

UNDERSTANDING THE IMPACT OF RURAL ALBERTA ED CLOSURES

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Faculty/Presenter Disclosure

- Presenter: Aaron Johnston
- Relationships with financial sponsors:
 - Any direct financial relationships, including receipt of honoraria: None
 - Memberships on advisory boards or speakers' bureau: None
 - Patents for drugs or devices: None
 - Other: financial relationships/investments: None

Providing Care in Rural Alberta



- AHS operates **84 rural/suburban hospitals** outside of regional centers
- **>750,000 individuals reside in rural Alberta**, likely closer to **22%** of the province's population
- Per capita, **rural Albertans use EDs at higher rates** than their urban counterparts
- Rural ED closures have been linked to:
 - **Increased mortality/morbidity** for neighboring communities
 - Increased CV deaths in neighboring communities



Background

- Rural ED closures continue to occur
- There is **limited research** evaluating the impacts of these closures
- Closure data is **difficult to access and not consistently reported**

ER closures adding stress throughout Alberta's health care system

Rural communities are increasingly finding themselves without an emergency department

 [Brett McKay, Local Journalism Initiative Reporter](#)
Feb 6, 2024 3:15 PM

NEWS

14 hospitals in Alberta lost ER service last month

Two communities lost their ER for over 200 hours, and four lost theirs for over 100 hours. Also, one community lost their ambulatory care.

By Kim Siever 9 September 2024 2 Comments

NEWS

12 rural Alberta hospitals lost ER service in May 2024

One community lost its ER for over 400 hours, 2 lost theirs for over 200 hours, and 2 others lost theirs for close to or more than 100 hours.

By Kim Siever 13 June 2024 3 Comments

Alberta Emergency departments closed for 38,000 hours in 2023

Emergency departments in Alberta were closed for more than 38,000 hours, or about 4.3 years combined, in 2023.

 [Brett McKay, Local Journalism Initiative Reporter](#)
Jan 22, 2024 5:09 PM

Study Objectives



Quantify rural ED closures and associated patterns of emergency care use

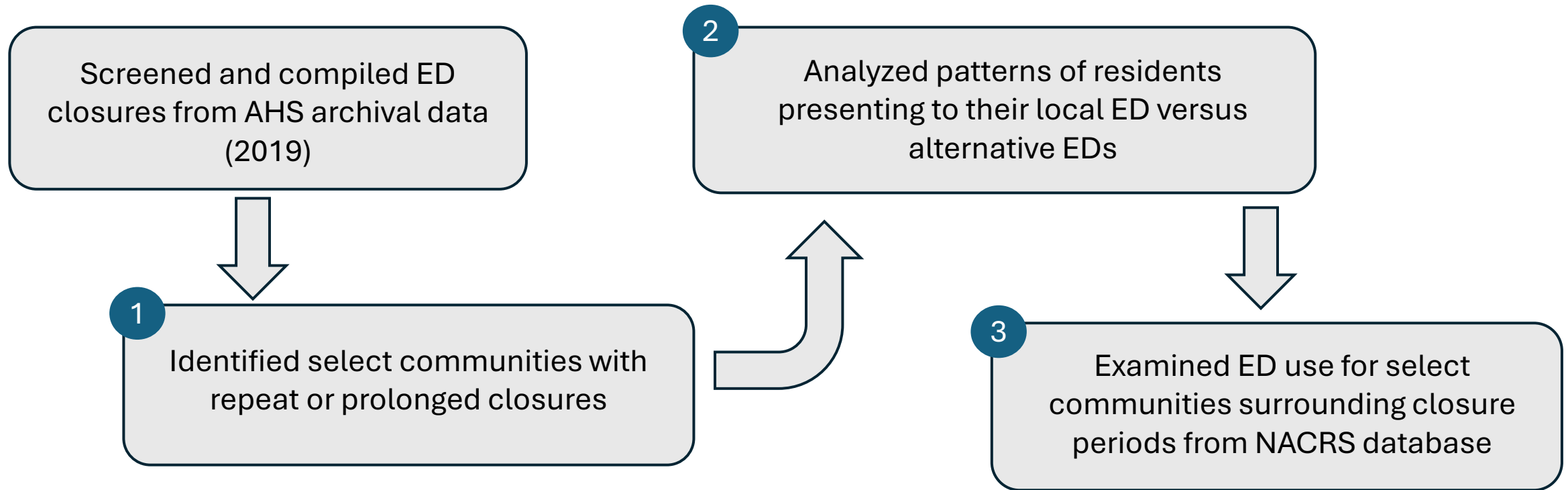


Compare utilization patterns in communities with and without frequent closures



Analyze shifts in patient volume before, during, and after closure periods

Study Design



1 Identified select communities with repeat or prolonged closures

2 Analyzed patterns of residents presenting to their local ED versus alternative EDs

3 Examined ED use for select communities surrounding closure periods from NACRS database

Table XX. Service interruptions of selected rural EDs from AHS publicly reported archival data

Year	Consort ED	Closure Time(hr)	Milk River ED	Closure Time(hr)	Hardisty ED	Closure Time(hr)
2021*	Aug 12, 2021 – Aug 16, 2021 Sep 24, 2021 Nov 8, 2021 – Nov 12, 2021 Dec 29, 2021 – Dec 31, 2021	316 (13.16d)	Oct 6, 2021 – Oct 12, 2021	120 (5d)	Jan 1, 2021 – Dec 31, 2021	8,760 (365d)
2022	Jan 1, 2022 – Jan 7, 2022 Jan 13, 2022 – Jan 20, 2022 Jan 27, 2022 – Jan 28, 2022 Feb 7, 2022 – Feb 11, 2022 Apr 15, 2022 – Apr 25, 2022 May 9, 2022 – Jun 3, 2022 Aug 17, 2022 – Dec 31, 2022	4,248 (177d)	Jan 3, 2022 – Jan 7, 2022 Feb 22, 2022 - Feb 23, 2022 Feb 24, 2022 - Feb 25, 2022 May 17, 2022 - May 18, 2022 Sep 9, 2022† Oct 14, 2022 – Oct 17, 2022 ^a Oct 21, 2022 – Oct 24, 2022 ^a Nov 28, 2022 (1700) – Nov 1, 2022 (0800) Nov 4, 2022 – Nov 7, 2022 ^a Nov 10, 2022 (1700) – Nov 14, 2022 (0800)	597 (24.88d)	Jan 1, 2022 – Dec 31, 2022	8,760 (365d)
2023	Jan 1, 2023 – Dec 31, 2023	8,760 (365d)	Dec. 23, 2022 - Jan. 3, 2023 Jan. 26, 2023 - Jan. 30, 2023 Feb. 3, 2023 - Feb. 17, 2023 Feb. 20, 2023 - Feb. 27, 2023 March 29, 2023 - April 3, 2023 May 12, 2023 - May 19, 2023 May 23, 2023 - May 26, 2023 June 2, 2023 - June 6, 2023 June 12, 2023 - June 23, 2023 July 3, 2023 - Aug. 2, 2023	2,091 (87.13d)	Jan 1, 2023 – Sept 18, 2023 Nov 6, 2023 – Nov 10, 2023 Dec 25, 2023 – Dec 26, 2023	6,310 (262.92d)

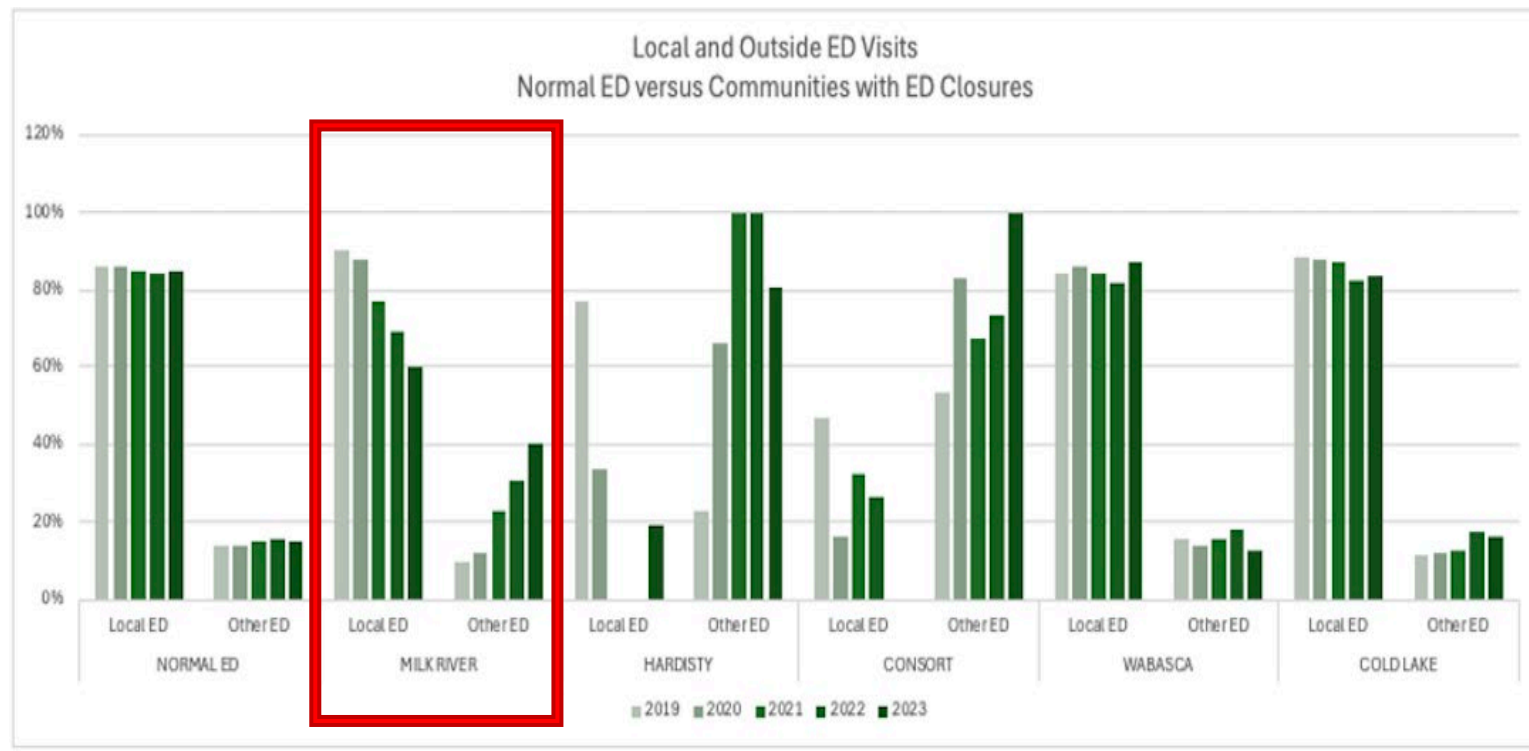
*Publicly available AHS archival data is not available prior to Aug 6, 2021
 † There is no end date associated with this closure on AHS published data
^a Overnight closures from 1700 - 0800

From 2021 to 2023, there were **1,664 days (4.55 years)** of **cumulative ER closure** from Consort, Milk River, and Hardisty, collectively

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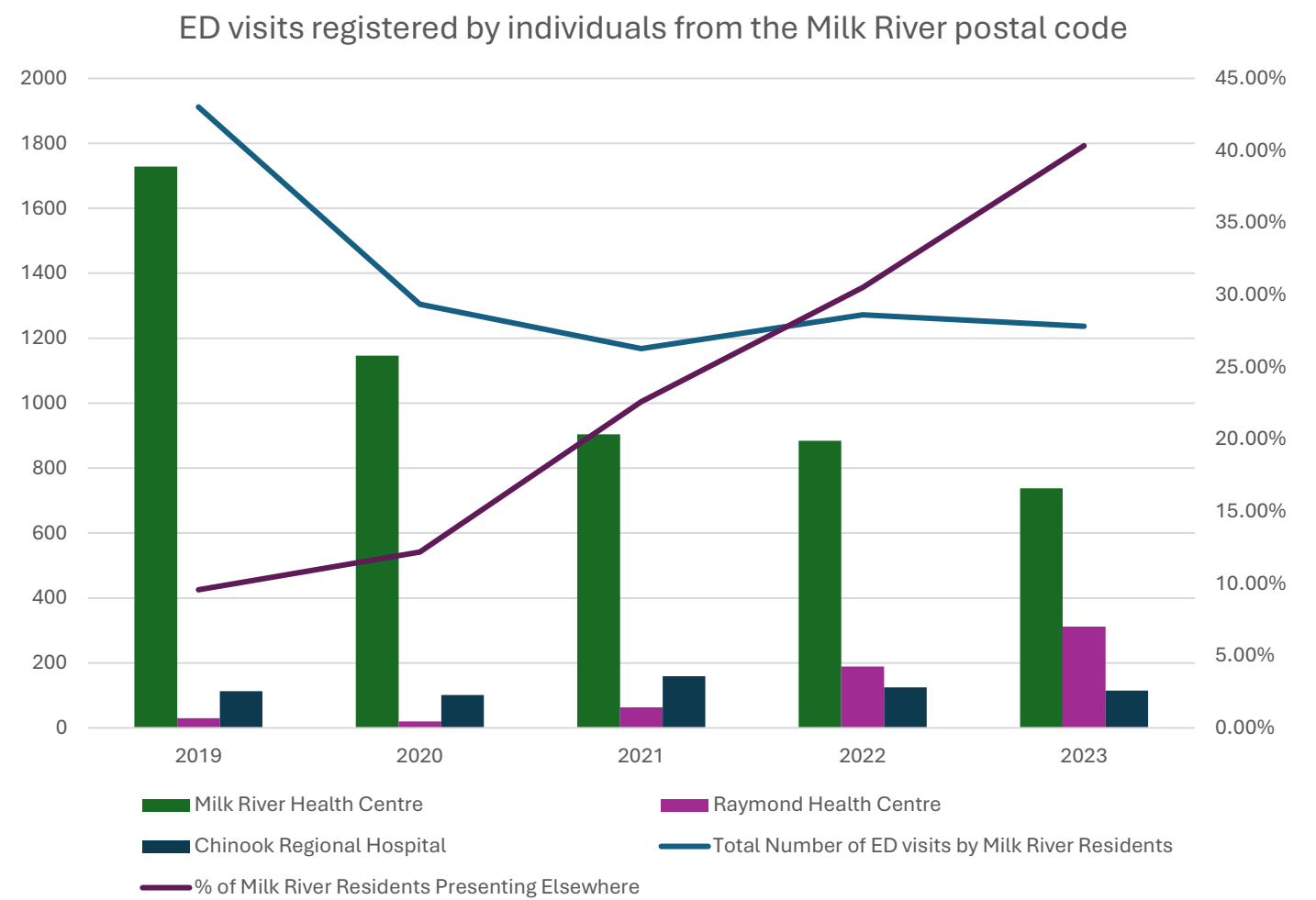
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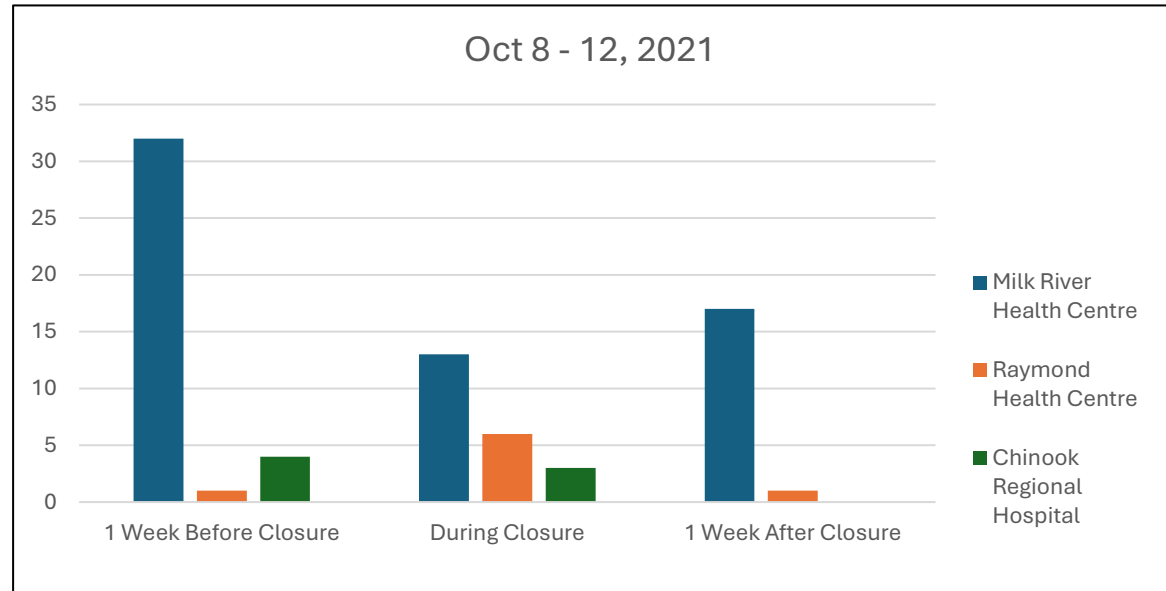
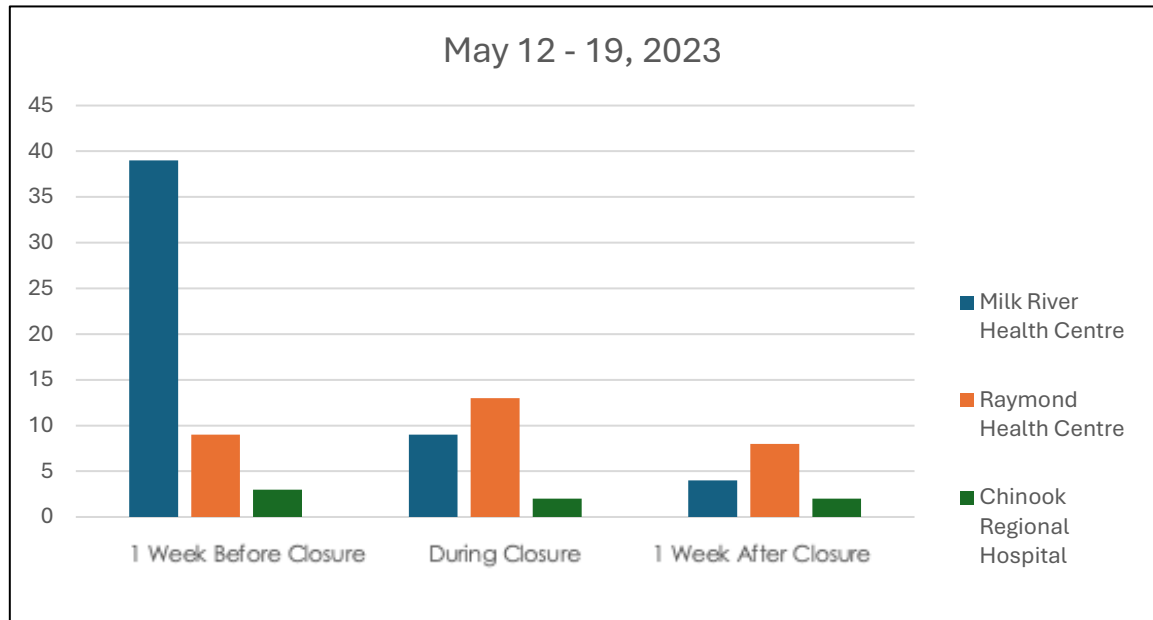
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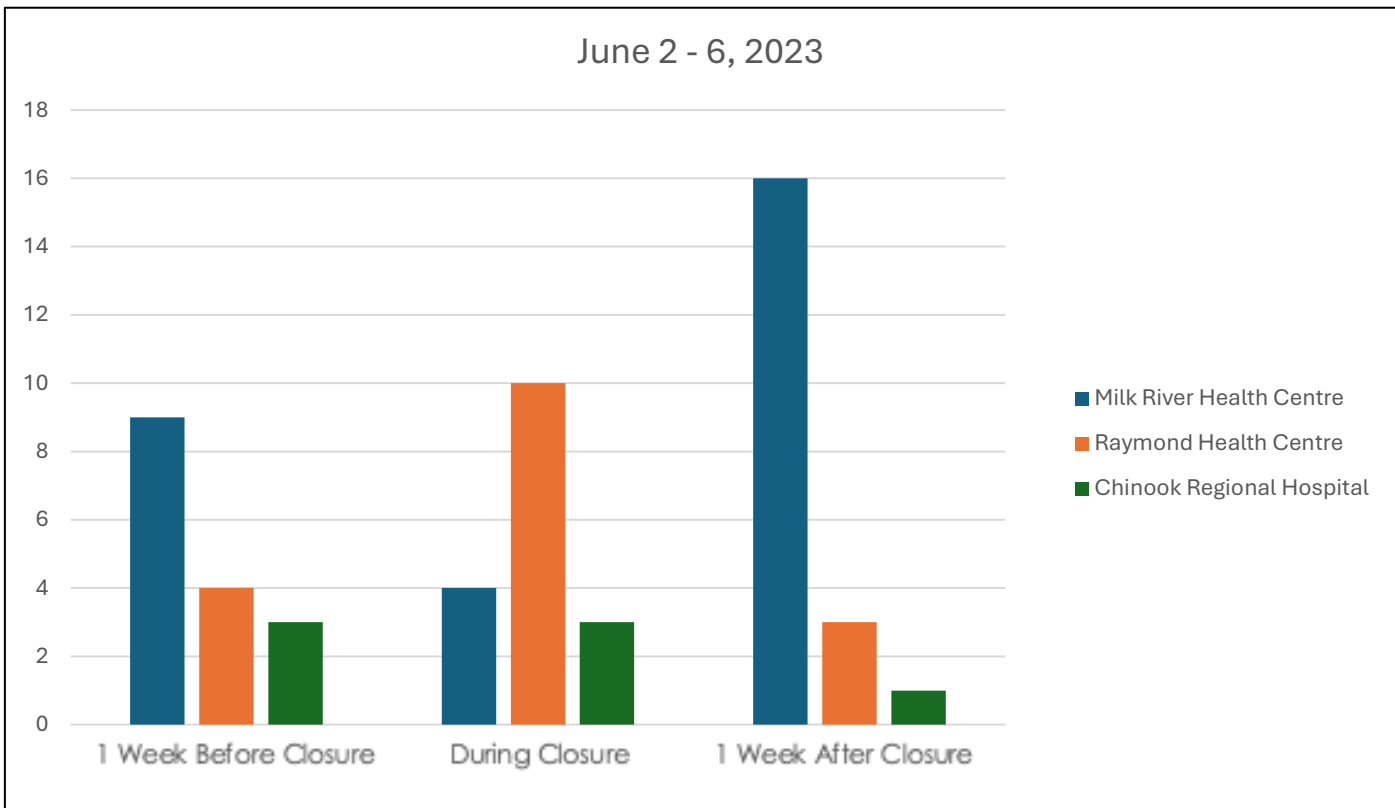
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Conclusions & Next Steps

- Patients displaced by rural ED closures **continue to seek emergency care at other sites**
- **Standardized closure reporting protocols are urgently needed** to accurately track rural ED closures and enable meaningful analysis.
- Some **patients continue to present to their local EDs during reported closure** periods
 - This suggests unreliable reporting, public confusion, inconsistent closure communication, or partial closure scenarios
 - Future work will analyze **key indicators of care during closure periods** to better understand patient use of both "closed" and open EDs.

Thank you!!

Questions??

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