

Acquisition of Vital Signs in Refusal Patients

Data for this study was pulled from the North Country Region between January 1st, 2025, and June 30th, 2025

Background

Vital sign acquisition in patients who refuse transport is critical to providing adequate patient care. A complete assessment of vital signs and GCS is key to providing an informed refusal. Completing an assessment of vital signs and GCS can reveal underlying health concerns that may require further medical attention. Arguably, GCS is the most important vital sign and should be performed on every refusal of transport patient to ensure patients have the mental capacity to refuse further treatment and transport.

Measure Description

Percentage of EMS responses originating from a 911 request for patients not transported by EMS during which a basic set of vital signs is documented

- Basic set of vital signs includes systolic blood pressure, heart rate, respiratory rate, SpO2, and Glasgow Coma Scale

Population

All EMS responses originating in a 911 request for patients not transported by EMS

Charts met the following criteria

- Contains Transport Disposition
 - No Transport
 - Patient Refused Transport
- Contains a response type of service requested:
 - 911 Response (Scene)
 - Emergency Response (Intercept)
 - Emergency Response (Mutual Aid Response Area)
 - Emergency Response (Primary Response Area)
- Contains Incident County Name
 - Jefferson
 - Lewis
 - St. Lawrence

- Contains NYS Region
 - North Country REMSCO
- Excludes Cardiac Arrest During EMS Event
 - Yes, before any EMS arrival
- Excludes Unit Disposition
 - Cancelled Prior to Arrival at Scene
 - Cancelled on Scene
 - No Patient Contact
 - No Patient Found
 - Non-Patient Incident (Not Otherwise Listed)

Metrics

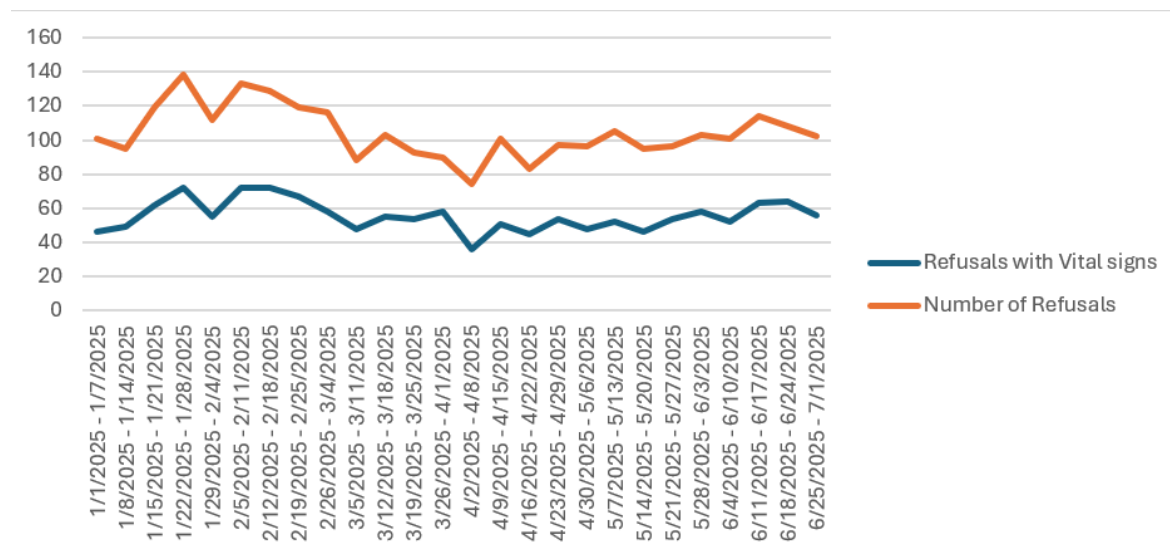
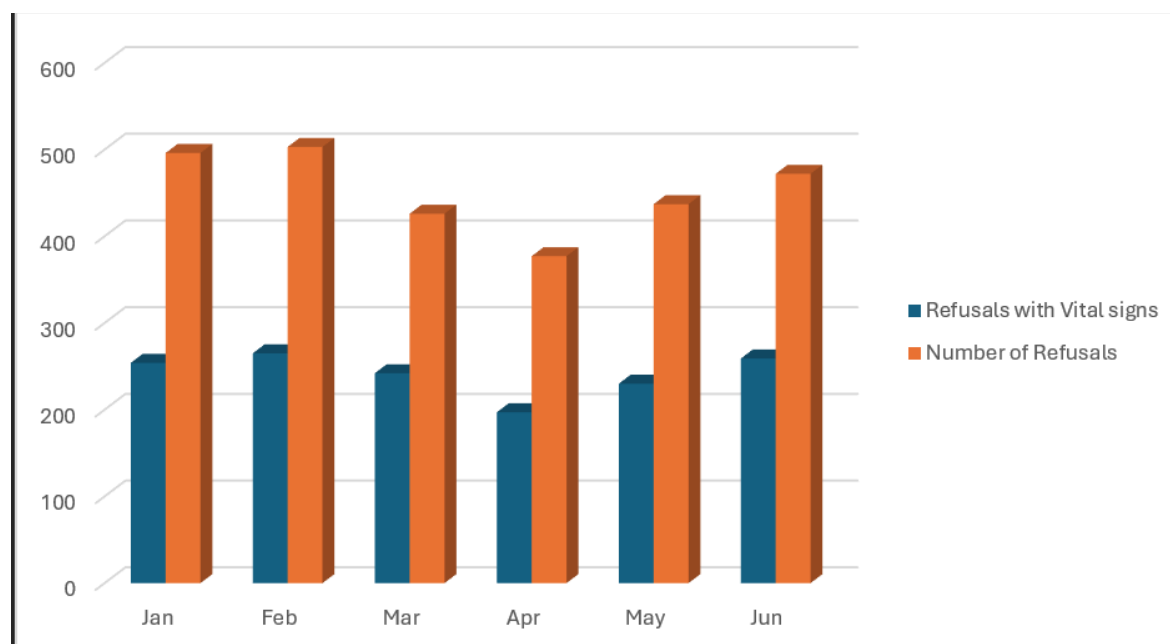
- Scene Incident County Name
- Agency Name
- Incident Date
- Response Incident Number
- Patient Last Systolic Blood Pressure SPB
- Patient Last Heart Rate
- Patient Last Pulse Oximetry
- Patient Last Respiratory Rate
- Patient Last Total Glasgow Coma Scale

Findings

Utilizing the numerator and denominator fields, 2,711 ePCRs were identified as patient refusals in Jefferson, Lewis, and St. Lawrence counties from January 1st, 2025, to June 30th, 2025.

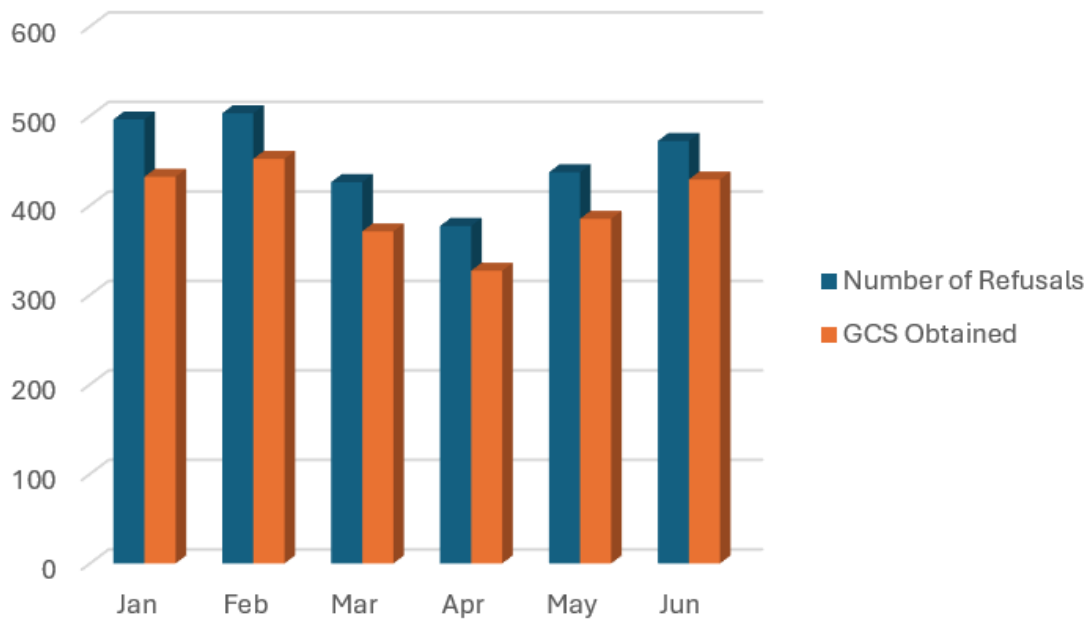
Overall findings

Out of the 2,711 ePCRs identified as patient refusals, only 1,447 were noted to contain documentation of systolic blood pressure, heart rate, respiratory rate, SpO2, and Glasgow Coma Scale. This equates to a 53.69% acquisition rate.



Glasgow Coma Scale Acquisition

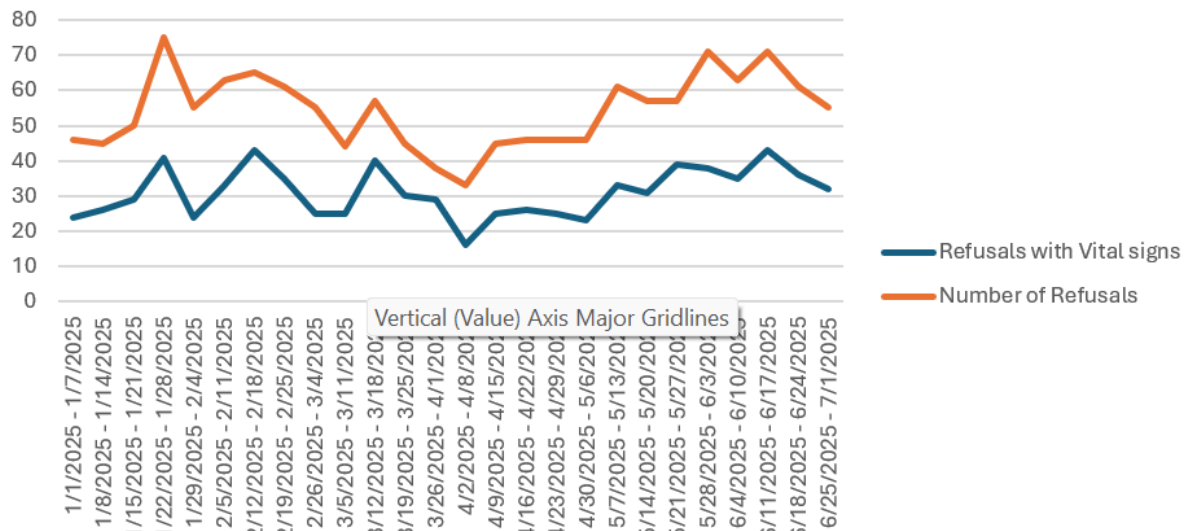
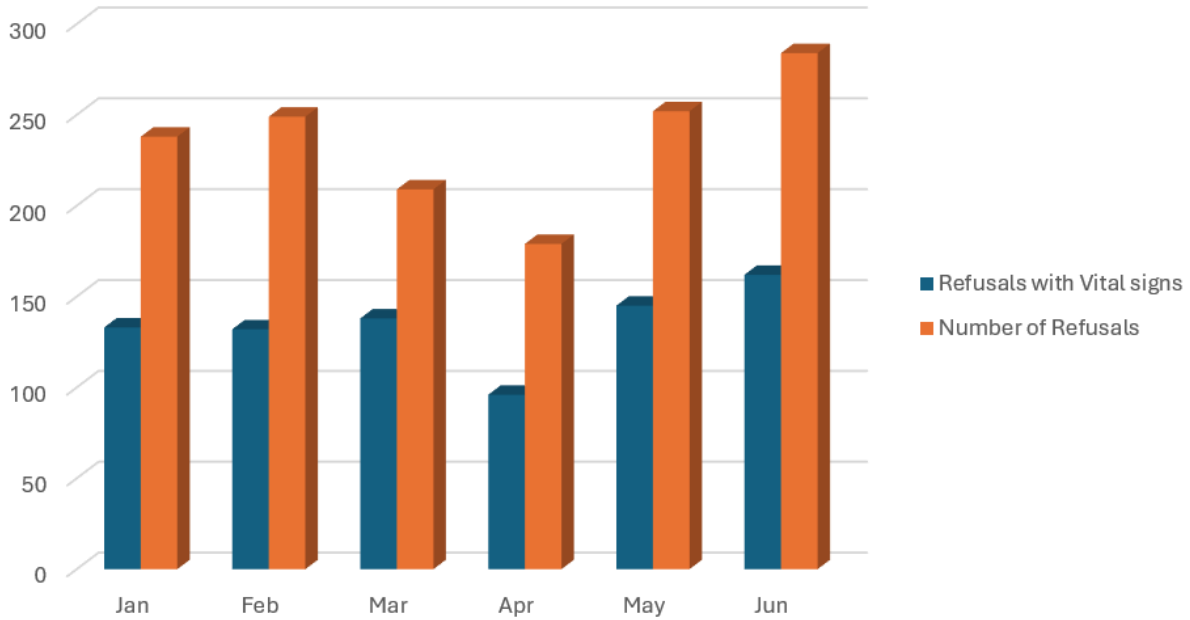
Out of the 2,711 ePCRs identified as patient refusals, 2,396 were noted to contain documentation of Glasgow Coma Scale. This equates to a 91.13% acquisition rate.



Jefferson County

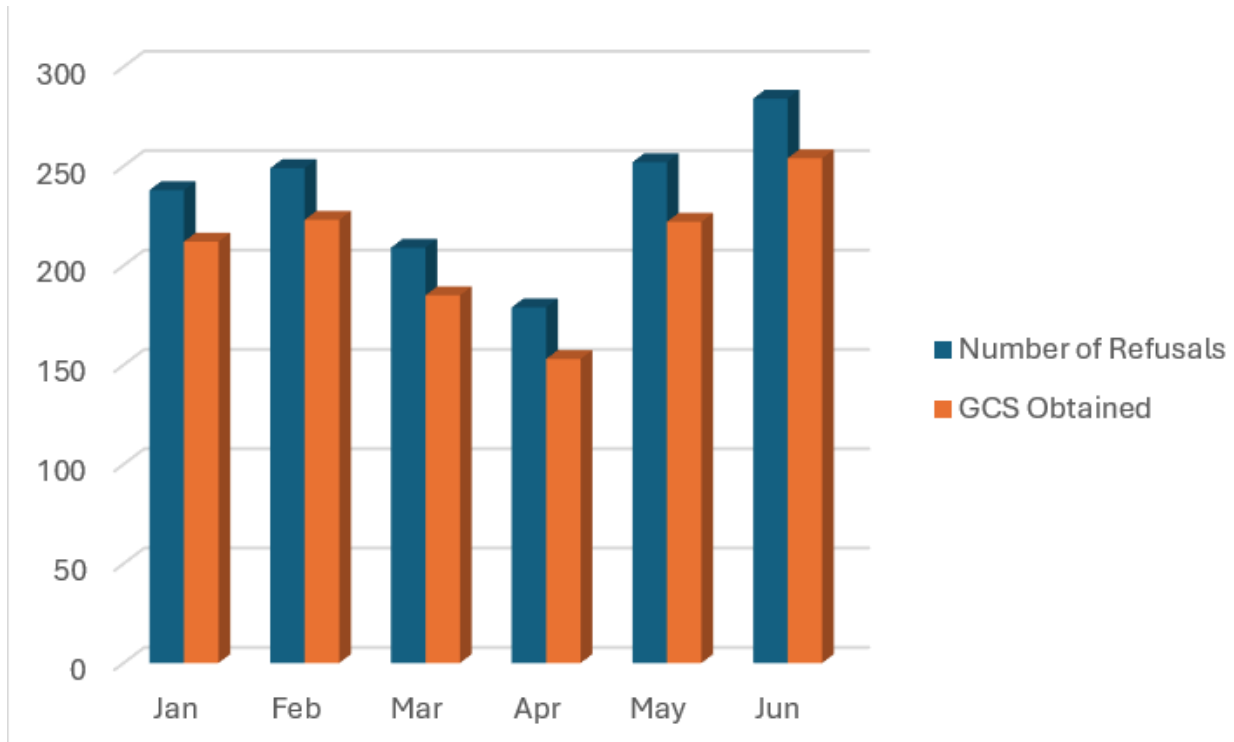
Overall

Out of the 2,711 ePCRs identified as patient refusals, 1,411 were in Jefferson County. 806 were found to contain documentation of systolic blood pressure, heart rate, respiratory rate, SpO2, and Glasgow Coma Scale. This equates to a 55.45% acquisition rate.



Glasgow Coma Scale Acquisition

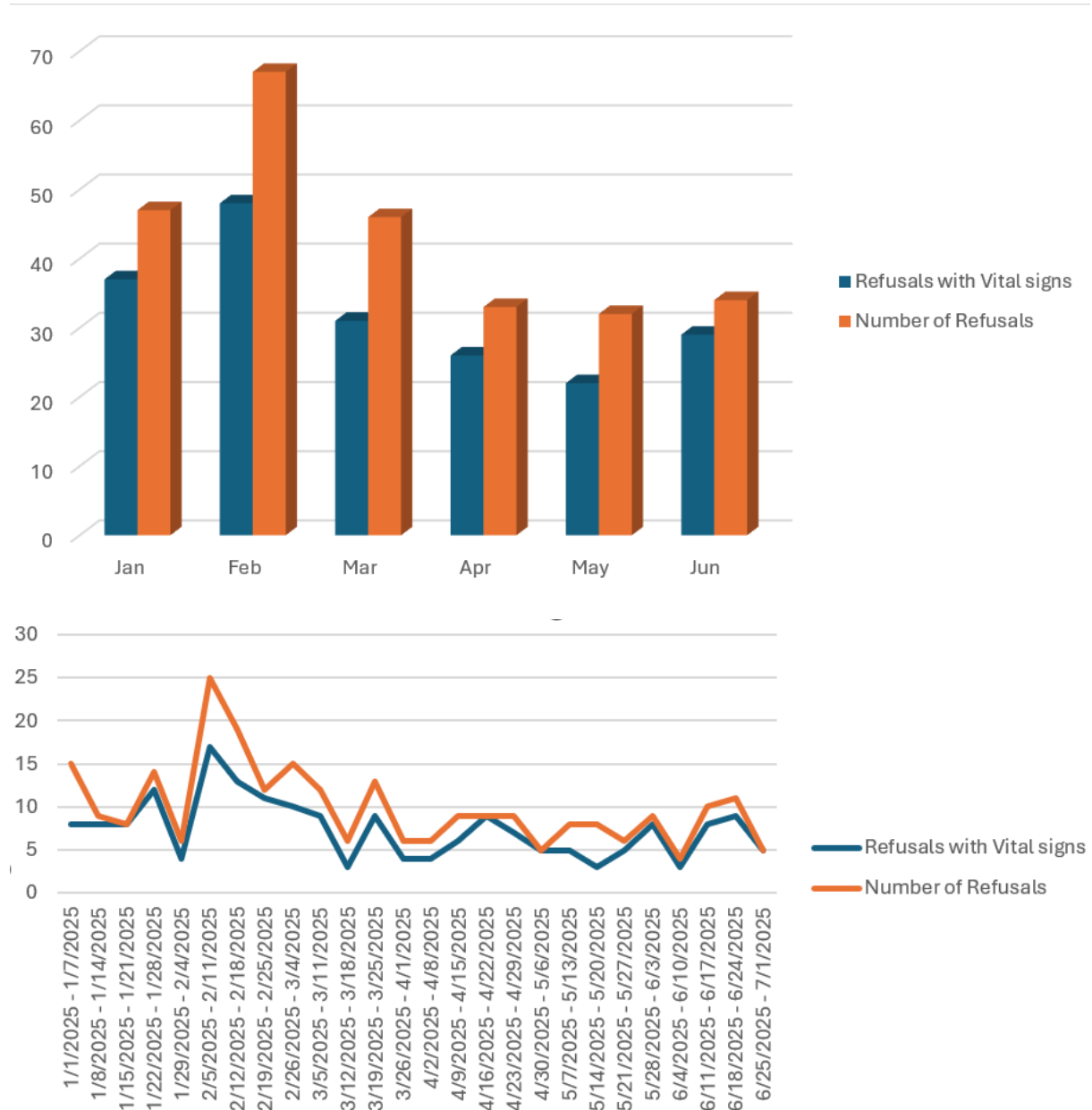
Out of the 1,411 ePCRs identified as patient refusals in Jefferson County, 1,249 were noted to contain documentation of Glasgow Coma Scale. This equates to an 85.45% acquisition rate.



Lewis County

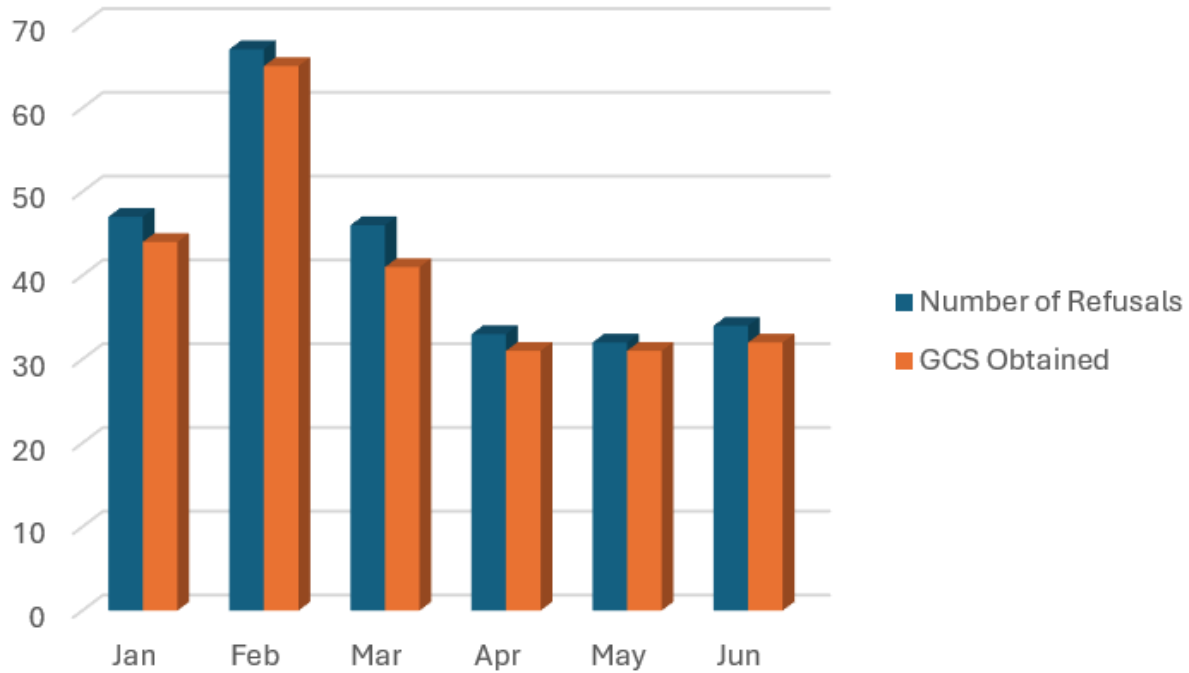
Overall

Out of the 2,711 ePCRs identified as patient refusals, 259 were in Lewis County. 193 were found to contain documentation of systolic blood pressure, heart rate, respiratory rate, SpO2, and Glasgow Coma Scale. This equates to an 88.88% acquisition rate.



Glasgow Coma Scale Acquisition

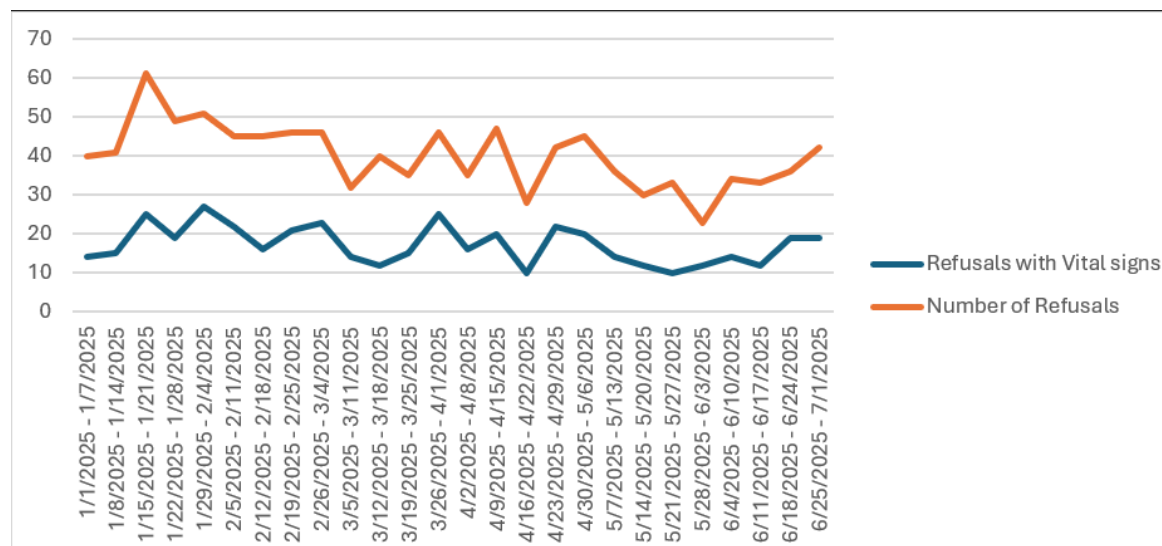
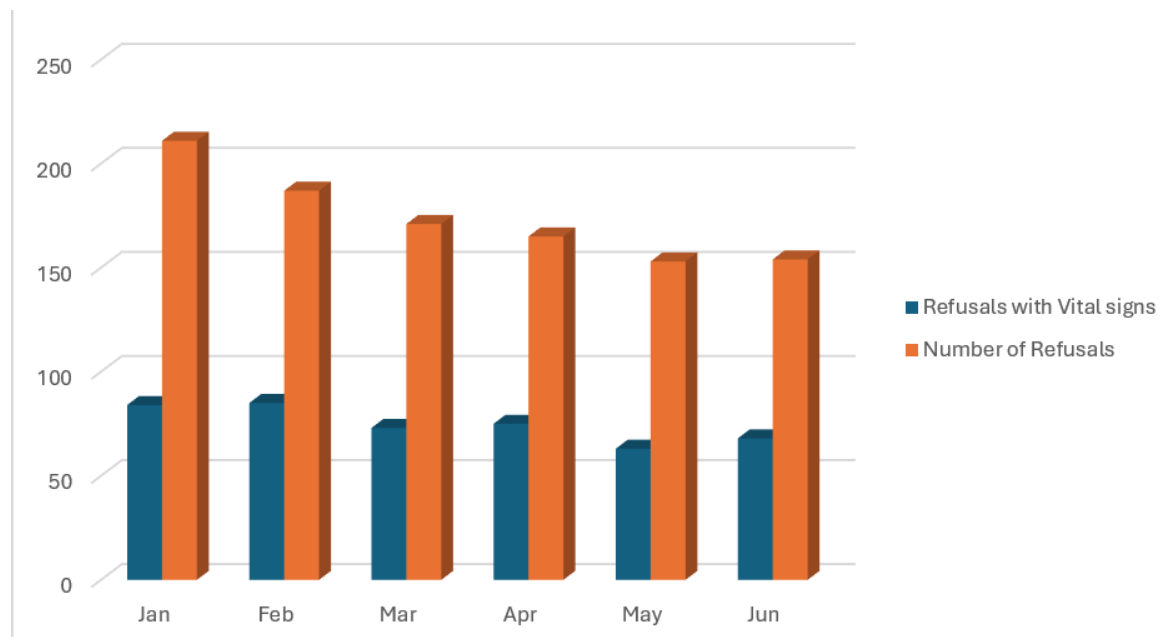
Out of the 259 ePCR's identified as patient refusals in Lewis County, 244 were noted to contain documentation of Glasgow Coma Scale. This equates to a 94.44% acquisition rate.



St. Lawrence County

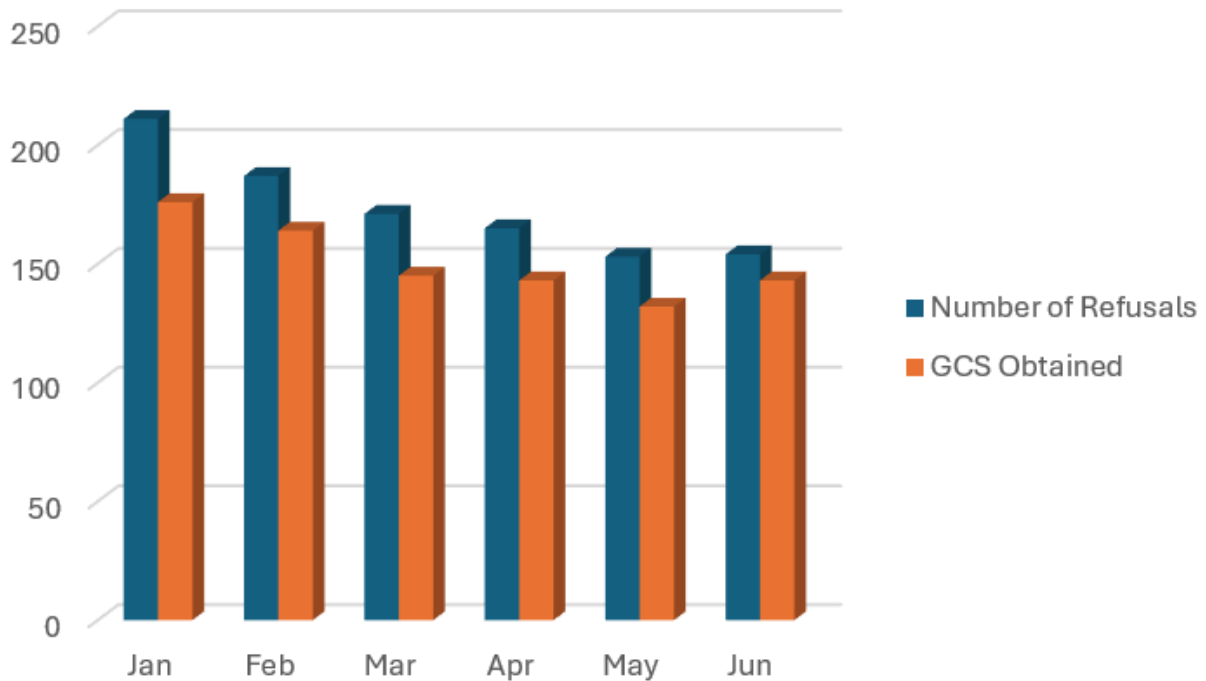
Overall

Out of the 2,711 ePCRs identified as patient refusals, 1,041 were in St. Lawrence County. 448 were found to contain documentation of systolic blood pressure, heart rate, respiratory rate, SpO2, and Glasgow Coma Scale. This equates to a 43.04% acquisition rate.

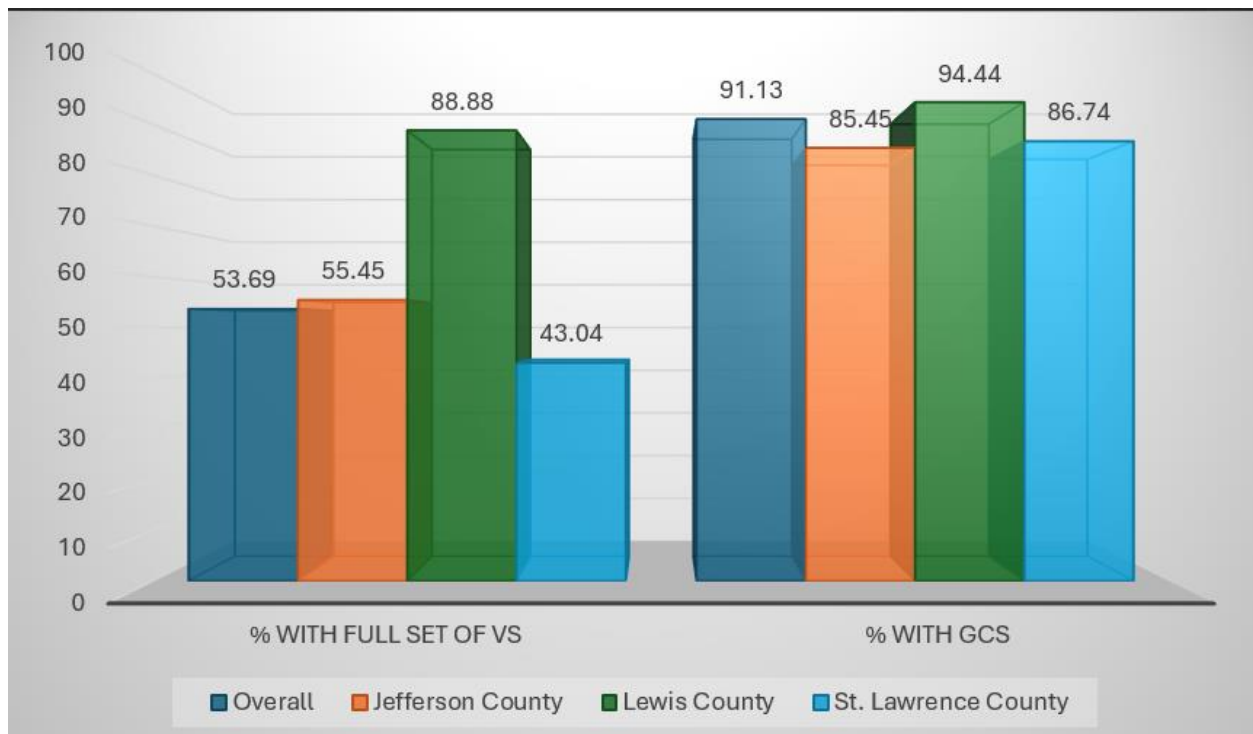


Glasgow Coma Scale Acquisition

Out of the 1,041 ePCRs identified as patient refusals in St. Lawrence County, 903 were noted to contain documentation of Glasgow Coma Scale. This equates to an 86.74% acquisition rate.



Summary



Observations:

- Lewis County leads in compliance with both full vital signs documentation and Glasgow Coma Scale (GCS) acquisition. This achievement reflects the impact of a quality improvement project conducted in partnership between Lewis County Search and Rescue and the Fort Drum Regional Health Planning Organization's EMS Program Agency. Data from January 2024 to June 2025 shows significant improvement directly attributed to this initiative.
- St. Lawrence County shows the lowest rate of complete vital signs documentation.
- GCS documentation consistently exceeds 85% across all counties, aligning with clinical guidelines emphasizing mental status assessment for informed refusals.

Conclusion:

While GCS documentation is generally strong, acquisition should be nearly 100% with limited exceptions, as all patients must receive a GCS assessment to verify their capacity to refuse further care and/or transport. Currently, overall compliance with obtaining a full set of vital signs in refusal cases stands at 53.69%. Targeted improvement efforts are necessary—particularly in St. Lawrence County—to ensure comprehensive patient assessments during refusals.

Resources:

- National EMS Quality Alliance (NEMSQA) – Florida F.A.I.R – 2023 TTR-01 Measure Package