

December 2014

## Fact Sheet

### A Look at Diabetic Foot Outcomes In Alberta

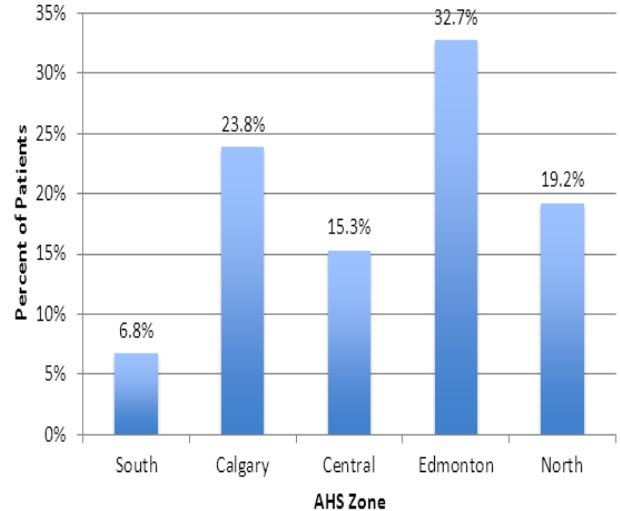
Foot ulceration is a major health problem which affects 15% to 25% of patients with diabetes at some point in their life. In the absence of proper and timely management, diabetic foot ulcer may result in lower limb amputation – at great impact to the patient and the healthcare system.

#### DON SCN Fast Facts

- In Fiscal Year 2013/14, 281 patients had a diabetic foot ulcer that resulted in a lower-limb amputation in Alberta.
- In Fiscal Year 2013/14, a total of 391 lower-limb amputations were performed in Alberta on those patients who presented with a diabetic foot ulcer.
- Over 75% of patients who had a diabetic foot ulcer resulting in a lower-limb amputation were male.
- The Edmonton Zone has the highest percentage of patients with diabetic foot ulcers that result in lower-limb amputation.
- More than 60% of patients who had a diabetic foot ulcer resulting in a lower-limb amputation were under the age of 66 years.

#### How Many Patients With Diabetic Foot Ulcers Have Lower-Limb Amputations in Alberta?

- 281 patients had a diabetic foot ulcer that resulted in a lower-limb amputation in the Fiscal Year 2013/14 in Alberta.
- 391 lower-limb amputation procedures were performed in Alberta on those patients who presented with a diabetic foot ulcer in Fiscal year 2013/14.
- Lower-limb amputations among patients with diabetic foot ulcers vary across Alberta Health Services Zones (**Figure 1**).
- Of the patients with a diabetic foot ulcer resulting in a lower-limb amputation, the highest numbers lived in the Edmonton Zone (33%).
- The majority of lower-limb amputation procedures were actually performed in the Edmonton Zone (41%) and the Calgary Zone (31%).



**Figure 1. Distribution of Adult Diabetic Patients Who Underwent a Lower-Limb Amputation — By Zone of Residence 2013/14 Fiscal Year.**

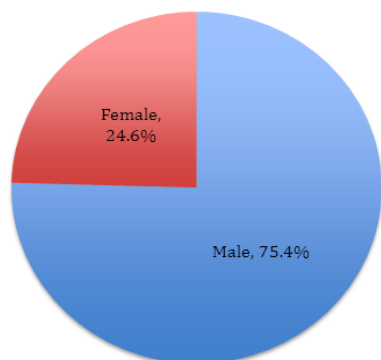
#### Data Source

Data Analysis was conducted by Clinical Analytics – Data Integration, Measurement and Reporting, Alberta Health Services. A cohort of patients presenting with diabetic foot ulcers and who also underwent lower-limb amputation was identified using DAD data from Alberta. The definition used to identify these patients was consistent with the definition used in the Canadian Institute for Health Information's (CIHI) August 2013 report on chronic wounds [https://secure.cihi.ca/free\\_products/AiB\\_Compromised\\_Wounds\\_EN.pdf](https://secure.cihi.ca/free_products/AiB_Compromised_Wounds_EN.pdf).

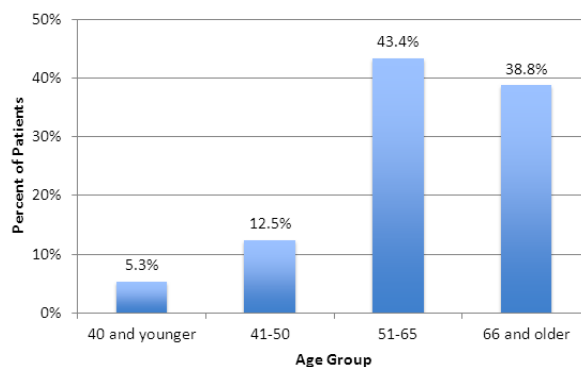
The Inclusion Criteria was 1) Age limited to patients 18 years and older; 2) Fiscal Year was limited to 2013/14 (April 1, 2013 to March 31, 2014); 3) Only patients with a valid PHN were included. The following Data Sources were used: 1. Discharge Abstract Database (DAD); 2. Ambulatory Care Classification System (ACCS); 3. National Ambulatory Care Reporting System (NACRS); 4. Physician Claims Database; and 5. Alberta Continuing Care Database (Date Range of Extracted Data: April 1st, 2008 to March 31st, 2014).

## How Does Lower-Limb Amputation Vary by Age and Sex in Alberta?

- Lower-limb amputations are more common in males than females (**Figure 2**).
- The majority of patients with a diabetic foot ulcer who ultimately undergo a lower-limb amputation are male (75%).
- The majority (61%) of lower-limb amputations among patients with diabetic foot ulcers occur in patients under the age of 66 (**Figure 3**).
- Patients aged 51 to 65 accounted for the largest proportion (43%) of patients with diabetic foot ulcers who also underwent a lower-limb amputation.



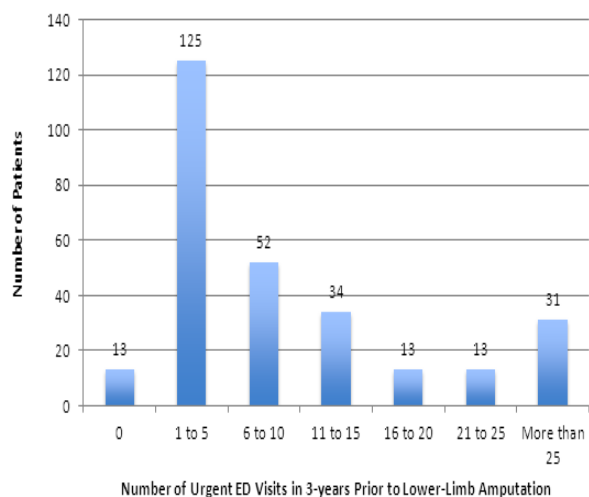
**Figure 2. Distribution of Adult Patients Who Underwent a Lower-Limb Amputation — By Sex 2013/14 Fiscal Year.**



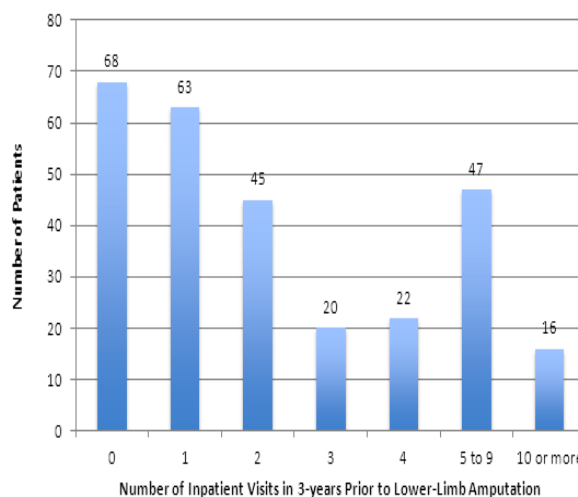
**Figure 3. Distribution of Adult Patients Who Underwent a Lower-Limb Amputation — By Age at First Amputation in 2013/14 Fiscal Year.**

## How Often Did Diabetic Patients With Lower-Limb Amputations Access Emergency Department and Inpatient Health Care Services?

- In the three years preceding their amputation, half of the diabetic patients who had lower-limb amputations had 6 or more visits to an Emergency Department (**Figure 4**).
- In the three years preceding their amputation, over 75% of diabetic patients who had lower-limb amputations made visits to an inpatient facility in Alberta (**Figure 5**).
- Diabetic patients with lower-limb amputations had a considerable amount of contact with the health system in the three years prior to their amputation(s).



**Figure 4. Distribution of Urgent Emergency Department Visits in the 3 Years Preceding Amputation for Adult Patients Who Underwent a Lower-Limb Amputation in Fiscal Year 2013/14.**



**Figure 5. Distribution of Inpatient Visits in the 3 Years Preceding Amputation for Adult Patients Who Underwent a Lower-Limb Amputation in Fiscal Year 2013/14.**

