The relationship between frequent emergency department visits and mental health: a retrospective study for the burden of mental illness among emergency department super users

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Purpose

- Identify the relationship between the frequency of visits to the Emergency Departments per year and the Mental and Behavioral Health Diagnosis (MBHD)
Methods

- Retrospective study

- De-identified Electronic Administrative Data
  - Sunrise Emergency Care System
  - NACRS (National Ambulatory Care Reporting System) – ICD 10 Code
  - August 2013 – July 2014
  - All 4 adult ED sites in Calgary (PLC, FMC, RGH, and SHC)

- Descriptive Statistics and Means
  - IBM SPSS Statistics 19
Categories based on the annual number of visits:

(#visits/12 month period)

- Infrequent users 1 visit
- Frequent Users (FRU) 2-4 visits
- Highly Frequent Users (HFRU) 5-9 visits
- Super Users (SU) ≥ 10 visits
August 2013 – July 2014

Foothills Medical Centre: 80234 visits
Rocky General Hospital: 80151 visits
Peter Lougheed Centre: 80771 visits
South Health Campus: 63581 visits

Total: 304737 visits
(223632 patients)
Results

- Infrequent Users (1 visit) 47.4%
- Frequent Users (2-4 visits) 40.8%
- Highly Frequent Users (5-9 visits) 8.5%
- Super Users (≥ 10 visits) 3.3%

**Top ICD-10 Dx**
- Abdominal Pain (21%)
- Abdominal Pain (22%)
- Mental and Behavioral Health Diagnosis (28%)

304737 visits

Mental and Behavioral Health Diagnosis included:
- Psychiatric Illnesses
- Substance Abuse
Correlation

Correlation between total number of visits and the visits with Mental and Behavioural Health Diagnosis

Number of Visits with MBHD vs Total Number of Visits During Study Period

R Linear = 0.496
p<0.001
Conclusion

- Just over half of the ED users visit ED more than once per year
- Majority of them visit ED 2-4 times per year
- MBHD is more commonly seen in patients who visit ED more frequently
- Abdominal pain is the most common reason for visiting ED overall, and in the FRU and HFRU
  - High frequency users might benefit from teaching and better follow up of GI complaints.
- MBHD is the most common diagnosis in the SU
  - Interventions to impact super-users require a focus on mental health, addiction, and social issues
Questions