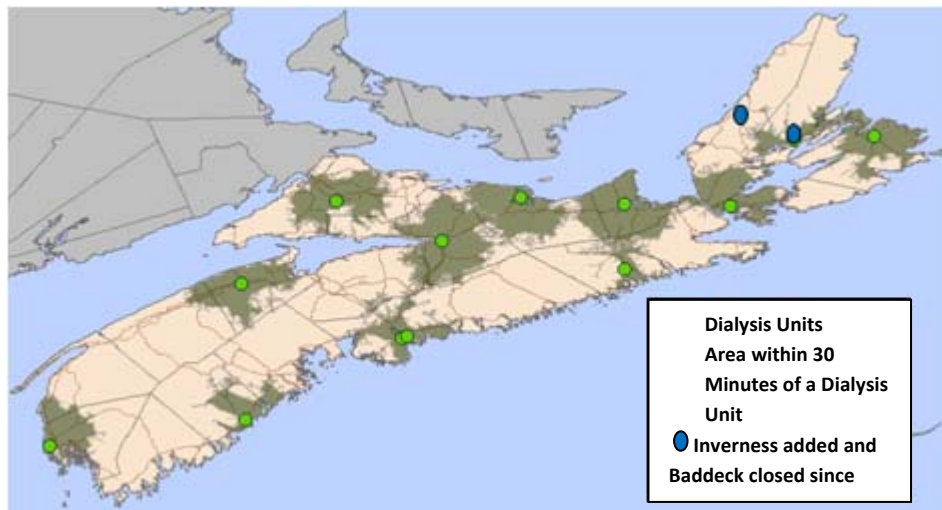


### Nova Scotia Hemodialysis/Satellite Units 60 Minute Drive Time

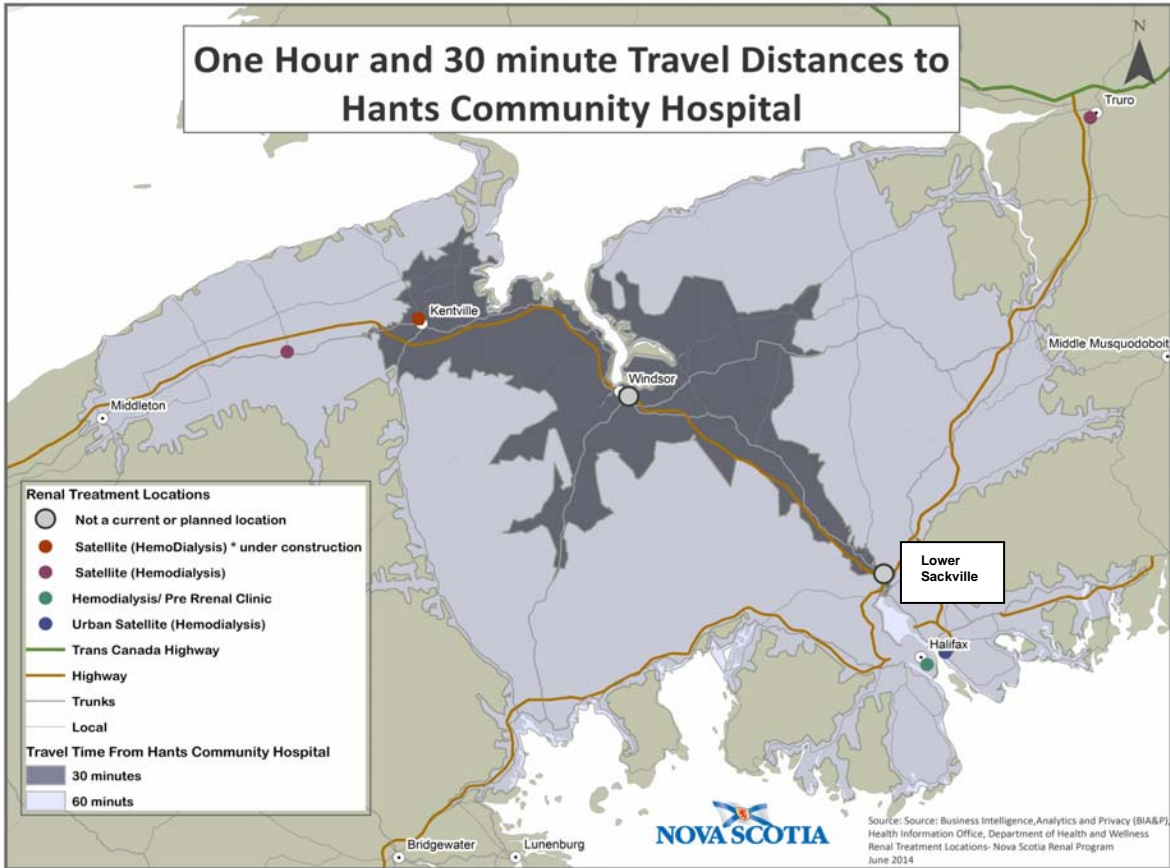


NOTE: In order to meet a 30 minute drive time goal, as requested by patients and families, at least 8 additional hemodialysis facilities would be required at a minimum construction cost of \$4M each.

### Nova Scotia Hemodialysis/Satellite Units 30 Minute Drive Time



NOTE: In order to meet a 30 minute drive time goal, as requested by patients and families, at least 8 additional hemodialysis facilities would be required at a minimum construction cost of \$4M each.



**Resource Implications**  
**(Estimates based on non validated assumptions)**

Option	Construction	Operating	Staffing	Project Operating	Capital	Total
Status quo						\$0
Enhance home dialysis						\$0
Fast track Kentville						\$0
Self care dialysis unit in Hants (6 station)	\$2,417,400	\$583,868	\$373,843	\$557,992	\$620,000	<b>\$4,553,103</b>
Satellite dialysis unit in Hants (6 station)	\$2,417,400	\$583,868	\$373,843	\$557,992	\$620,000	<b>\$4,553,103</b>
Satellite dialysis unit in Cobequid (12 station)	\$4,200,000	\$835,002	\$1,187,257	\$749,728	\$585,000	<b>\$7,556,987</b>
Transportation Assistance (est. 15 patients)		\$30,000				<b>\$30,000</b>