Care of Diabetic Foot – Much Needed Change!

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Aim

To gain support for establishing a multi-disciplinary diabetic foot clinic (MDDFC) at Abbotsford Regional Hospital from more than 80% of identified stakeholders by June 2018.

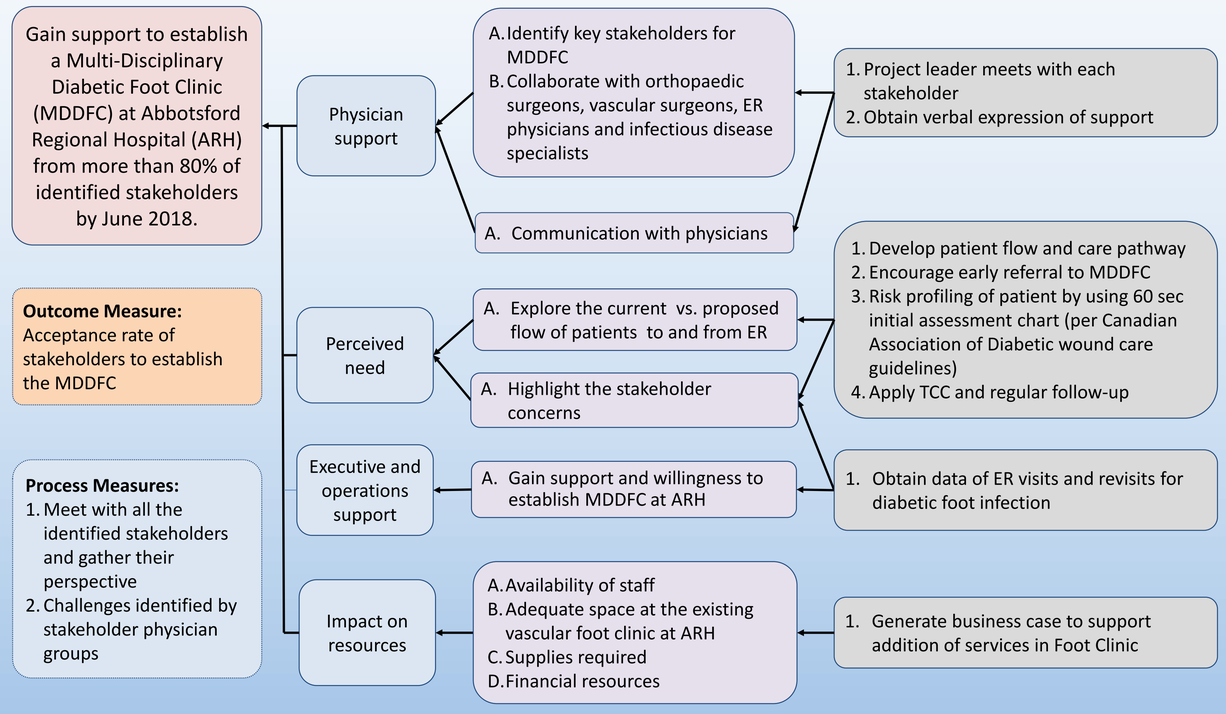
Background

- Early screening and appropriate foot care can prevent up to 85% of diabetes-related lower limb amputation[1,2,3]
- Diabetic foot ulcer is the leading cause of lower extremity amputation (LEA)[3]. Single diabetic foot ulcer (DFU) requiring amputation costs approximately $70,000 to the system[4].
- The total annual cost of chronic DFU is $418 million in BC and the prevalence is expected to increase by 44% by 2027[5]
- There is evidence that well-organized multidisciplinary teams not only reduce amputation rates but they are also more cost effective[4,6]. There are some chronic wound clinics in BC, but to the author's knowledge there are no MDDFC's in BC at present.

Why the Need for Change?

- Lack of a proper care pathway for continuity of care for DFU
- Overloading of emergency department (ED) and surgeons
- Increased admission and readmission rate in hospitals
- Low threshold for amputations over multiple debridement
- Need early and timely assessment and application of total contact casting (TCC), which is lacking in present care
- Studies from around the world demonstrated the benefits of MDDFC with[2,3,4,6]:
  a) overall better and cost effective care
  b) reduced hospital stays, readmission and decrease rate of LEA

Project Design & Strategy



Project Measurements

- ED revisit rate for DFU patients <30d and >30d
- Readmission rates for DFU patients <30d
- Number of LEA's

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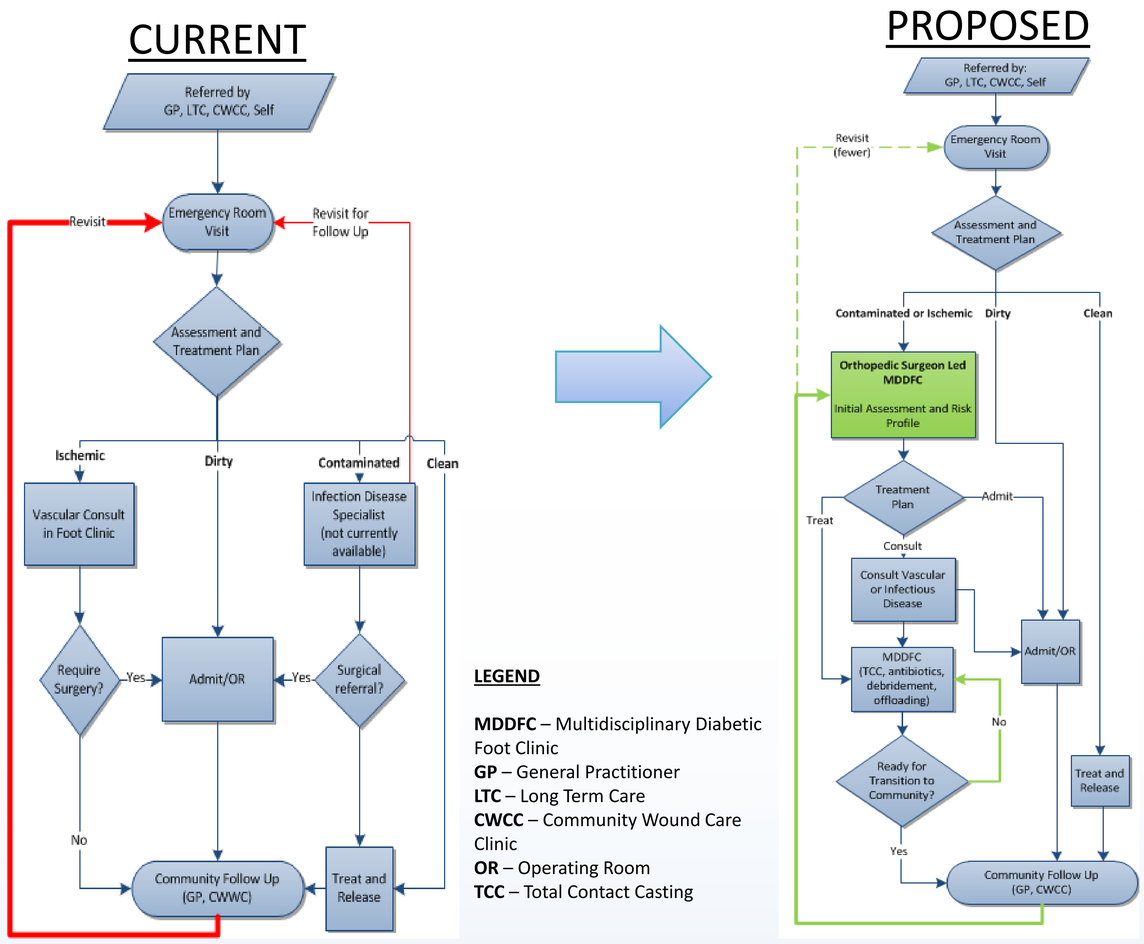
Process

Author interviewed 4 orthopaedic surgeons, 3 vascular surgeons, 3 emergency physicians, 1 infectious disease specialist, 3 wound clinic nurses, 3 ARH directors and 1 health authority director. Stakeholders were interviewed between 1-3 times. Questions included:

1. Opinion about current care of DFUs?
2. Challenges in the current system?
3. Opinion and awareness about MDDFCs?
4. Advantages and challenges anticipated of a MDDFC?
5. Support for a MDDFC at ARH?

Patient Care Pathway for Diabetic Foot Ulcer



Results

- 17/18 (94.4%) of the stakeholders support the need for a MDDFC at ARH
- Most clinicians agreed that there is a need for early and timely assessment and application of TCC in the treatment of DFU
- There is a willingness to design a proper care pathway for DFU patients
- Barriers identified include space, staff shortage and financial impacts
- Data indicates that the mere act of discussions targeted at gaining support for a MDDFC may have had a positive impact on revisits <30d to the ED. Further analysis is required to determine the source of the impact.

Conclusion

A MDDFC grants early assessment and treatment by a specialist and may decrease admission and LEA rate. The specialist will also identify the diabetic foot deformities at risk of developing ulcers. Using different modes of offloading the area at risk of developing ulcers may prevent DFUs in the first place which should decrease unnecessary visits to the ED. This will provide continuity and collaborative care of the DFU patients, which will improve quality of life and patient satisfaction.

References

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