First Nations and Métis Health Service: Royal University Hospital Chart Audit Executive Summary

Introduction & Purpose

Aboriginal people in Canada have greater health disparities compared to the rest of the population (Adelson, 2005).[1] These health disparities often translate into an increased burden on the health care system in the form of increased emergency department (ED) visits, increased hospital admissions, and an increased length of stay in the hospital.

Upon request from the Director of the First Nations and Métis Health Service (FNMHS), a Masters of Public Health student under the supervision of the Office of the Associate Vice-President Research – Health and the FNMHS carried out a retrospective chart audit. The audit sought to examine the characteristics of the First Nations and Métis patients seeking care at Royal University Hospital (RUH) in Saskatoon, Saskatchewan. Key variables of interest included: length of stay, delay in discharge, and visits to the ED. Information obtained from this audit is to be used by the Saskatoon Health Region (SHR) for quality improvement purposes.

Results

For a summary of the demographic and clinical data, please see Table 1.

- 96% of First Nations patients were admitted through the Emergency Department
- 55% of the patients had 3 or more comorbidities
- 7% of the patients had a delay in discharge

Table 1. Demographic and Clinical Data

Demographic and Clinical Data	Percent
Residence	
Urban	44%
Reserve	27%
Rural	17%
Homeless	6%
Medical facility	4%
Correctional facility	2%
Primary Care Provider	
Yes	69%
No	31%
# of Comorbidities	
0	17%
1 - 2	28%
3 - 5	45%
6 +	10%
Admittance to Hospital	
Admitted through ED	96%
Other	4%
# of Admissions to RUH in Previous Year	
None	64%
One	23%
Two	8%
Three or more	5%
# of ED Visits to RUH in Previous Year	
None	54%
One	23%
Two	9%
Three or more	14%
Delay in Discharge	
Yes	7%
No	93%

Methodology

A retrospective chart audit was completed at RUH in Saskatoon, SK.

Inclusion criteria included any First Nations or Métis patient admitted to general medicine in RUH. Upon investigation into how patients would be included, only First Nations could be identified through their Department of Indian Affairs and Northern Development (DIAND) numbers.

Charts were pulled from First Nations patients who were admitted from January 2013 to July 2014. Prior to data collection, ethics approval from the University of Saskatchewan and Operational Approval from the SHR was obtained.

Patients

A total of 100 charts were included in the report.

- All patients were First Nations (No Métis patients were included in the sample, as they could not be tracked due to the current standards of recording data in health record charts)
- Mean age: 44.3 (SD 17.0) years
- Gender: 46 males; 54 females
- Primary Spoken Language: 89 English; 6 English/Cree; 1 English/Dené; 1 Dené

Contact

To obtain more information about the Office of the Associate Vice-President Research – Health (UofS)/ Vice President Research and Innovation (SHR), please click here.

[1]Adelson, N. (2005). The embodiment of inequity: Health disparities in Aboriginal Canada. *Canadian Journal of Public Health*, 96(2), S45-61.

Results Continued

For the First Nations patients who had a delay in discharge:

- 3 patients were delayed due to bed space availability at the receiving facility (e.g. home hospital);
- 2 patients were delayed due to transportation issues;
- 1 patient was delayed for community support issues; and
- 1 patient was delayed for further medical issues.

The most common reasons for admission included: infection (23 patients); intestinal or gallbladder diagnoses (17 patients); respiratory diagnoses (11 patients); and overdose (11 patients).

The average length of stay for all patients was 9.7 (SD 14.5) days, with a range of 0 to 90 days.

Patients with a delay in discharge (26.0 SD 24.0 days) stayed in hospital significantly longer than patients without a delay in discharge (8.5 SD 12.9 days) (p<0.05) (Figure 1).

When length of stay was compared across residence (rural, urban, and reserve), there was no significant differences found (p=0.761).

Postal code analysis of residence showed:

- 46 patients resided in the Saskatoon Census Metropolitan Area;
- 32 resided in rural south Saskatchewan;
- 15 resided in rural north Saskatchewan; and
- 7 resided in small cities.
  (See Figure 3 in full report for residence map)

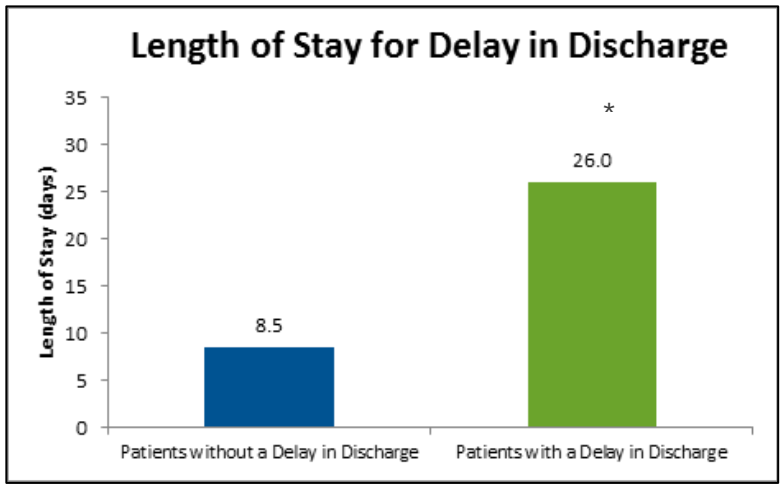

Figure 1. Length of Stay for Delay in Discharge. * Length of stay for patients who had a delay in discharge (7 patients) was significantly longer than those who did not have a delay in discharge (93 patients) (ρ<0.05).

Limitations

The main limitation of this quality improvement work was the inability to identify Métis patients.

- Currently, patients admitted to hospital in the Saskatoon Health Region have no option to self-identify.
- First Nations patients could be identified in the chart through their DIAND number; however, there is no method for determining if a patient is Métis from their chart.

The data presented in this chart audit contains information from a single hospital within the Saskatoon Health Region and included data from First Nations patients only. As such, the generalizability of this data is limited.

Conclusion

One of the main findings of the chart audit was that First Nations patients who experienced a delay in discharge stayed in hospital significantly longer than patients without a delay in discharge. Although various findings were not statistically significant due to small sub-samples, they may be clinically relevant. Thus, further investigation of this preliminary work is needed, with larger sample sizes and qualitative approaches to provide important contextual information regarding individuals' experiences. The present chart audit reaffirmed the need for patients to have the option to self-identify upon admission to hospital. It is imperative that systems are put in place to gain a better understanding of the First Nations and Métis populations being served. Research is needed, in collaboration with First Nations and Métis patients and families to further understand this population's hospital stay in order to improve services and health outcomes.