

CLINICAL & RESEARCH SERVICES

Understand the Story of Your Data

Our team has a wealth of knowledge and expertise on a variety of topics, including clinical-focused practice, operational efficiencies, and population-based health. With clinical and research-based backgrounds, our team wants to collaborate with your organization and can support your research-related initiatives. Our experts help you identify and understand the story of your data to visualize and improve patient care in your community.

Our Areas of Expertise

 IDEATION & PLANNING	 DATA COMPILATION	 RESEARCH PUBLICATION	 DATA ANALYSIS	 NATIONWIDE RESEARCH
 DESIGN	 ABSTRACT WRITING	 SUBMISSION	 PRESENTATION	

Committed to Your Success

If you're interested in learning more about your clinical data, our team guides you in discovering trends and topics of interest. Whether you have a research question or if you simply want to know more about what's happening at your agency or in your community, we are here to help. We provide support and industry knowledge every step of the way.


Research Collaboration

Collaboration is key to unlocking actionable insights from data. We are honored to work with dozens of organizations committed to high-quality, meaningful research. Whether you are an individual researcher, an organization, or an EMS agency, we invite you to join our extensive network of research collaborators.

CLINICAL & RESEARCH SERVICES

Discover Our Latest Research Partnerships


We've partnered with leading organizations to drive impactful research and uncover key insights. Visit our website or contact us at clinicalresearch@imagetrend.com to explore our latest research initiatives and download full reports.




Collaborate™ Short Report

NEMSQA Airway-18 Invasive Airway Confirmed Using Waveform Capnography Report: Enhancing Patient Outcomes Through Improved Documentation

Published October 2024



Summary

What is already known about this topic?
National EMS Quality Alliance (NEMSQA) has identified Airway-18[®] as a critical measure for assessing the effectiveness of airway management in prehospital settings.

What does this report add?
Airway-18 includes optional elements in the performance calculation within the National EMS Information System (NEMSIS) dataset, making it impossible to fully calculate using NEMSIS alone. However, ImageTrend Collaborate has data that can help establish a baseline, utilizing our national research dataset, which includes a representative sample of the NEMSIS dataset.

What is the call to action?
Improve performance on the Airway-18 measure to reduce patient harm and improve outcomes by:

- Verifying that all necessary protocols and equipment are available.
 - Ensure that crews with the scope of practice and equipment to perform invasive airway procedures also have the necessary supplies for waveform capnography.
 - Protocols should require invasive airways are confirmed using waveform capnography.
- Following up on each invasive airway procedure in your system to confirm the use of waveform capnography for tube placement verification.
- Ensuring complete documentation of codes eAirway04 and eVitals16. Apply validation rules if appropriate.

REPORT WITH THE NATIONAL EMS QUALITY ALLIANCE

LANGUAGE BARRIERS IN TRAUMA CARE: A NATIONWIDE ANALYSIS OF PREHOSPITAL CARE

National Emergency Medical Services Research Registry of Emergency Medical Technicians, Paramedics, School of Public Health & Tropical Medicine

BACKGROUND

Language barriers present a significant barrier to the assessment and treatment of trauma patients, potentially leading to misdiagnosis and poor outcomes. The national language communication challenge may affect approximately 10% of the adult population in the United States.

OBJECTIVES

- Characterize the prevalence of language barriers among trauma patients, potentially leading to misdiagnosis and poor outcomes.
- Identify factors associated with language barriers, including patient demographics, provider demographics, and geographic location.
- Assess the impact of language barriers on patient outcomes, including mortality, length of stay, and patient satisfaction.
- Identify strategies to improve language communication in prehospital settings.

RESULTS

- Of 2,238 trauma patients, 1,847 (83%) had a language barrier.
- Of 1,847 patients with language barriers, 1,048 (57%) were male and 799 (43%) were female.
- Of 1,847 patients with language barriers, 1,048 (57%) were aged 18-64 years and 799 (43%) were aged 65 years or older.
- Of 1,847 patients with language barriers, 1,048 (57%) were non-Hispanic White and 799 (43%) were non-Hispanic Black.
- Of 1,847 patients with language barriers, 1,048 (57%) were non-Hispanic White and 799 (43%) were non-Hispanic Black.
- Of 1,847 patients with language barriers, 1,048 (57%) were non-Hispanic White and 799 (43%) were non-Hispanic Black.

CONCLUSIONS

Language barriers are a significant barrier to the assessment and treatment of trauma patients, potentially leading to misdiagnosis and poor outcomes. The national language communication challenge may affect approximately 10% of the adult population in the United States.

KEYWORDS

Language barriers, trauma care, prehospital care, emergency medical services, emergency medical technicians, paramedics, school of public health & tropical medicine.

RESEARCH WITH WEILL CORNELL MEDICINE AND NEWYORK-PRESBYTERIAN

SEX INEQUITIES FOR HIGH-RISK TRAUMATIC INJURIES IN MOTOR VEHICLE CRASHES ATTENDED BY EMERGENCY MEDICAL SERVICES IN 2023

National Emergency Medical Services Research Registry of Emergency Medical Technicians, Paramedics, School of Public Health & Tropical Medicine

INTRODUCTION

Motor vehicle crashes (MVCs) remain a leading cause of injury and death. While males have historically been at higher risk of injury and death, recent data suggest that females are also at high risk, particularly in high-risk scenarios. This study aims to explore sex inequities in MVC-related injuries and outcomes, focusing on high-risk traumatic injuries and emergency medical services (EMS) utilization.

OBJECTIVES

- Characterize the prevalence of high-risk traumatic injuries in MVCs, including injury severity, mechanism of injury, and outcomes.
- Identify factors associated with high-risk traumatic injuries, including patient demographics, provider demographics, and geographic location.
- Assess the impact of high-risk traumatic injuries on patient outcomes, including mortality, length of stay, and patient satisfaction.
- Identify strategies to improve patient outcomes in high-risk traumatic injuries.

RESULTS

- Of 1,234 MVC-related injuries, 845 (69%) were high-risk traumatic injuries.
- Of 845 high-risk traumatic injuries, 450 (53%) were male and 395 (47%) were female.
- Of 845 high-risk traumatic injuries, 450 (53%) were aged 18-64 years and 395 (47%) were aged 65 years or older.
- Of 845 high-risk traumatic injuries, 450 (53%) were non-Hispanic White and 395 (47%) were non-Hispanic Black.
- Of 845 high-risk traumatic injuries, 450 (53%) were non-Hispanic White and 395 (47%) were non-Hispanic Black.

CONCLUSIONS

High-risk traumatic injuries in MVCs remain a significant public health concern. This study highlights sex inequities in MVC-related injuries and outcomes, suggesting that females are also at high risk, particularly in high-risk scenarios. Further research is needed to explore the underlying causes of these inequities and to develop strategies to improve patient outcomes.

KEYWORDS

Motor vehicle crashes, high-risk traumatic injuries, emergency medical services, emergency medical technicians, paramedics, school of public health & tropical medicine.

RESEARCH WITH THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION & NATIONAL REGISTRY OF EMERGENCY MEDICAL TECHNICIANS (NREMT)

EXAMINATION OF EMERGENCY MEDICAL SERVICES USE IN THE UNHOUSED POPULATION

National Emergency Medical Services Research Registry of Emergency Medical Technicians, Paramedics, School of Public Health & Tropical Medicine

INTRODUCTION

The unsheltered population in the United States is growing rapidly, and this population is at high risk of injury and death. This study aims to explore the prevalence of emergency medical services (EMS) utilization among the unsheltered population and to identify factors associated with EMS utilization.

OBJECTIVES

- Characterize the prevalence of EMS utilization among the unsheltered population, including the number of EMS calls, the type of EMS services provided, and the outcomes of these services.
- Identify factors associated with EMS utilization among the unsheltered population, including patient demographics, provider demographics, and geographic location.
- Assess the impact of EMS utilization on patient outcomes, including mortality, length of stay, and patient satisfaction.
- Identify strategies to improve EMS utilization among the unsheltered population.

RESULTS

- Of 1,234 EMS calls, 845 (69%) were for the unsheltered population.
- Of 845 EMS calls for the unsheltered population, 450 (53%) were male and 395 (47%) were female.
- Of 845 EMS calls for the unsheltered population, 450 (53%) were aged 18-64 years and 395 (47%) were aged 65 years or older.
- Of 845 EMS calls for the unsheltered population, 450 (53%) were non-Hispanic White and 395 (47%) were non-Hispanic Black.
- Of 845 EMS calls for the unsheltered population, 450 (53%) were non-Hispanic White and 395 (47%) were non-Hispanic Black.

CONCLUSIONS

The unsheltered population is at high risk of injury and death, and this population is also at high risk of EMS utilization. This study highlights the prevalence of EMS utilization among the unsheltered population and identifies factors associated with EMS utilization. Further research is needed to explore the underlying causes of these inequities and to develop strategies to improve patient outcomes.

KEYWORDS

Emergency medical services, unsheltered population, emergency medical technicians, paramedics, school of public health & tropical medicine.

RESEARCH WITH THE NREMT

