

# EVALUATION OF FINANCIAL IMPACTS OF EMS ON-SCENE TREATMENT PROGRAMS

# **Final Report**

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# **Revision History**

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# Contents

1.	Executive Summary	. 3
1.1 1.2	Key Observations Report Highlights	
2.	Introduction	. 7
2.1	Project Background	7
2.2 2.3	Purpose and ScopeObjective	
3.	Approach	. 8
	Overview of Methodology	
4.	Policy Review and Financial Impact Analysis	10
4.1	Assessment of EMS Usage	.10
	1.1 (a): To what extent is the treatment or service generally used by a significant portion of the popula	
	Assessment of Insurance Coverage	_
4.	2.1 (b): To what extent is the insurance coverage generally available	. 26
	2.2 (c): If insurance coverage is not generally available, to what extent does the lack of coverage results.	
p(	eople avoiding necessary health care treatment	34
4. S0	onable financial hardship	
4.3	Assessment of Public Demand	. 44
	3.1 (e): The level of public demand for treatment or service.	
	3.2 (f): The level of public demand for insurance coverage of the treatment or service.	
	3.3 (g): The level of interest of collective bargaining agents in negotiating for the inclusion of this cover group contracts	
	Assessment of Financial Impact	
	4.1 (h): To what extent will the coverage increase or decrease the cost of the treatment or service	
4.	4.2 (i): To what extent will the coverage increase the appropriate uses of the treatment or service	. 56
	4.3 (j):To what extent will the mandated treatment or service be a substitute for a more expensive treatment or service be a substitute for a subs	
	ent or service	
	4.4 (k):To what extent will the coverage increase or decrease the administrative expenses of insurance of policyholders	
	4.5 (I):The impact of this coverage on the total cost of health care.	
5.	Conclusion	71
6.	Appendices	73
Ар	pendix A- Financial Impact Study Exhibits	73
Ар	pendix B- Recommendations	80
Αp	pendix C- References	81





## 1. Executive Summary

The Florida Department of Health (Department/DOH) Division of Emergency Preparedness and Community Support, Bureau of Emergency Medical Oversight, commissioned a comprehensive evaluation of the financial impacts of requiring all health benefits contracts issued in Florida to provide coverage for medically directed on-scene treatment and Emergency Medical Services (EMS) patient transportation to destinations other than a hospital under specified circumstances. This study, conducted by North Highland in conjunction with Milliman, is intended to provide a thorough analysis of the economic implications associated with potential legislative changes to enhance public health and safety in Florida.

The EMS system in Florida currently faces multifaceted challenges, including high utilization rates, geographical access barriers, and financial constraints affecting both the system and patients. This evaluation assesses the potential impact of expanding EMS coverage to include medically directed on-scene care and alternative destination transport. The study offers an in-depth analysis of the implications associated with broadening insurance coverage for EMS on-scene care and transport to alternative destinations within Florida.

The proposed expansion presents several potential advantages, including but not limited to:

- Prospective cost savings
- Enhanced access to timely and appropriate medical care
- Reduced financial constraints on the system and on patients
- More efficient utilization of healthcare resources

This report provides a thorough analysis of the aforementioned topics, structured in accordance with the framework outlined in Section 624.215 of the Florida Statutes. This statutory framework delineates various provisions relevant to the subject matter. The insights derived from this study are intended to inform policymakers and stakeholders about the potential impacts and benefits of expanding EMS coverage in Florida.

#### 1.1 KEY OBSERVATIONS

This analysis encompasses a wide range of factors, including EMS utilization patterns, the current landscape of insurance coverage, financial implications, public demand for expanded services, and the potential effects on overall healthcare system efficiency. By addressing these diverse elements, the study aims to provide a holistic view of the potential outcomes of expanding EMS coverage in the state.

The key observations and potential impacts associated with the expansion of EMS coverage in Florida are summarized below. The information presented is structured to address each element as outlined in Section 624.215 of the Florida Statutes, highlighting the aspects of the proposed changes and enabling informed decision-making and policy formulation. Section 4 of this report provides a more thorough examination of various aspects pertinent to the proposed changes in EMS coverage. This section offers an in-depth analysis of the factors considered in this study, providing a more detailed perspective on the potential impacts of expanding EMS coverage in Florida.





	STATUTE 624.215	KEY OBSERVATIONS	IMPACT	
a)	Extent of treatment or service use	Florida recorded 5.12 million EMS events in 2024. 2.94 million events resulted in EMS transport. Nearly 60% of EMS events result in hospital transport. <sup>1</sup>	Requiring coverage could address a significant gap in current EMS service delivery and reimbursement models, potentially improving care for a large portion of the population.	
b)	Extent of insurance coverage availability	89.3% of Floridians have health insurance that includes EMS coverage. 10.7% remain uninsured. <sup>2</sup> Nearly 60% of ground ambulance transports involve out-of-network services.	Requiring coverage could reduce surprise billing and improve access to appropriate care for the majority of Floridians with health insurance.	
c)	Impact of lack of coverage on necessary health care treatment	23% of Americans report avoiding calling an ambulance due to cost concerns. In Florida, 55% of adults delayed or skipped healthcare in the past year due to cost.	Requiring coverage could reduce care avoidance, potentially improving health outcomes for those who delay or skip necessary care.	
d)	Extent of unreasonable financial hardship due to lack of coverage	Uninsured patients face costs of \$500- \$3,500+ for ambulance transport. 6.6% of Floridians have medical debt in collections, with a median amount of \$1,593.	Requiring coverage could reduce the financial burden on patients, particularly the uninsured, and help address the medical debt.	
e)	Level of public demand for treatment or service	58% of surveyed patients support being transported to alternate destinations for minor conditions. 86% support EMS having greater access to medical records to facilitate on-scene treatment.	Requiring coverage would align with previously reported public preferences and potentially improve patient satisfaction with emergency care services.	
f)	Level of public demand for insurance coverage of the treatment or service	72%-83% of surveyed Americans are willing to pay a modest tax or premium increases to maintain pay additional amounts annually.	Requiring coverage would meet the public demand for improved EMS services and coverage.	
g)	Level of interest from collective bargaining agents	Limited information is available on specific EMS coverage negotiations in Florida. National-level EMS professional organizations have advocated for policy changes, such as reimbursement for treatin-place responses.	Requiring coverage could prompt increased focus on these benefits in future collective bargaining agreements.	
h)	Extent of coverage impact on treatment or service cost	Projected total estimated savings of \$520 million across all payers, 3.7% reduction in total ambulance events costs or a 0.3% reduction in total health care expenditures).	Requiring coverage could lead to significant cost savings in the healthcare system.	





i)	Extent of coverage impact on appropriate use of treatment or service	31% of current Emergency Department (ED) visits following ambulance transport are identified as potentially avoidable.	Requiring coverage could lead to more appropriate use of healthcare resources by diverting a significant portion of ED visits to more suitable alternative care settings.
j)	Extent to which mandated treatment or service substitutes for more expensive treatment	Average cost savings of \$1,049 per avoidable event (ED visit cost: \$2,133; alternative care cost: \$1,084).	Requiring coverage could lead to substantial cost savings while maintaining or improving quality of care.
k)	Impact on administrative expenses for insurance companies and policyholders	Administrative expenses for insurance companies are not expected to increase.	Requiring coverage could improve care delivery without substantially increasing costs for insurers or policyholders.
l)	Impact on the total cost of health care	The total impact is estimated to be a 3.7% reduction in ambulance-related event costs or 0.3% of total cost of healthcare.	Requiring coverage demonstrates meaningful savings potential in this specific area of care delivery.

#### 1.2 REPORT HIGHLIGHTS

This analysis demonstrates that introducing a requirement for health benefits contracts to cover medically directed on-scene treatment and transport to non-hospital destinations could yield significant benefits, aligning with the framework outlined in Section 624.215 of the Florida Statutes.

The following table summarizes the key highlights and the potential benefits of expanding EMS coverage in Florida. These findings underscore the significant impact this change could have on cost savings, care delivery, public health, financial accessibility, and healthcare equity:

HIGHLIGHT	BENEFIT		
Cost Savings	Projected total savings of \$520 million across all payers, representing a 3.7% reduction in total ambulance event costs, demonstrating substantial financial benefits.		
Improved Care Delivery	31% of current ED visits following ambulance transport identified as potentially avoidable, highlighting the opportunity to provide care in alternative settings.		
Public Demand and Satisfaction	Florida faces primary care shortages in 66 of 67 counties, estimating a need for 1,338 additional providers to meet demand. Strong public support for EMS		





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	models offering on-scene treatment and transport to non-ED sites, aligning with patient preferences.
Addressing Financial Constraint	Potentially reducing out-of-pocket costs and surprise billing for patients, particularly the uninsured and underinsured, as well as systemwide cost savings.
Geographic Barriers and Socioeconomic Differences	Proposed changes have the potential to address differences in EMS access and quality between urban and rural areas, promoting equitable healthcare delivery.

In summary, the proposed requirement for health benefits contracts in Florida to cover medically directed on-scene treatment and alternative EMS transportation presents an opportunity to enhance healthcare delivery and efficiency. With potential savings of \$520 million across all payers, coupled with improved care alignment and strong public support, this initiative could benefit Florida's healthcare system. By reducing avoidable ED visits, reducing financial burdens, and addressing healthcare disparities, the proposal aligns with both public health needs and statutory requirements. While successful implementation will require careful planning and stakeholder engagement, the potential benefits in terms of cost savings, improved care delivery, and enhanced healthcare equity make this a compelling consideration for Florida's healthcare landscape.





#### 2. Introduction

The Florida Department of Health (Department/DOH) Division of Emergency Preparedness and Community Support, Bureau of Emergency Medical Oversight, play an integral role in ensuring the health and safety of Florida's residents. As the central authority for EMS, the Department's initiatives directly support its mission to enhance public health and safety.

Florida's EMS system is increasingly challenged by the evolving complexity of patient presentations, shifting away from the traditional model centered on emergent transport to hospital-based emergency departments. A large proportion of EMS events now involve behavioral health conditions, chronic disease exacerbations, and low-acuity medical needs that do not always warrant transport to an acute care setting. The current system design, however, remains heavily transport-driven, contributing to inefficiencies in care delivery, delays in definitive treatment, and unnecessary emergency department utilization. Geographic disparities further exacerbate access to timely, appropriate EMS responses, particularly in rural and medically underserved areas. Insurance coverage gaps and reimbursement limitations create additional operational and financial constraints, impacting both patient access to care and provider sustainability.

The Department retained North Highland, in collaboration with Milliman, to conduct a statewide evaluation of the financial and operational impacts of requiring all health benefits contracts issued in Florida to cover EMS-based on-scene care and transport to clinically appropriate alternative destinations under specified circumstances. This evaluation examines how expanded coverage for these services could improve patient care, reduce unnecessary emergency department utilization, and strengthen the overall efficiency of Florida's EMS system.

This report utilizes the statutory requirement 624.215 as a framework to inform an overall analysis of the proposed requirement for expanded EMS coverage in Florida. The study examines the projected costs, benefits, and economic impact of mandating coverage for medically directed on-scene treatment and transport to alternative destinations under specified circumstances.

The analysis employs evidence-based methodologies to evaluate the potential fiscal implications for the state's healthcare system. The findings are intended to provide the DOH and members of the Florida Legislature with objective data to inform policy decisions regarding EMS coverage.

By quantifying the financial implications and potential healthcare delivery improvements, this analysis intends to facilitate evidence-based decision-making. The objective is to present a balanced evaluation of the proposed requirement, considering both fiscal responsibility and potential enhancements to the state's emergency medical services.

#### 2.1 Project Background

EMS agencies have recently been facing an unprecedented challenge: responding to an increasingly diverse range of medical situations that extend far beyond their traditional scope. This evolving landscape of emergency care has highlighted a significant gap between patient needs and the services EMS agencies are equipped to provide. While there is a growing demand for more flexible and patient-centered care models, EMS agencies face challenges to implement these alternative treatment methodologies due to financial limitations. The core issue lies in the fact that most insurance plans do not cover these innovative approaches to emergency care.





Traditionally, calling 9-1-1 for a medical issue meant an ambulance transport to the ED. In recent years, there's been growing public interest in more flexible emergency medical services models. Many non-life-threatening 9-1-1 calls could be managed with treatment on-scene or transport to an urgent care or clinic instead of a hospital ED. Studies have confirmed this trend – a substantial number of ambulance transports to EDs are avoidable with safer alternative .³ This has prompted interest in patient-centered EMS models that offer "the right care, at the right place, at the right time".⁴ Nationally, the COVID-19 pandemic accelerated these changes by expanding telemedicine and 9-1-1 nurse triage, making "hear-and-treat" or "see-and-treat" options more common.⁵ Communities and policymakers are increasingly recognizing that the historic binary choice – either transport to an ED or do nothing – is no longer financially sustainable or patient-centric.⁶ The Florida Department of Health has identified \$3 billion in costs for EMS services in its current operation. The intent of this study is to improve the program's cost effectiveness and long-term sustainability.

#### 2.2 PURPOSE AND SCOPE

The scope of this evaluation is to identify the financial impacts of requiring all health benefits contracts issued in Florida to provide coverage for medically directed on-scene care and transportation to destinations other than a hospital under specified circumstances.

#### 2.3 OBJECTIVE

EMS agencies are addressing a wider array of situations than was traditionally anticipated. These agencies encounter challenges in delivering optimal care due to most insurance plans not covering alternative treatment methodologies.

In response to evolving the EMS system and the necessity for more patient-centered care models, the Florida Department of Health has commenced an evaluation of the economic impacts associated with expanding EMS coverage. This evaluation encompasses the assessment of medically directed on-scene care and transportation to non-hospital destinations. The objective is to ensure that Florida's EMS systems remain financially sustainable while meeting the needs of Florida's communities.

# 3. Approach

This report evaluates the impact of proposed changes to health benefits for EMS on-scene treatment and transportation to non-hospital destinations. Our methodology follows Section 624.215 of the Florida Statutes to assess these changes and is structured around four key components, each directly addressing specific statutory requirements:

**Assessment of EMS Usage**: Evaluating the extent of treatment or services used by a significant portion of the population.

a. The extent of treatment or service use by a significant portion of the population

**Insurance Coverage:** Determining the availability of insurance coverage and the impact of its absence on healthcare treatment and financial hardship.

- b. The availability of insurance coverage
- c. The impact of lack of coverage on necessary healthcare treatment
- d. The extent of unreasonable financial hardship due to lack of coverage





**Public Demand:** Assessing the level of public demand for the treatment or service and the insurance coverage for it.

- e. The level of public demand for treatment or service
- f. The level of public demand for insurance coverage of the treatment or service
- g. The interest of collective bargaining agents in negotiating for this coverage

**Financial Impact:** Estimating the potential cost savings, identifying alternative care settings, and calculating the average cost of services in each setting.

- h. The impact on the cost of treatment or service
- i. The impact on appropriate use of the treatment or service
- j. The potential for the mandated treatment to substitute for more expensive treatments
- k. The impact on administrative expenses for insurance companies and policyholders
- I. The impact on the total cost of healthcare

By structuring our approach around these four components, we ensure a thorough evaluation that directly responds to each of the statutory elements. This approach allows for a detailed assessment of the proposed changes, considering their potential effects on healthcare accessibility, financial implications, and overall impact on the healthcare system. The findings from this analysis will provide policymakers with the necessary information to make informed decisions about the proposed changes in health benefits coverage for EMS services.

## 3.1 Overview of Methodology

The methodology applies to a mixed-methods approach that combines quantitative and qualitative data collection and analysis. This includes:

- Collaborative Planning: Engaged DOH throughout the data collection, interpretation, and insights gathering process. Identified gaps and ensured a comprehensive understanding of the data elements.
- Research and Data Collection: Conducted comprehensive desktop research on EMS, telehealth, and insurance coverage. Defined research scope, reviewed reliable and recent public data focusing on Florida and national levels, identifying gaps. Data sources included the following among others:
  - The Emergency Medical Services Tracking and Reporting System (EMSTARS) recorded dataset from 2019-2024: Florida's statewide EMS data system, designed to capture incident-level information for performance monitoring, system evaluation, and public health reporting.
  - The National Emergency Medical Services Information System (NEMSIS): The national database that standardizes EMS data collection across states, enabling national benchmarking, research, and policy development.
- Claims Data Analysis: Analyzed de-identified Florida health insurance claims data to identify EMS trends in utilization, costs, and reimbursements utilizing an algorithm published by NYU.





- The NYU Emergency Department Algorithm: A research-based tool developed by New York University (NYU) that categorizes emergency department visits according to the clinical urgency and potential preventability of a patient's condition. It is widely used to assess patterns of ED utilization, identify avoidable visits, and support healthcare system planning and policy development.
- **Financial Model:** Developed a model to estimate the financial impact of required coverage on insurers, patients, and the healthcare system, using methodology informed by the NYU algorithm.
- Statewide Analysis: Stratified data analysis by geographic region, population density, and other
  relevant factors to identify variations in EMS utilization and costs across Florida and compared to
  other national averages.
- Recommendations: Identified high-level recommendations for consideration.

# 4. Policy Review and Financial Impact Analysis

Using Florida Statute 624.215 as the framework, this section provides an in-depth analysis of the impacts associated with the implementation of EMS on-scene treatment programs in Florida. It delves into various aspects, including the assessment of EMS usage, insurance coverage availability, public demand for these services, and the financial implications of expanding EMS coverage to include medically directed on-scene care and alternative destination transport. While the statute provides specific requirements for evaluating such proposals, the financial impact section provides a detailed assessment of the economic implications associated with potential legislative changes to enhance public health and safety in Florida.

## 4.1 Assessment of EMS Usage

4.1.1 (a): To what extent is the treatment or service generally used by a significant portion of the population.

#### **Kev Findings**

- **EMS Utilization Rate:** In 2024, Florida recorded approximately 5.12 million ambulance events through Emergency Medical Services Tracking and Reporting System (EMSTARS).
- ➤ ED Transport Rate: 57.4% of EMS events (2.94 million) resulted in transport to the emergency department.
- ➤ Potential for Avoidable ED Visits: Over 62% of ED visits in Florida have potential for prevention through improved primary and preventive care.
- ➤ Telehealth and Alternate Destination EMS Models: Innovative EMS models such as treat-inplace protocols, tele-triage, and alternate destination transports have reduced emergency department visits by up to 72% while maintaining comparable or improved patient outcomes, including 5-day mortality rates equivalent to traditional ED care.





- ➤ **High Satisfaction and Clinical Safety:** Across diverse pilot programs, patient satisfaction consistently ranged from 88% to 95%, and mortality rates remained extremely low (as little as 0.09%), underscoring the safety and acceptability of non-transport and community-based EMS care.
- Age-Driven EMS Demand: Older adults (65+) account for 48% of EMS users; individuals aged 80 and above represent 22% of all EMS contacts.
- Disability-Driven Utilization: 31.8% of Florida adults aged 65 and older report a disability, contributing to higher EMS usage.
- > Socioeconomic Barriers: Higher EMS utilization correlates with lower income, uninsured rates, and rural residence; rural poverty rates in Florida are 19.8%.
- ➤ **Geographic Response Time Disparities:** For emergencies, urban EMS systems maintain approx. 7–9 minute averages, while rural counties frequently exceed15 minutes.
- ➤ Gaps in Primary Care Access: Florida faces primary care shortages in 66 of 67 counties, with HRSA estimating a need for 1,338 additional providers to meet demand.
- ➤ Low-Acuity and Emerging Alternatives: Florida recorded over 100,000 EMS responses for drug-related overdoses in 2023; statewide initiatives like the CORE Network aim to improve crisis stabilization and integrate long-term recovery care.
- > Mobile Integrated Healthcare Impact: Florida MIH programs, such as in Pasco and Walton counties, have reduced ED visits by up to 58% and inpatient stays by 60%.
- Preventable Hospitalizations Persist: Florida continues to report high rates of hospitalizations for ambulatory care sensitive conditions like COPD, heart failure, and diabetes.

EMS plays a crucial role in Florida's healthcare system, serving as a vital link between the community and medical facilities. These key findings highlight the complex nature of EMS utilization in Florida, emphasizing demographic and geographic barriers, the potential for system optimization, and the significant impact on the broader healthcare system.

This comprehensive assessment of EMS usage in Florida aims to evaluate the extent to which these services are utilized by a significant portion of the population. Florida's varied geography, ranging from densely populated urban centers to sparsely populated rural areas, presents unique challenges for EMS delivery. The state's demographic composition, particularly its large older adult population, further shapes the demand for emergency medical care. As healthcare delivery models evolve and the population's needs change, understanding EMS utilization patterns becomes increasingly important for policymakers, healthcare providers, and community stakeholders.

This section examines the utilization rates and trends compared to national averages and explores demographic patterns across various population segments including the most common reasons for EMS events, offering insights into frequently encountered medical emergencies. A significant focus was placed on non-transport cases and alternative care pathways, representing potential areas for system optimization. The analysis also highlights geographic variations in EMS usage and service delivery across urban and rural areas, identifying region-specific challenges. Furthermore, we assess the impact of EMS utilization on the broader healthcare system, including effects on EDs, hospital admissions, and overall costs. Finally, this section of the report explores payment and reimbursement patterns, examining how different funding sources influence EMS financing, service delivery, and usage.



#### **EMS Utilization and Impact on Emergency Departments**

EMS are a vital entry point into the healthcare system, providing urgent care and transport for individuals experiencing acute medical conditions. A significant portion of EMS transports result in ED visits, contributing substantially to hospital demand across Florida. The Department utilizes EMSTARS for the collection of incident level data from EMS agencies and subsequent analysis for benchmarking and identifying quality improvement initiatives. Based on recorded information from EMSTARS, in 2024 Florida had 5.12M ambulance events and 2.94M (approx. 57.4%) of these resulted in transport to the ED.

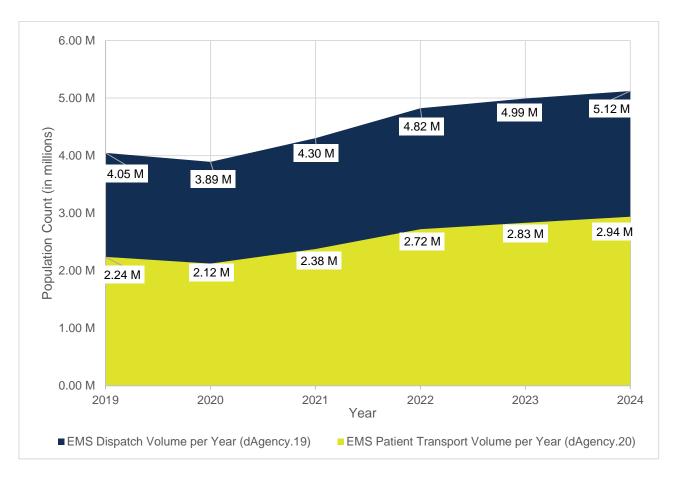


Figure 1 EMS Dispatch Volume and Patient Transport Volume per Year (2019-2024)

Nationally, an analysis of over one hundred million weighted ED visits per year showed 18% of all ED visits patients arrived by EMS.<sup>7</sup> Although EMS is designed to address emergent needs, multiple studies suggest that a significant proportion of these ED visits may not require emergency-level care and could be managed in alternative settings, such as primary care or urgent care facilities. This high volume of low-acuity calls places additional strain on EMS and ED resources, contributing to increased wait times, resource diversion, and operational pressures across the healthcare system.

In Florida, data from the Agency for Health Care Administration (AHCA) indicate that over 62% of ED visits have the potential to be prevented through enhanced healthcare management, including improved chronic disease management and access to preventive care services. AHCA's 2024 report further noted a 52.3% increase in potentially preventable ED visits between 2020–2021 and 2022–2023, highlighting





persistent challenges in reducing unnecessary emergency utilization, particularly among vulnerable populations.<sup>8</sup> Nationally, a 2019 report by UnitedHealth Group found that nearly two-thirds of ED visits by privately insured individuals, approximately 18 million out of 27 million annually, were potentially avoidable. Redirecting these non-emergent cases to more appropriate care settings could generate up to \$32 billion in potential healthcare savings annually.<sup>9</sup>

Pilot programs that utilized on scene telehealth-directed EMS care and alternate destination models demonstrated promising results that could address this overutilization. The CMS Emergency Triage, Treat, and Transport (ET3) model allowed EMS crews to manage low-acuity 911 calls on scene via treat-in-place protocols, often supported by telehealth. The final evaluation (2021–2023) found that 72% of patients avoided an ED visit altogether, and only 28% sought emergency care within five days. Additionally, 5-day mortality rates for treat-in-place patients were statistically no different from those transported to EDs, demonstrating clinical safety. Patient satisfaction was also higher among those who avoided an ER trip, and Medicare reported average savings of \$538 per patient<sup>10</sup>. Similarly, a 2024 study in Prehospital and Disaster Medicine reported that 85% of patients managed via tele-triage did not require ED visits within 72 hours, with 92% expressing satisfaction with receiving care at home.<sup>11</sup>

Similar programs implemented in other states have reported promising clinical outcomes and patient satisfaction.

- Houston's Emergency TeleHealth and Navigation (ETHAN): This program uses telehealth to triage 9-1-1 calls and guide patients to the most appropriate care. In its first year, ETHAN reduced ambulance ED transports by 56%, demonstrating overall 90% success rate in avoiding unnecessary ambulance transport for low-acuity patients and achieved a patient satisfaction rate of 88%, equivalent to that of the standard ED care group. 12 Follow-up data showed minimal 9-1-1 callbacks (0.2%), and there were no increases in adverse clinical outcomes. 13
- Los Angeles County's "Assess & Refer" pilot: This pilot confirmed the viability of non-transport care. Among 3,300 patients treated on scene, 95% were satisfied with the decision not to be transported, and only 0.09% experienced an unexpected death within 72 hours. These outcomes mirror the safety and satisfaction findings of broader telehealth-directed initiatives.<sup>14</sup>
- Mental Health pilot programs (2015–2022): California allowed EMS to transport patients with isolated psychiatric crises directly to mental health crisis centers instead of EDs. These mental health diversion programs safely routed 98% of eligible psychiatric 9-1-1 callers to crisis centers, with only 2% requiring subsequent ED transfer. Sobering centers for intoxicated patients demonstrated similarly safe outcomes, with 98.3% of 3,900 patients avoiding ED transfer and only 0.3% requiring hospital admission. Both models dramatically reduced EMS offload times, thereby improving system efficiency.

Access to primary care services is a key determinant of ED utilization rates. <sup>17</sup> As of 2024, 66 of Florida's 67 counties have areas designated as primary care Health Professional Shortage Areas (HPSAs). The Health Resources and Services Administration (HRSA) estimates that Florida would need an additional 1,338 primary care practitioners to eliminate these shortages. This shortage of access to primary care contributes to increased reliance on EMS and ED services for non-emergent conditions. In 2023, Florida recorded over 9.6 million ED visits, equating to approximately 427 visits per 1,000 residents (est. Florida population in 2023 est. 22.6 million). <sup>18,19</sup> The high volume of ED use, combined with staffing shortages and increasing complexity of cases, has led to elevated rates of ambulance diversion, prolonged wait times, and ED boarding, where admitted patients are held in the ED due to lack of available inpatient beds.. According to the Florida Hospital Association, hospitals reported a 15% increase in ED boarding times between 2021 and 2023, contributing to delays in inpatient care and higher healthcare system costs. <sup>20</sup>





Florida's ongoing population growth could further increase these challenges. Between 2022 and 2023, the state's population grew by approximately 1.6%, with projections estimating sustained annual growth of around 1.3% through 2027.<sup>21</sup> Much of this increase is attributed to older adults, a demographic group with higher rates of EMS events and ED utilization. As the population continues to expand, demand for emergency services is anticipated to increase, along with existing strains on EMS systems and hospital emergency departments statewide.

Overall, while EMS remains a foundational component of emergency response, the current rate of ED utilization, often for preventable or low-acuity conditions, presents challenges to long-term system sustainability. Integrated telehealth and alternate destination strategies have proven to reduce unnecessary transport, preserve EMS capacity, and deliver equal or improved outcomes in patient satisfaction and safety. These innovations offer a scalable, evidence-based solution to rising healthcare system pressures, especially when coupled with long-term investments in primary care access and preventive health infrastructure.

Given the high and often preventable use of EMS and ED services, it is essential to examine the underlying factors that contribute to this utilization. Demographic characteristics such as age, along with factors like income, and geographic access to care, shape how and when individuals seek emergency services. Understanding these drivers is critical to designing targeted interventions, improving system efficiency, and ensuring equitable access to the appropriate level of care.

#### **Demographic Factors Influencing EMS Utilization**

Age is one of the most significant predictors of EMS utilization, with older adults consistently exhibiting higher rates of EMS use compared to younger populations. Factors such as a higher prevalence of chronic conditions, increased risk of acute medical events, and mobility or transportation limitations contribute to this trend. <sup>22,23</sup> In Florida, this dynamic is especially pronounced due to the state's demographic composition. Adults aged 65 and older comprise approximately 22% of Florida's population, compared to the national average of 17.3%. <sup>24</sup> This large older adult population makes age a particularly important factor to examine in understanding EMS utilization patterns. As such, this section focuses on age-based utilization as a key indicator of system demand and strain, providing insights to support more effective planning and delivery of emergency services.

A review of the EMSTARS recorded data revealed significant age-related trends in EMS utilization. Analysis of over 21.5M Floridians that utilize EMS demonstrates a substantial demand for emergency medical services among older populations, with nearly half (48%) of all EMS patients 65 years of age or older. Of the recorded observations, particularly noteworthy is the utilization pattern among individuals aged 80 and above which accounts for 22% of all EMS contacts. Their utilization rate is remarkably high, being 3.49 times greater than that of the general population. These findings highlight a clear correlation between advancing age and increased reliance on emergency medical services. Figure 2 provides a more detailed breakdown of the age-based utilization patterns, further illustrating the significant role that age plays in EMS demand across the state.





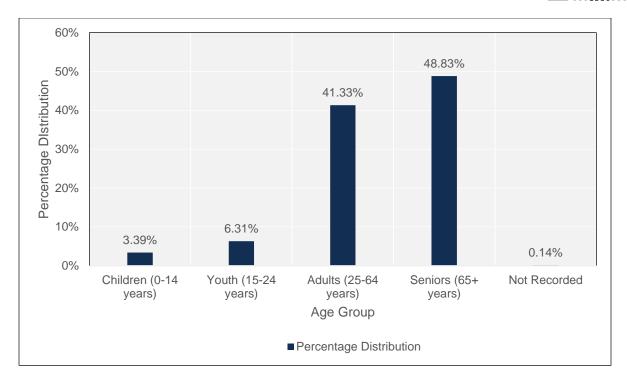


Figure 2 Percentage distribution of EMS utilization in Florida by age range (2019-2024)

Research indicates a significant association between disability status and increased utilization of EMS. Individuals with disabilities are more likely to use EMS compared to those without disabilities. A study analyzing data from 2006 to 2008 found that people with disabilities accounted for nearly 40% of annual ED visits in the United States. This increased usage is influenced by factors such as limited access to regular medical care, complex health profiles, and the nature of their disabilities.<sup>25</sup>

A study involving community-dwelling individuals aged 65 and over with disabilities found that those with major depression reported more EMS events than their non-depressed counterparts, averaging 2.10 versus 1.68 events, respectively. This suggests that mental health conditions can further exacerbate EMS utilization among older adults with disabilities.<sup>26</sup>





In Florida, 31.8% of the population aged 65 and older experiences various forms of disability as demonstrated in Figure 3.<sup>27</sup>

Moreover, research indicates that individuals with intellectual and developmental disabilities (IDD) utilize emergency services more frequently. For example, in Louisiana, Medicaid participants with IDD had a higher rate of lower-level acuity ED visits compared to other participants, even after controlling for factors like age, race, ethnicity, and gender.<sup>28</sup>

These findings underscore the importance of addressing the healthcare needs of individuals with disabilities, particularly older adults.

#### **Socioeconomic Factors**

Beyond individual health conditions and disability status, broader socioeconomic factors have a well-documented influence

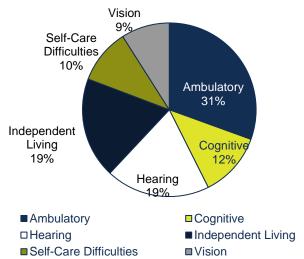


Figure 3: Florida Disability Distribution of Population Aged 65 and Older

on the utilization of EMS. Communities characterized by limited financial resources, lower educational attainment, and constrained access to healthcare infrastructure often experience disproportionately high EMS demand. According to a nationwide study published by *BMC Public Health* in 2019, neighborhoods with lower socioeconomic status were associated with increased rates of emergency service use, particularly for time-sensitive conditions such as cardiac events and respiratory distress. The study also found that lower-income communities had higher rates of ambulance transport, underscoring systemic barriers to timely and preventive care.<sup>29</sup>

Additional research across U.S. counties (including Florida) has shown that EMS demand correlates with indicators such as unemployment, uninsured rates, teen birth rates, and overall community health status, particularly in areas experiencing persistent underinvestment.<sup>30</sup> In Florida, similar patterns emerge: an analysis of pediatric asthma cases in Lee County revealed that EMS incidents were most concentrated in neighborhoods with greater socioeconomic challenges—suggesting a strong link between limited access to routine care and reliance on emergency response for chronic conditions. Moreover, rural regions in Florida face elevated barriers, with a poverty rate of 19.8% compared to 13.9% in urban areas.<sup>31</sup> These conditions exacerbate EMS utilization pressures and reinforce the need for alternate interventions.

Studies of EMS call volume have demonstrated that regions with greater socioeconomic challenges, including rural counties with higher rates of uninsurance and underemployment, report higher EMS events, often for conditions that might otherwise be manageable in outpatient settings. These findings suggest that EMS utilization is not solely a function of clinical need but is also shaped by a community's environment, including its access to preventive care, transportation, and health education.

In 2023, approximately 8.9% of families and 12.6% of individuals in Florida were living below the poverty level<sup>32</sup>, reflecting ongoing economic challenges for many households. These conditions have direct implications for healthcare access and EMS utilization. Notably, 54.7% of emergency medical services in the state were financed through public insurance programs, with Medicare covering 38.2% and Medicaid accounting for 16.5% of utilization. This reliance on public coverage highlights the essential role of





government-funded insurance in ensuring access to emergency care—particularly for older adults, individuals with disabilities, and low-income populations who may otherwise face significant barriers to receiving timely medical attention.

#### **Geographic Variations in EMS Utilization**

Regional variations in EMS utilization across Florida reflect differences in population demographics, healthcare resource availability, geography, and EMS system design. Rural counties face distinct challenges, including longer average response times, fewer alternative care destinations, and greater reliance on transport to emergency departments due to limited local healthcare infrastructure. In rural areas average response times frequently exceed 15 minutes or more. Urban counties, by contrast, benefit from greater healthcare access and system resources, maintaining EMS response averages between approximately 7–9 minutes.

Seasonal surges in tourism, particularly in destinations like Orlando, Volusia County, and Florida's coastal regions, further strain EMS systems during peak periods. Similarly, recurring extreme weather events, including hurricanes and tropical storms, create sharp, sometimes sustained increases in EMS demand across multiple counties. These dynamics highlight the need for adaptive resource allocation, surge staffing models, and strong regional coordination to maintain timely emergency care access.

The following analysis outlines key seasonal drivers, 2024 county-specific call volume trends, and response time considerations for select counties across Florida, offering a snapshot of the operational challenges and patterns shaping EMS service delivery throughout the state.

- Leon County: Leon County, home to Florida State University (FSU) and Florida A&M University (FAMU) among other colleges, experiences a notable increase in EMS call volume during the fall semester, particularly aligned with football season. Each home game can draw between 70,000–80,000 attendees to Doak Campbell Stadium<sup>33</sup>, contributing to higher rates of alcohol-related incidents, vehicular accidents, and traumatic injuries associated with large crowd gatherings. Additionally, the influx of over 45,000 students annually during August move-in intensifies the transient population density, temporarily straining EMS resources.<sup>34</sup> In total, Leon County responds to over 83,000 EMS calls annually, making it one of the highest call volume counties in the Panhandle region. Urban response times in Tallahassee average around 8–10 minutes, though outer areas of the county can see longer waits to exceed 20 minutes.
- Volusia County: EMS demand in Volusia County spikes sharply during spring and early summer, driven by large-scale tourism events. Daytona Bike Week attracts over 500,000 visitors annually, resulting in increased motorcycle trauma cases, intoxication-related emergencies, and dehydration. Similarly, the Daytona 500 brings approximately 100,000 spectators to the region<sup>35</sup>, intensifying traffic accident rates. Spring Break tourism along Daytona Beach further elevates incidents related to drowning, heat-related illnesses, and drug and alcohol overdoses. Volusia handled approximately 108,000 EMS incidents in 2024, and while urban centers like Daytona Beach maintain 8–10 minute response averages, rural parts of the county can face longer response times, particularly during large-scale event weekends when traffic congestion further impacts EMS access.
- **Pinellas County:** Pinellas County sees a significant rise in EMS events during the winter months (November through March), correlating with the arrival of over 1 million seasonal residents ("snowbirds") and tourists.<sup>36</sup> The older demographic skews EMS case types toward cardiac arrests, respiratory distress, and geriatric falls. Additionally, Clearwater Beach experiences peak tourism





during Spring Break, with associated increases in alcohol-related traumas and minor injuries in high-traffic recreational areas.<sup>37</sup> Pinellas County responded to 375,344 EMS calls in 2024, among the highest call volumes statewide. Response times remain strong even with seasonal surges, with 90% of calls receiving EMS arrival within 7.5 minutes.

- Hernando County: Although Hernando County's population base is smaller than neighboring coastal counties, it experiences winter and early spring surges in EMS activity, driven by the seasonal influx of retirees. Approximately 30% of Hernando's residents are aged 65 or older<sup>38</sup>, a proportion that rises even higher seasonally. EMS call patterns during these periods frequently involve management of chronic conditions (e.g., COPD exacerbations, cardiac events), fall injuries, and medical transport requests. Recreational injuries also increase due to tourism at Weeki Wachee Springs.<sup>39</sup> Hernando handled approximately 28,000 calls annually, with most urban areas maintaining reasonable response times; however, some rural sections of the county, particularly near conservation lands, can experience delays exceeding 15 minutes depending on EMS unit availability. These delays are often compounded by extended offload times at crowded emergency departments, where backed-up EDs prevent EMS crews from transferring patients promptly and returning to service.
- **Escambia County:** In Escambia County, EMS call volume escalates during the summer, largely due to tourism in Pensacola Beach. Events like the Blue Angels Pensacola Beach Air Show attract over 100,000 attendees<sup>40</sup>, often resulting in rapid surges in EMS incidents tied to heat exhaustion, crowd-related minor trauma, and intoxication. Furthermore, hurricane season (June–November) presents acute EMS system stress, with spikes in storm-related injuries, displacement health needs, and disaster response deployments.<sup>41</sup> Escambia County logged 49,299 calls in 2024, and within Pensacola city limits, EMS response times average 8–10 minutes; however, more remote parts of the county can experience extended response windows, particularly during major weather events.
- Orange County: Orange County's EMS operations are significantly influenced by the region's concentration of major tourist attractions, including Walt Disney World and Universal Orlando. With over 74 million visitors annually, 42 seasonal peaks (during summer, winter holidays, and spring break) drive increases in heat-related emergencies, pediatric incidents, and recreational injuries. Language barriers, unfamiliarity with local emergency protocols, and varying health insurance statuses among international visitors introduce additional operational complexities for EMS teams. In 2024, Orange County responded to 252,054 EMS calls. Response times are generally strong, averaging under 8 minutes in urban areas, but tourist congestion and surrounding semi-rural pockets, like East Orange County, can introduce variability, especially during peak travel seasons.

#### **Clinical Presentations and EMS Response**

EMS in Florida serves as a critical access point for patients experiencing acute medical needs, but the nature of EMS calls reveals a complex spectrum of clinical presentations. Analysis of EMSTARS data shows that while many calls involve time-sensitive emergencies, a substantial portion are related to chronic, low-acuity, or behavioral health conditions—cases that may not require traditional ED transport and could be better managed through alternative care pathways.

The data further illustrates this complexity. The largest share of EMS impressions falls under nonspecific categories, including abnormal clinical and laboratory findings and signs not elsewhere classified, highlighting the diagnostic uncertainty often encountered in the prehospital environment. Infectious and parasitic diseases and injury-related conditions constitute significant portions of EMS workload, reflecting a mix of acute medical and trauma-related presentations. Beyond these, EMS providers regularly manage a broad range of chronic and subacute conditions, including those related to health status and healthcare





access, diseases of the nervous system, circulatory disorders, and mental and behavioral health conditions. This clinical distribution underscores the growing opportunity for EMS systems to adopt expanded care models. Research suggests that treatment-in-place protocols such as on-scene medical management, telehealth consults, and selective non-transport with outpatient referrals could be applied for many low-acuity, infectious, and chronic disease presentations. Similarly, structured alternate destination programs could redirect clinically appropriate patients to urgent care centers, behavioral health facilities, or primary care practices, reducing unnecessary ED utilization and optimizing system resources.

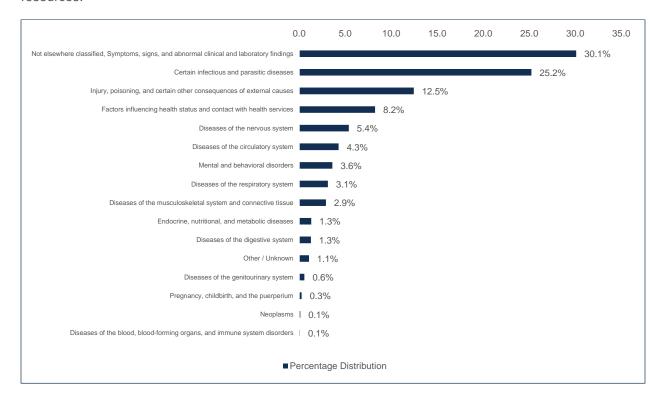


Figure 4 Clinical Presentation Based on Provider's Primary Impression (eSituation.11)

Given the significant proportion of EMS calls attributed to mental and behavioral health disorders, this area represents a particularly critical opportunity for innovation. Addressing behavioral health needs through specialized crisis response teams, expanded telepsychiatry support, and direct transport to psychiatric stabilization facilities rather than hospital EDs could significantly improve outcomes for this vulnerable population while alleviating pressure on emergency departments.

Florida faces significant challenges when it comes to mental health and psychological conditions. Nearly 3 million adults, or about 17.49% of the adult population, experience mental illness, and the state ranks 45th nationally in access to care. Over 58% of adults with mental illness in Florida do not receive treatment, and among youth, 15.5% have experienced at least one major depressive episode, with nearly two-thirds not receiving mental health services.<sup>43</sup>

EMSTARS data on these EMS responses captures the growing demand for behavioral health-related interventions. Traditionally, EMS responses often result in transport to hospital emergency departments, but EDs are not always the most appropriate setting for individuals in psychiatric crisis, which has led Florida to begin developing alternative care and transport models.





One example is the Mobile Integrated Healthcare–Community Paramedicine (MIH-CP) programs, such as those in Manatee County, where EMS personnel are deployed to manage patients in their homes, offering chronic disease management and connecting individuals to mental health services in the community.<sup>44</sup> For youth, Community Action Treatment (CAT) teams offer a multidisciplinary approach to stabilize behavioral health issues at home and prevent unnecessary hospitalizations.<sup>45</sup> In the Tampa Bay region, TransCare, operated by the Crisis Center of Tampa Bay, provides dedicated psychiatric transport services to mental health facilities instead of defaulting to emergency departments.<sup>46</sup>

These evolving programs show that Florida is actively exploring alternatives to traditional EMS-to-ED models for mental health crises. By expanding specialized response teams and transportation options, the state seeks to deliver more appropriate care, reduce emergency department overcrowding, and improve long-term outcomes for people experiencing behavioral health emergencies.

#### Non-Emergent and Chronic Care Needs in Florida

EMS in Florida are increasingly utilized for non-emergent, chronic, and preventable health conditions leading to preventable hospitalizations. Ambulatory Care Sensitive Conditions (ACSCs) are health issues that can often be effectively managed with timely outpatient care, thereby preventing the need for hospitalization. High hospitalization rates for these conditions often indicate gaps in access to or quality of primary healthcare services. Nationally, ACSCs contribute to hospital admissions. A study analyzing the 2023 U.S. National Inpatient Sample found that pneumonia, diabetes, and congestive heart disease were among the most common ACSCs leading to hospitalizations.<sup>47</sup> In Florida, ACSC-related hospitalizations have consistently mirrored or exceeded these national trends, underscoring ongoing challenges in managing chronic conditions through preventive and community-based care. As shown in the table below, while reduction in overall ACS cases was noted since 2014, hospitalizations for such conditions persist and continue to drive ED and EMS utilization for avoidable emergencies.

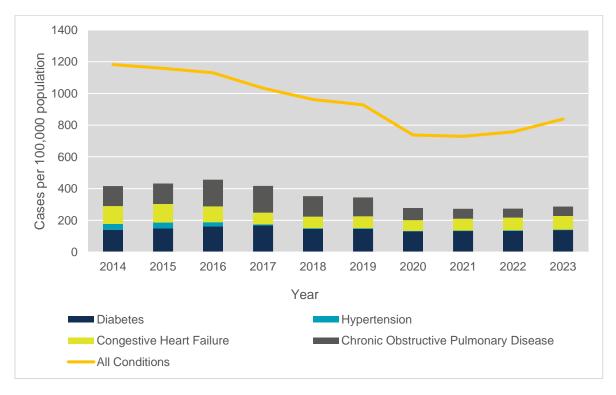


Figure 5 Rate of Ambulatory Care Sensitive Hospitalizations in Florida





Many of the EMS encounters resulting from these conditions could be avoided altogether with earlier outpatient intervention. EMS agencies are increasingly identifying cases as "primary care treatable within 12 hours"—meaning the patient's condition, while concerning enough to warrant a 9-1-1 call, could have been safely addressed in a primary care setting within a 12-hour window rather than requiring ED care. This concept helps capture the large share of EMS responses that fall into the gray area between urgent and emergent, often involving manageable exacerbations of chronic illness or low-acuity symptoms that reflect unmet outpatient needs. This contributes to unnecessary ED visits and strains emergency resources. Diabetic emergencies accounted for approximately 1.4% of EMS dispatches in Florida EMSTARS dataset. However, research shows that in diabetic emergencies, particularly hypoglycemia, only about 46.4% of the cases result in transport to emergency departments. Similarly, respiratory distress comprises a substantial portion of EMS events, with studies indicating that 6–12% of EMS transports involve patients experiencing respiratory distress. These cases often necessitate transport due to the severity of conditions such as COPD and asthma exacerbations. However, prehospital interventions like oxygen therapy and bronchodilators are commonly administered, which can stabilize patients and, in some instances, allow for alternative care pathways.

Notably, Florida counties like Pasco and Walton have demonstrated the potential of Mobile Integrated Health (MIH) programs to reduce repeat EMS and ED use, with reports of ED visits reduction by 58% and inpatient stays by 60%.

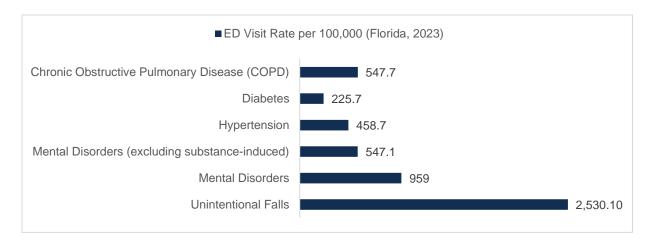


Figure 6 Chronic diseases resulting in emergency department utilization in Florida

Figure 6 shows the ED visit rate per 100,000 population in Florida for common chronic and low acuity conditions. Escambia County provides a notable case study in low-acuity EMS utilization, reporting that a significant portion of its 216,000+ calls in 2023 were for non-emergent issues. These current ED transports could be safely managed at alternative destinations, including urgent care centers, primary care offices, detoxification centers, or behavioral health clinics.<sup>49</sup> Many EMS responses for suspected drug overdoses, particularly those involving opioids, represent prime opportunities for this type of diversion. As illustrated in the Figure 7 below, Florida continues to experience persistently high EMS call volumes related to drug and opioid-involved overdoses, with over 100,000 responses recorded in 2023.<sup>27</sup> A meaningful portion of these cases, when clinically stable after initial assessment, may be more appropriately managed through direct transport to detox centers or crisis stabilization units rather than hospital EDs.



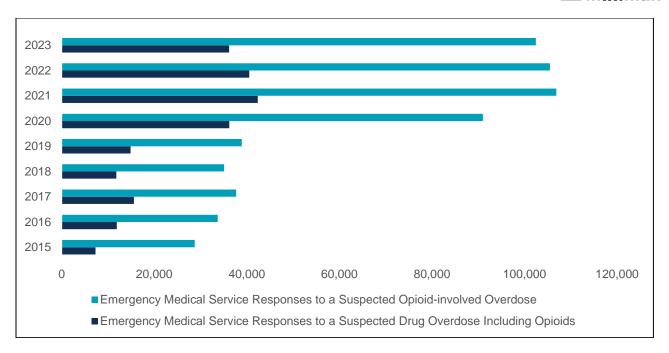


Figure 7 Total Florida Emergency Medical Service Responses to Drug Overdoses Count

Nationally, the push to shift EMS transport away from overburdened EDs is growing, but implementation remains limited. According to a 2021 environmental scan by the Association of State and Territorial Health Officials (ASTHO), only 5.7% of nationally surveyed EMS agencies reported receiving reimbursement for transporting overdose patients to alternative destinations. Yet among those that do, 65% reported a positive impact, and nearly 73% of unreimbursed agencies expressed strong or moderate interest in adopting such policies.<sup>50</sup> A pilot study published in the Journal of Substance Abuse Treatment demonstrated that EMS-initiated medication administration and direct linkage to outpatient care can effectively reduce ED dependence and improve recovery outcomes.<sup>51</sup>

Launched by Governor DeSantis in 2022, Florida's Coordinated Opioid Recovery (CORE) Network was the first statewide system of its kind in the U.S., designed to address substance use, including opioids, alcohol, fentanyl, and prescription drugs through long-term, comprehensive care. Unlike traditional programs that focus solely on overdose reversal, CORE integrated first responders, emergency departments, and treatment providers to deliver a sustained recovery pathway. This model reduced repeat overdoses and improved long-term outcomes by addressing the full continuum of care.

Other states are beginning to trend towards adoption of these alternate models of care. Delaware passed House Bill 160 to formalize its 988 Behavioral Health Crisis Intervention Services, which included the development of 24/7 stabilization centers operated by community-based providers. These facilities are designed as alternative treatment destinations for individuals in behavioral or substance use crises, including those revived from overdoses by EMS, offering immediate care and facilitating transitions into long-term treatment.

Given the prevalent low-acuity cases presenting EMS utilization, implementing protocols for treatment in place and transport to alternate destinations offer a promising strategy to improve system efficiency and patient outcomes. Treat-in-place models, where EMS professionals assess and manage low-acuity patients at the scene, often with the support of telehealth physicians, have been shown to reduce unnecessary hospital visits and lower healthcare costs without compromising safety.<sup>53</sup> Alternate destination models, in which EMS transports eligible patients to urgent care, mental health facilities, or other non-ED settings, have demonstrated similar benefits.<sup>22</sup> Florida's existing infrastructure, including





MRTs and MIH programs, provides a foundation on which to build. The practicality of these models becomes even more evident when examining the varying potential for alternative destination transport across common EMS clinical presentations, as illustrated in the chart below.

#### Impact of EMS Utilization on Florida's Healthcare System

The extensive use of EMS in Florida impacts the state's healthcare system, affecting ED capacity, costs, and patient outcomes. Nationally, EMS-transported patients account for about 18% of all ED visits and are 2.3 times more likely to be admitted than walk-in patients. Analysis of ED dispositions from National EMS Information System (NEMSIS) Region 4, which accounts for over 350,000 cases reveals that of all the EMS-transported patients 24% are admitted to the hospital, 15% are treated and released, suggesting potential for alternative care pathways. The high admission rate indicates that EMS is often utilized for more severe cases. However, 1% of patients leaving without treatment represents an area for system improvement.

ED DISPOSITION PERCENTAGE		AVERAGE ANNUAL VOLUME	POTENTIAL ALTERNATIVE PATHWAY
Transferred	33%	117,401	Limited alternatives
Observation	27%	94,658	Many suitable for alternative destinations
Admitted to Hospital	24%	83,705	Potential for direct transport to appropriate facility
Treated and Released	15%	53,818	High potential for alternative management
Left Without Treatment	1%	2,983	Many suitable for alternative management
Other/Unknown	1%	2,104	Varies

Table 1 Emergency Department Disposition Volume and Potential Alternate Pathways

The financial implications of current EMS utilization patterns are substantial. The analysis (Section 4) shows that with an average cost of \$2,133 per EMS transport and ED visit, there's potential for significant cost savings. Alternative destination transport for low-acuity cases could save over \$520 million annually.

The high volume of EMS calls, particularly for non-emergency situations, strains system resources. This affects ambulance availability and can increase response times for true emergencies, especially in rural areas with limited resources.

Patient outcomes present a mixed picture: while the system demonstrates strengths in rapid response to true emergencies and appropriate utilization for severe cases, there are areas for improvement. Patients with low-acuity conditions may experience long wait times in EDs and receive care in higher-acuity





settings than necessary. Frequent EMS users, particularly those with chronic conditions, may not receive optimal long-term care management through repeated ED visits.

The high volume of EMS transports contributes to system-wide challenges, including ED overcrowding (which has been associated with increased mortality rate by up to 5.4%)<sup>54</sup>, hospital capacity issues, and ambulance offload delays. These factors can lead to longer waiting times for all patients and reduced EMS system capacity.

Population growth trends indicate continued increases in EMS demand. The aging demographic profile is expected to further influence EMS event patterns and service utilization. The Florida Office of Economic and Demographic Research projections suggest an average annual growth rate of 1.1% from 2025 through 2033, as demonstrated in the figure below.<sup>55</sup>

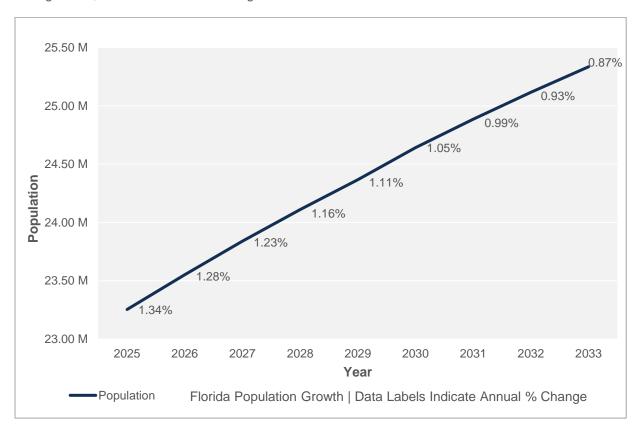


Figure 8 Population Growth Projections in Florida from 2025 to 2033





#### **Section Summary**

- **EMS Volume:** Florida's EMS system recorded approximately 5.12 million ambulance events in 2023, according to state-level EMSTARS data. These represent a substantial component of the healthcare delivery system.
- **Transport Rate:** Approximately 57.4% of events resulted in transport to EDs, while the remainder involved on-scene evaluation, treatment without transport, or other dispositions.
- Non-Transport Prevalence: A review of utilization patterns indicates that a significant portion of EMS responses are associated with non-transport outcomes. Despite this, operational and funding models across the state continue to prioritize hospital transport as the primary service endpoint. This configuration influences EMS resource distribution and care delivery approaches.
- Demographic Influence: Demographic characteristics appear to impact EMS utilization rates.
  - Older adults, particularly those aged 65 years and older, account for a higher share of EMS events.
  - Socioeconomic status also correlates with service use patterns, with higher rates observed in areas with lower median household incomes.
  - Geographic factors further differentiate utilization trends; rural areas generally experience longer response times, reduced EMS unit availability, and higher transport rates compared to urban centers.
- Common Clinical Presentations: EMS events encompass a wide range of conditions. A considerable number of responses involve ACSCs, such as asthma exacerbations, congestive heart failure episodes, and diabetes-related complications. Behavioral health emergencies, including psychiatric crises and substance use-related events, are also frequently documented. In 2023, EMS agencies in Florida responded to over 100,000 suspected drug overdose incidents.
- Population Trends: Population growth in Florida is projected to continue rising, contributing to
  increased EMS demand. An aging population is also expected to drive shifts in EMS utilization
  patterns. According to the Florida Office of Economic and Demographic Research, the state's
  population is anticipated to grow at an average annual rate of 1.1% between 2025 and 2033.
- Systemic Impacts: Overall EMS activity has downstream effects on the healthcare system.
  - ED crowding, extended ambulance turnaround times, and patient boarding events are associated with high volumes of EMS-facilitated ED visits.
  - Many transported patients are subsequently treated and released, suggesting that a subset of EMS responses involve conditions that might be clinically manageable in outpatient or alternative care settings.
  - Use of alternative destinations and treatment on scene can also add available ambulance hours back into the system, improving response capacity and reducing EMS response times.





### 4.2 Assessment of Insurance Coverage

4.2.1 (b): To what extent is the insurance coverage generally available.

#### **Key Findings:**

- ➤ Out-of-Network Ambulance Transport: In 2022, 59.4% of ground ambulance transport involved providers not contracted with the patient's insurer, increasing exposure to balance billing.
- ➤ Uninsured Rate: In 2023, 10.7% of Florida residents lacked health insurance, compared to 7.9% nationally.
- > Transport-Based EMS Reimbursement: Medicare and Medicaid reimburse ambulance services primarily when transport to an approved facility occurs; reimbursement for treatment without transport is generally unavailable.
- Medicaid Reimbursement Rates: Florida Medicaid reimburses ambulance services at approximately 38% of Medicare rates.
- Private Insurance Coverage Variability: EMS benefit design varies across commercial insurance plans, with coverage gaps related to high-deductible plans and network restrictions.
- Urban and Rural Transport Distance Differences: Average EMS transport distance in urban counties is approximately 6.5 miles; rural counties report average distances exceeding 11 miles per transport.
- **EMS Funding Structure by Geography:** Rural EMS agencies derive approximately 68% of operating revenue from billing, compared to 51% for urban agencies.
- Development and Pilot Adoption of Alternative EMS Models: Mobile Integrated Healthcare (MIH) and community paramedicine programs in selected Florida counties have reduced emergency department utilization; pilot initiatives with private insurers have supported limited reimbursement for treatment-in-place and alternative destination transports.

As Florida considers expanding insurance coverage for innovative EMS delivery models, it is important to assess how these services are currently supported across different types of insurance. Medicare, Medicaid, ACA marketplace plans, Medicare Advantage and commercial insurance all vary in their coverage of EMS services, particularly when care is delivered outside of traditional hospital transport. The analysis includes various types of insurance, geographic and demographic factors, and identifies challenges and opportunities in the EMS insurance landscape. It reviews coverage variations across different payer types, including private insurers, Medicare, Medicaid, and the uninsured. Additionally, it examines how recent insurance trends, along with geographic and demographic factors, impact EMS utilization and reimbursement patterns. While Florida's overall insurance distribution aligns with national trends, the state displays distinct characteristics regarding policy types, coverage limits, and out-of-network billing practices for EMS services.





#### **Healthcare Infrastructure**

In 2022, an estimated 59.4% of ground ambulance transports nationally involved out-of-network providers, exposing patients to the risk of surprise medical bills. Even when services are in-network, patients may face significant out-of-pocket costs due to high deductibles or coinsurance. For uninsured individuals, the financial burden is often even greater, as they are typically billed the full charge for services without the benefit of negotiated insurance rates. Out-of-network ambulance providers generally receive only partial reimbursement from insurers and frequently balance bill patients for the remaining amount. Unlike in-network providers, out-of-network ambulance services often do not receive full reimbursement for their charges from insurers. Instead, health plans typically cover only a portion of the billed amount, leaving patients responsible for the balance, a practice known as balance billing. Because ground ambulance services are excluded from the federal No Surprises Act, patients transported by out-of-network providers can face hundreds or even thousands of dollars in unexpected costs.

#### **Overview of Insurance Distribution**

Understanding the distribution of health insurance coverage is essential for assessing the financial sustainability and accessibility of healthcare services, including EMS. Table 2 provides a comparative overview of health insurance coverage by payer type in Florida versus national averages, revealing both alignment and key divergences such as a higher uninsured rate and greater reliance on non-group private insurance. Florida's insurance distribution largely mirrors national trends as demonstrated below:

Coverage type	U.S. population percentage	Florida population percentage	
Total Private Insurance	54.80%	51.60%	
Employer-Sponsored Insurance Non-Group	48.60% 6.20%	40.50% 11.10%	
Medicare	14.7%	18.10%	
Medicaid	21.2%	17.70%	
Military / VA / TRICARE	1.3%	1.9%	
Uninsured	7.90%	10.70%	

Table 2 Health Insurance Coverage by Payer Type (2023): National vs. Florida

To better understand the insurance coverage landscape for EMS, it is essential to examine how different service models, emergency and non-emergency transport, on-scene treatment without transport, and transport to alternative destinations, are currently structured and reimbursed. These variations in coverage influence how EMS services are utilized and reimbursed. As Florida explores innovations in EMS delivery, it becomes critical to examine the current coverage landscape. Table 3 outlines the extent to which traditional and emerging EMS models are supported by government-funded and private payers.



EMS model Coverage Landscape		Coverage Gaps & Considerations
Traditional Emergency & Non-Emergency Transport	Emergency transport is widely covered; non-emergency transport is inconsistently covered across payers.	High out-of-pocket costs, inconsistent coverage, reliance on ER transport. Opportunity: Standardize coverage, expand alternative destination options, align billing reforms.
On-Scene Treat- ment Without Transport	Rarely reimbursed across Medicare, Medicaid, ACA, and commercial plans.	Disincentivizes EMS providers, confuses patients. Opportunity: Create billing codes, raise public awareness.
Transport to Alternative Destinations	Coverage mostly limited to hospital transport. Alternative sites (e.g., urgent care) are often excluded.	Restricts EMS flexibility, inconsistent definitions, outdated billing systems. Opportunity: Expand covered destinations, educate EMS and enrollees.

Table 3 Current Coverage Landscape for Traditional and Proposed EMS Services

# National and Florida Coverage: EMS Coverage Under Government Operated Insurance (Medicare and Medicaid)

Medicare Part B classifies ambulance services as a transportation benefit, only reimbursing when a patient is transported to an approved facility such as a hospital, critical access hospital, or skilled nursing facility. If no transport occurs, Original Medicare offers no reimbursement – in fact, Medicare's policy manual explicitly states that without a transport, there is no payable service. On-scene care or alternate destination transport is not reimbursed, except for certain pandemic-era exceptions. Florida Medicare beneficiaries largely follow these federal rules, including the 20% coinsurance after the Part B deductible. While Medicare Advantage plans are permitted to offer supplemental benefits beyond what Original Medicare provides, cost-sharing structures vary widely. It often replaces coinsurance with fixed copays or reduces out-of-pocket costs. However, despite this flexibility, coverage for EMS innovations such as onscene treatment or transport to alternative destinations remains inconsistent across MA plans, limiting system-wide adoption and reimbursement predictability.

Similarly, Medicaid, the joint federal and state program, plays a significant role in financing EMS across Florida. By federal mandate, Florida Medicaid must cover emergency medical transportation deemed necessary to stabilize a patient's condition. This includes ambulance services to EDs and other qualifying facilities for time-sensitive, life-threatening conditions.<sup>57</sup> To qualify for emergency ambulance transportation under Florida Medicaid, the patient must be experiencing an "emergency medical condition," typically defined as the sudden onset of a medical issue that places the individual's health in serious jeopardy. While federal law requires states to ensure access to medical transportation, the scope and reimbursement of EMS under Florida Medicaid remain constrained.

Between 2019 and 2023, Medicaid EMS utilization in Florida increased by approximately 18%, signaling a rising reliance on EMS by low-income and underserved populations. This increased use is partly attributed to limited access to routine healthcare, making EMS a de facto entry point into the healthcare system for many Medicaid enrollees.

Despite this growing demand, Florida Medicaid's reimbursement for EMS services remains below that of other payers. Medicare reimburses substantially more for equivalent services, placing Florida Medicaid reimbursement at approximately 38% of Medicare's rates. This under-reimbursement presents a challenge for EMS agencies, many of which struggle to recover the actual cost of care delivery. To help address the shortfall between actual service costs and low Medicaid reimbursement, Florida has adopted supplemental payment models like the Public Emergency Medical Transportation (PEMT) program. While limited in scope (primarily benefiting publicly owned EMS providers), these programs reflect a broader



recognition that traditional Medicaid payments are insufficient to sustain EMS operations. As utilization grows and EMS demands evolve, these efforts underscore the need for a more comprehensive reimbursement model. Such models have the potential to reduce overall healthcare costs, ensure EMS agencies are reimbursed appropriately for the care they deliver, and improve access to timely, appropriate care for Medicaid beneficiaries. Table 4 below highlights the current structure, coverage challenges and implementation considerations for Medicare and Medicaid coverage of the proposed innovative EMS model.

Coverage Current Structure Type		Coverage Challenges	Implementation Considerations	
Medicare	Covers approximately 18.1% of Floridians (2023).  Divided into Parts A and B.	Strict documentation requirements for medical necessity for transport reimbursement	Adapting to newer EMS models would require statutory changes and updates to Medicare billing systems.	
	Part B covers medically necessary ambulance transport to hospitals and skilled nursing facilities.	Limited benefit flexibility for alternative destinations	Implementing reimbursement for on-scene treatment and alternative destinations necessitates the development of	
	Premiums for Part B average \$185/month (2025). Beneficiaries typically pay 20%	No payment for non- transport treatment services.	new billing codes and clinical criteria.	
	coinsurance after meeting a \$240 deductible.  No network requirements,	Rising ambulance costs and out-of-network utilization in Florida	Public education is essential to ensure appropriate utilization and reduce surprise billing risks.	
	offering national coverage, but does not typically reimburse medically directed on-scene care or alternative destination transports.	increase financial risk for beneficiaries.	Financial modeling is needed to estimate cost savings from reduced ED overutilization. (Section 4 of this report)	
Medicaid	Covers about 17.7% of Floridians (2023). <sup>58</sup> State-administered program	Inconsistent reimbursement and service availability across counties	The implementation of expanded EMS services requires federal guidance and coordinated state action.	
	with federally mandated minimums.  In Florida, it covers emergency ambulance transport and limited non-emergency transport with prior authorization.	Low provider participation due to below-market reimbursement	States must update claims systems and fee schedules. Close collaboration with	
		Minimal coverage for on- scene care and alternative destinations.	managed care organizations is essential for network inclusion of EMS alternatives.	
	Most Medicaid enrollees in Florida are in managed care (Medicaid Managed Medical Assistance). No premium for most beneficiaries; limited flexibility due to statedetermined provider networks.	High ED use due to lack of alternative EMS coverage and patient awareness.	Public education campaigns are critical to inform Medicaid enrollees about when and how EMS services are covered. Aligning incentives with providers will support sustainability.	

Table 4 EMS Coverage Structures, Challenges, and Implementation Considerations Across Government-Operated Insurance (Medicare and Medicaid)



National and Florida Coverage: EMS Coverage Under Commercial/Private Insurance (Employer-sponsored, individual, ACA marketplace):

Commercial insurance comprising employer-sponsored plans, individual market coverage, and ACA marketplace plans represent a large and diverse share of Florida's insured population. While all plan types typically cover emergency ambulance transport, the details of EMS benefits vary widely depending on the plan's structure (e.g., HMO vs. PPO) and cost-sharing tier (e.g., Bronze vs. Platinum in the ACA market-place). These variations impact whether EMS providers are reimbursed for services like on-scene treatment or transport to alternative destinations, such as urgent care centers or behavioral health facilities.

Plan structure plays a particularly important role in shaping EMS access. For example, PPOs offer broader provider flexibility and are more capable of adapting to alternate transport models, but patients still face high coinsurance rates after meeting substantial deductibles. HMOs, which are more restrictive and network-based, often lack contracts with local EMS providers, increasing the likelihood of out-of-network billing—even for emergency care. High-Deductible Health Plans (HDHPs) pose additional barriers, as ambulance services are usually subject to the full deductible, leading to cost-related care avoidance in some cases.

Plan Type	Current Structure	Coverage Challenges	Implementation Considerations
HMO (Health Maintenance Organization)	Lower premiums, in-network provider requirements, specialist referrals needed. Emergency transport covered, but out-of-network ambulance services often occur due to limited EMS provider contracts.	Many HMOs, including Florida Blue, have few in- network contracts with EMS providers for emergency services. Patients are at high risk of balance billing after ambulance transport.	Network expansion required to include urgent care centers, mental health facilities, and PCPs accepting EMS transport. This will require notable administrative loads.
PPO (Preferred Provider Organization)	Greater provider flexibility, including out-of-network options. Emergency ambulance services often have consistent coinsurance rates regardless of network, but service charges vary.	Typical coinsurance rates of 20–30% after deductible apply, resulting in high patient financial liability. Ambulance charges vary widely, even when covered.	More adaptable to include alternative destinations. Benefits administration systems must be updated to process new EMS service types.
EPO (Exclusive Provider Organization)	Network-based structure without referrals. Emergency ambulance coverage is typically allowed regardless of the network. Non- emergency ambulance coverage may be limited.	Often excludes non- emergency ambulance coverage. Alternative destination transport may not meet emergency criteria, leading to denial risk.	Clinical guidelines are essential to define emergency vs. non-emergency transport eligible for alternate destinations and avoid claim issues.
POS (Point of Service)	Requires PCP coordination, allows out-of-network care at a higher cost. Emergency transport is generally covered regardless of network.	PCP referral systems are poorly aligned with EMS operations, complicating patient transitions to follow-up care after EMS transport to alternate sites.	Leverage PCP infrastructure to support coordinated care and follow-up after alternate destination transports, improving integration and value.





HDHP (High-Deductible Health Plans) Lower premiums, high deductibles, HSA compatible. Ambulance services are subject to deductible and coinsurance.

High out-of-pocket costs lead to financial barriers, possible care avoidance or unsafe alternatives. Structure EMS coverage as preventive service exempt from deductible to improve access without altering the core design of HDHPs.

# Table 5 EMS Coverage Structures, Challenges, and Implementation Considerations Across Private Insurance Plan Types

The Affordable Care Act (ACA) marketplace plans, covering over 3 million Floridians, serve as a crucial baseline for evaluating EMS benefit design. However, the tier structure in commercial insurance introduces significant complexity to EMS coverage and innovation support. <sup>59</sup> Lower-tier Bronze and Silver plans prioritize affordability with lower premiums but impose higher cost-sharing, often excluding non-transport EMS services. <sup>60</sup> In contrast, Gold and Platinum plans offer more robust EMS benefits, including predictable co-pays and some coverage for on-scene care and alternate destinations. However, these higher-tier plans have higher premiums and account for less than 20% of marketplace enrollments nationally, limiting the scalability of enhanced EMS benefits. <sup>61</sup> While some private plans, including select PPOs, are beginning to cover expanded EMS services, the lack of standardization across tiers and plan types creates ongoing coverage gaps. <sup>62</sup>

Similarly, while some private plans including Medicare Advantage (MA) and select PPOs—are beginning to cover expanded EMS services, challenges remain. In Florida, Medicare Advantage enrollment surpassed 60% of all Medicare beneficiaries in 2024. MA plans offer flexibility to include supplemental benefits like transportation to non-hospital destinations and in-home care, but coverage varies widely between plans. Many MA plans require prior authorization for non-emergency EMS services, and there is no uniform standard for supporting treatment-in-place or alternate destinations. This inconsistency complicates provider participation and hinders broader adoption of innovative EMS models.

#### **Geographic Variations in Utilization**

#### **Rural and Urban Insurance Coverage Differences**

EMS coverage in Florida varies between urban and rural areas, affecting both the availability and effectiveness of insurance for ambulance transport. While Florida is predominantly urban, 9.1% of its 23 million residents live in rural counties, which cover over a third of the state's land area<sup>63,64</sup>. These geographic variations create distinct challenges in EMS delivery and insurance coverage.

#### **Urban counties**

Urban counties like Miami-Dade, Broward, Orange, and Pinellas benefit from large populations, higher insurer competition, and denser hospital networks. This makes it more feasible for EMS providers to secure in-network agreements with major insurers. For example, Miami-Dade Fire Rescue regularly coordinates with hospitals and likely receives reimbursement from both Medicare and private insurers. Insured patients in Miami- Dade are more likely to encounter an EMS provider that's in-network, especially in cities with multiple public and private EMS services. However, network gaps persist. Even in Broward County, where the regional EMS system has standardized Basic Life Support (BLS) and Advanced Life Support (ALS) charges for easier contracting, some municipalities (e.g., Coral Springs) operate independently and maintain their own rate structures.

This inconsistency creates confusion and can still result in patients receiving out-of-network bills. Nevertheless, due to shorter transport distances (6.5 miles on average in Miami-Dade), urban patients gener-





ally face lower mileage charges and faster ambulance turnaround times, which helps contain costs. Urban insurance markets also tend to have higher ACA enrollment and better plan diversity, increasing the likelihood of EMS services being covered comprehensively. In addition, urban counties often subsidize EMS through local taxes, allowing agencies to absorb insurance shortfalls or unpaid patient balances—offering a form of financial protection that's rare in rural counties.

#### **Rural counties**

Lesser in-network agreements with commercial insurer: In more rural areas, such as Monroe, Bay, Liberty, and parts of Leon County, insurance coverage tends to be less generous and less effective in practice. Monroe County, for instance, has a significant Medicare population and is served by a single EMS provider that covers the length of the Keys. Due to the provider's low bargaining power and administrative capacity, it may not hold in-network agreements with many commercial insurers, increasing the likelihood of balance billing. Even patients with insurance can face large, uncovered expenses due to out-of-network EMS transport.

Private insurance offerings are often sparse in rural counties, with some regions having only one ACA marketplace insurer. Many residents opt for high-deductible plans, making them responsible for the full cost of ambulance services until their deductible is met.<sup>65</sup> This is particularly burdensome when base EMS charges and mileage rates are high. Bay County, for example, charges \$914 for basic life support and \$20.27 per mile, among the highest in the state.<sup>66</sup> Patients may end up owing hundreds (or even thousands) of dollars for a single emergency ride, especially if it exceeds the insurer's fixed reimbursement cap for ambulance transport.

Rural areas often experience longer transport distances due to fewer healthcare facilities. Monroe County averages 11.6 miles per transport, nearly double that of Miami-Dade, increasing patient charges and the risk of reimbursement shortfalls when insurers cap mileage payments. Some insurers may only reimburse for a fixed distance or amount per transport, leaving rural patients to pay the difference even if the longer trip was medically necessary.

**Inconsistency in coverage:** Residents within Florida frequently move between rural and urban zones and rural highways often serve as routes to urban destinations. A crash on a rural road may still require high-quality EMS, even if the nearest hospital is miles away. In these cases, allowing EMS providers to treat patients on-scene or transport them to appropriate alternative destinations can provide more timely and effective care. This approach ensures that patients receive the right level of attention without unnecessary delays caused by long-distance hospital transport.

Challenges in EMS sustainability: Insurance coverage does not just affect patients: it plays a vital role in EMS agency sustainability, especially in rural areas. Urban counties like Miami-Dade and Orange can supplement EMS budgets through local tax dollars and diversified funding streams. In contrast, rural EMS agencies rely heavily on transport reimbursements for survival. A state analysis in 2019 found that 68% of rural EMS funding in Florida comes from billing, compared to just 51% in urban areas. FWhen insurers deny claims or underpay, rural EMS providers may be forced to bill patients directly or absorb the losses, jeopardizing long-term viability. Additionally, EMS providers in rural areas face significant administrative hurdles in contracting with insurers. The cost of credentialing and maintaining network relationships is often prohibitive for small agencies, leading many to operate entirely out-of-network, especially if their call volume is low. This systemic under-contracting is a core reason rural counties report higher out-of-network billing rates, even for insured patients.

#### Impact of Lack of Coverage on Florida's Healthcare System

Nationally, EDs remain among the most expensive care sites, with average visits costing over \$3000 when ambulance transport and facility fees are included. Data consistently show that between 30% and 40% of EMS calls involve non-emergent or low-acuity conditions that could be appropriately managed through on-scene treatment or transport to lower-acuity settings such as urgent care clinics, mental health





facilities, or even through EMS-facilitated telehealth. Despite this, EMS agencies continue to operate under reimbursement rules that only allow payment when a patient is transported to a hospital.

Florida has initiated multiple innovative EMS delivery models such as Mobile Integrated Healthcare (MIH) programs in Polk, Manatee, and Pinellas Counties, and community paramedicine initiatives in Brevard and Sarasota Counties. In Manatee County, for example, the MIH program reduced unnecessary ED transport by connecting high-utilizer patients with paramedics for in-home care and follow-up visits. These programs have generally relied on grant funding, local hospital partnerships, or cost absorption by EMS agencies. EMS providers are enhancing care, but with these limited funding streams, scaling these programs is difficult.

Nationally, there are signs that private insurers are beginning to recognize the value of these non-traditional EMS interventions. While these policies are often implemented in response to state mandates or specific pilot programs rather than a broad nationwide initiative, national payers like UnitedHealthcare have revised their commercial medical policies to allow coverage for EMS treatment without transport when care is rendered at the scene and deemed medically necessary. <sup>69</sup> Some Blue Cross Blue Shield plans, including in Michigan, have implemented enhanced benefits within Medicare Advantage plans to reimburse EMS providers for treat-and-release care, using dedicated codes for treatment without transport. <sup>70</sup>

In Florida, insurers like Florida Blue and Aetna have partnered in pilot MIH initiatives targeting high-risk patients in managed care populations, indicating that select private payers are willing to reimburse alternate EMS models when aligned with value-based goals.<sup>71,72</sup>.

#### **Section Summary**

- **Insurance Coverage:** Insurance coverage for EMS in Florida is widely available for traditional emergency transport but remains limited for non-transport services and alternative destination models.
- **Non-transport Services:** Although most emergency transport is reimbursed when linked to hospital delivery, on-scene treatment and transport to non-hospital settings are rarely covered.
- **Payer Variability:** Private and public payer structures vary considerably and on-scene treatment and transport to non-hospital settings often go uncovered.
- **Geographical Impact:** Rural regions face additional financial and service delivery challenges due to longer transport distances and fewer contracted EMS providers.
- **Emerging Insurance Trends:** Emerging trends in private insurance and pilot programs demonstrate changing care delivery within the state.
- **Improved Care Delivery:** The growing acceptance of alternative EMS models, such as treatmentin-place and transport to non-traditional destinations, offer options for improving care delivery while potentially reducing costs.





4.2.2 (c): If insurance coverage is not generally available, to what extent does the lack of coverage result in people avoiding necessary health care treatment.

#### **Key Findings**

- Widespread EMS avoidance due to cost: Nearly one-quarter (23%) of Americans report having needed emergency transportation but deliberately not calling an ambulance because of cost concerns, despite recognizing the medical necessity.<sup>73</sup>
- ➤ High rates of care delay in Florida: Approximately 55% of Florida adults delayed or skipped some form of healthcare in the past year due to cost, with 27% avoiding a doctor's visit or procedure entirely.<sup>74</sup>
- ➤ **Significant health consequences:** 41% of adults who delayed care due to cost reported their health problem worsened as a result, with particularly severe outcomes for time-sensitive conditions requiring EMS intervention.<sup>75</sup>
- ➤ **Disproportionate burden on vulnerable populations:** Florida's 10.7% uninsured rate creates barriers for low-income individuals, rural residents, and the elderly, who often face the difficult choice between financial stability and necessary emergency care.<sup>76</sup>
- Alternative transportation compromises care quality: 91% of those who avoided calling an ambulance due to cost still ended up seeking hospital care by other means, including driving themselves (18%) or using rideshare services (13%), potentially delaying critical treatment and increasing risk.<sup>73</sup>

This section examines the extent to which lack of insurance coverage results in individuals avoiding necessary healthcare treatment, with specific focus on EMS. The evaluation considers both national and Florida-specific data on care avoidance patterns, demographic factors, and patient outcomes when EMS services are bypassed due to financial concerns.

The analysis reveals that a large portion of the population avoids or delays necessary EMS services specifically due to cost concerns, resulting in worse health outcomes, increased hospitalizations, and potentially preventable complications. This pattern is particularly pronounced in Florida, where high uninsured rates and significant out-of-network ambulance billing create substantial financial barriers to appropriate emergency care utilization.

#### **Quantifying the Extent of Healthcare Avoidance**

Florida is experiencing an issue in healthcare access, as a significant segment of its population finds it challenging to afford essential medical services. As of 2023, 10.7% of Floridians under 65 were uninsured, higher than the national average of 7.90%. This translates to approximately 2.3 million Florida residents without health insurance. Although the uninsured rate has improved since earlier decades (nearly 25% in 2006), Florida still ranked 4th highest in the nation for uninsured residents. The consequences of this high uninsured rate are stark: a statewide survey revealed that in 2023, 55% of Florida adults delayed or skipped some form of healthcare in the past year due to cost. Moreover, 27% of surveyed Floridians said they avoided a doctor's visit or procedure entirely because of cost. Among uninsured Floridians, 48% cited cost as the main reason they lacked insurance.

Avoidance of care is also prevalent in EMS services. A factor driving the avoidance of EMS is the issue of out-of-network (OON) billing for ambulance services. Patients often receive surprisingly large bills because the ambulance provider does not have a contract with their health insurance plan. A detailed





study published in the National Library of Medicine confirmed that OON billing for ground ambulance services imposes a substantial financial burden on patients, with a particularly high incidence of OON bills for transport originating from homes or incident scenes.<sup>79</sup>

An analysis of Florida-specific data illustrates the financial difference between in-network and out-of-network ambulance services:

Service level	Scenario	Average billed ch arge (out -of- network)	Average patient cost-sharing (in-network - estimate)	Average pati ent financial burden (out- of-network - estimate)	Median pot ential balan ce bill (out- of- network - e stimate)	Status of state balance billing protection (ground ambulan ce)
BLS Emer gency	In-Network	N/A	~\$130	N/A	N/A	Limited to In- Network Cost- Sharing
BLS Emer gency	Out-of- Network (Curr ent Status)	\$940	N/A	~\$435 - \$1000+	\$450	No Comprehensive Pr otection; High Risk (>67%)
ALS Emer gency	In-Network	N/A	~\$130	N/A	N/A	Limited to In- Network Cost- Sharing
ALS Emer gency	Out-of- Network (Curr ent Status)	\$1,277	N/A	~\$435 - \$1500+	\$450	No Comprehensive Pr otection; High Risk (>67%)

#### Table 6 Cost of In-network and Out-Of-Network Ambulance Services

This difference creates significant financial exposure for patients, often resulting in medical debt and collection actions. Florida Senate analysis has found that ambulance providers in the state are reimbursed, on average, for only 56% of their billed charges, creating a disconnect between service costs and reimbursement that ultimately impacts both patient liability and provider sustainability.<sup>80</sup>

#### **Demographic and Geographic Barriers in Care Avoidance**

An analysis of EMS utilization across age groups reveals distinct patterns shaped by insurance coverage, out-of-pocket costs, and perceived affordability. These patterns are reflected in the figure below, which shows that Florida adults under age 65 consistently report the highest rates of forgoing care due to cost in the past year. These financial pressures help explain how different age groups engage with EMS and the decisions they make around activating or accepting emergency services.



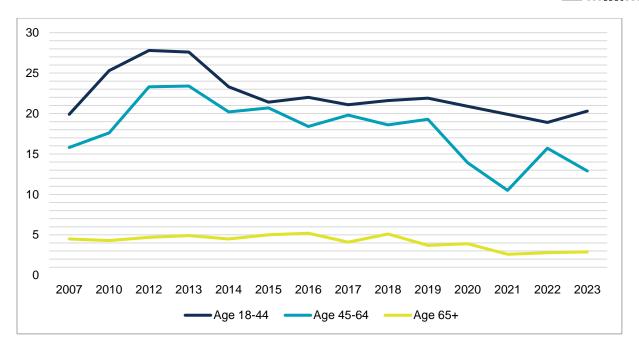


Figure 9 Percentage of Florida Adults Who Could Not See a Doctor in the Past Year Due to Cost by Age Range

Adults aged 18–44 face the greatest cost-related barriers to care, with 12% in 2023 reporting they could not see a doctor due to cost.<sup>81</sup> This aligns with EMS utilization patterns showing that working-age adults often experience fragmented coverage, with a mix of private insurance (0.85 million cases recorded through EMSTARS), Medicaid (0.29 million cases recorded through EMSTARS), and a significant share of self-pay or uninsured patients. Many in this group could hesitate to accept transport or delay seeking emergency services due to out-of-pocket costs. In particular, FAIR Health data shows that individuals aged 19 to 35 (a subset of this group) account for a disproportionately high share of EMS encounters resulting in treatment without transport, suggesting that affordability concerns may influence their preference for on-scene care over ambulance transport to a hospital.<sup>82,83</sup>

The 45–64 age group also demonstrates elevated rates of cost-related care avoidance, as shown in the figure above, though slightly lower than their younger counterparts. EMS utilization in this group reflects continued financial vulnerability, with broader reliance on Medicaid and subsidized private insurance, and a growing incidence of chronic conditions that can drive EMS use. Although not as likely to forgo care as younger adults, this group still faces notable affordability challenges, particularly for services that may involve cost-sharing or occur outside of covered networks.<sup>73</sup>

In contrast, adults aged 65 and older report lower rates of avoiding care due to cost, rates that have remained consistently low over time, around 3%–5% annually.<sup>81</sup> This corresponds with their strong reliance on Medicare, which covered approximately 1.43 million EMS cases as recorded through EMSTARS. Seniors make up nearly 48% of all EMS patients nationally, with utilization driven by complex medical needs and age-related conditions. While Medicare provides critical coverage for emergency services, the 20% coinsurance after meeting the Part B deductible can still create cost barriers, particularly for those without supplemental insurance or with limited income.<sup>59</sup>





These age-based disparities point to an urgent need to modernize EMS service models and payment policies. These models allow EMS providers to stabilize patients on-scene or transport them to lowercost, clinically appropriate facilities such as urgent care, primary care, or behavioral health centers. Expanding these options can reduce unnecessary hospital use, alleviate patient financial burden, and promote better access to emergency services.

#### **Urban-Rural Differences in EMS Avoidance**

The tendency to avoid EMS services due to cost concerns manifests differently across Florida's varied geographic settings. Urban and rural communities present distinct challenges and resources that shape how residents navigate medical emergencies when facing financial difficulties.

In densely populated urban counties, such as Miami-Dade, approximately 16% of residents under age 65 lacked health insurance in recent years.<sup>84</sup> While urban dwellers generally benefit from closer proximity to hospitals and potentially faster EMS response times compared to their rural counterparts, this geographic advantage does not negate the impact of cost concerns.

Conversely, rural counties like Glades face a different reality. Glades County reported one of the highest uninsured rates in Florida, with about 25% of residents under 65 lacking coverage as of 2022.<sup>84</sup> Compounding this is a severely limited healthcare infrastructure; Glades County has no major hospitals within its borders. EMS access is similarly constrained, with only two ambulance units operating 24/7 to cover the entire county's geographic area. Additionally, as of 2023, there were no emergency department facilities in Glades County and EMS patients are typically transported to neighboring counties that serve as the nearest points of emergency care.<sup>85</sup>

For uninsured residents in such rural settings, this situation creates compounded barriers: the high likelihood of lacking insurance increases the risk of cost-related care avoidance, while geographic remoteness simultaneously increases travel distances, potential delays, and the ultimate cost of an ambulance ride. Faced with the prospect of a thousand-dollar-plus ambulance bill coupled with a long journey, many residents in rural counties may feel compelled to attempt driving themselves to the hospital, even when experiencing serious medical conditions, or relying on family and friends for transportation. This not only puts their own health at risk but also endangers the lives of others on the road due to impaired judgment or sudden medical deterioration.

# **Health Consequences of Bypassing EMS Services**

#### Clinical Outcomes When EMS Services Are Avoided

Delaying or avoiding ambulance services due to cost concerns can have serious, and sometimes fatal, consequences. In emergencies such as trauma, heart attacks, strokes, or respiratory failure, every minute is vital. EMS not only offers rapid transport, but provides essential pre-hospital interventions, including CPR, defibrillation, oxygen administration, airway management, and medication.

When individuals choose to drive themselves, wait for a friend, or avoid calling EMS due to financial barriers, they risk losing critical minutes that can mean the difference between full recovery and permanent disability. Without EMS support, patients also forego essential stabilization services that paramedics are trained to provide during transport.

According to the *Commonwealth Fund's 2024 Biennial Health Insurance Survey*, 41% of adults who reported delaying care due to cost experienced a worsening of their condition. These findings underscore the clinical risks of allowing affordability (not clinical urgency) to dictate whether a patient seeks emergency transport. Avoidance of EMS often leads to greater system strain downstream. Patients who





skip initial care are more likely to be hospitalized later with worsening conditions. This pattern is particularly pronounced among uninsured individuals, who research shows are more likely to be hospitalized for conditions that could have been managed or prevented with timely care—and who also experience poorer health outcomes overall.<sup>75</sup> .

The clinical outcomes of delayed EMS events vary by medical condition. However, time-sensitive emergencies such as cardiac events, strokes, and trauma are particularly vulnerable to poor outcomes in the absence of timely EMS intervention:

- Cardiac Emergencies: The American Heart Association reports that for every 30-minute delay in treating a ST-elevation myocardial infarction (STEMI), mortality risk increases by 7.5%. Timely EMS events is essential for achieving door-to-balloon, (time from arrival to treatment) times within the recommended 60–90 minutes.<sup>86</sup>
- **Stroke:** For ischemic stroke, administration of tissue plasminogen activator (tPA) within 3 to 4.5 hours of symptom onset dramatically improves outcomes. Delays in care can result in irreversible neurological damage; it is estimated that 1.9 million neurons are lost for each minute that treatment is delayed.<sup>87</sup>
- Trauma: Rapid transport is critical for severe injuries. The "golden hour" concept in trauma care
  emphasizes that mortality increases significantly if patients do not receive surgical intervention or
  stabilization within the first hour. EMS providers are trained to perform lifesaving field
  interventions, including hemorrhage control, airway stabilization, spinal immobilization, and fluid
  resuscitation.<sup>88</sup>
- Respiratory Distress: Acute conditions such as asthma attacks or COPD exacerbations can
  deteriorate quickly without treatment. According to the Florida Department of Health, EMS
  administered oxygen to 57.59% of respiratory distress patients in 2015, illustrating the frequency
  of critical prehospital intervention.

#### **Alternative Transportation Methods and Their Impact**

When faced with a medical emergency, many individuals choose not to call an ambulance due to concerns about cost. In doing so, they often resort to alternative transportation methods, such as private vehicles, rideshares, or waiting for a friend or family member, that may compromise both their safety, and the quality of care received. This decision introduces delays in initiating treatment and eliminates the possibility of receiving professional medical interventions during the critical window before hospital arrival.

Findings from an American Medical Association survey reveal that 91% of individuals who avoided calling an ambulance due to cost still ended up going to the hospital by other means. Nearly half were transported by family or friends, 13% used a rideshare or taxi service, and 18% drove themselves. Only 8% eventually arrived via ambulance, typically because someone else at the scene initiated the call.<sup>73</sup>

These choices can impact the timeliness and effectiveness of care. Arranging alternative transportation often causes delays in the onset of medical intervention, which is critical in time-sensitive emergencies such as stroke, cardiac events, or trauma. Even short delays can increase the risk of mortality and long-term disability in such cases. Unlike ambulances, rideshare vehicles and private cars offer no medical oversight, and drivers are untrained in how to respond if the patient's condition deteriorates. According to CDC, EMS professionals are uniquely trained to deliver field stabilization, including oxygen administration, hemorrhage control, and cardiac monitoring, capabilities that are entirely absent in non-medical vehicles.





Another often-overlooked consequence of self-arranged transport is suboptimal hospital selection. EMS providers follow strict destination protocols designed to ensure patients are transported to the facility most appropriate for their condition, such as stroke centers or trauma-designated hospitals. In contrast, individuals driving themselves or being taken by others may arrive at the nearest facility, regardless of its capacity to handle the emergency at hand. These decisions can result in delayed access to specialized care and diminished treatment effectiveness.

There is also the risk of in-transit deterioration. A patient experiencing cardiac arrhythmia, respiratory distress, or neurological symptoms may worsen en-route. In an ambulance, these changes would be monitored and addressed in real time.

# **Section Summary**

- Consequences of Avoidance: The evidence from Florida and across the U.S. clearly
  demonstrates that lack of insurance coverage and concerns about high out-of-pocket costs drive
  many people to avoid or delay essential emergency medical services.
- **Health Outcomes:** This pattern of care avoidance leads to poorer health outcomes, higher rates of hospitalization for preventable conditions, and increased financial strain on the healthcare system.
  - 41% of individuals who delay care due to cost report that their health condition worsened as a result.
  - For time-sensitive emergencies (e.g., strokes, heart attacks, trauma), these delays can result in permanent disability or death.
- **National Findings**: Research shows that nearly one-quarter of Americans have avoided calling an ambulance in an emergency due to cost concerns with 91% of these individuals still ultimately seeking hospital care through potentially less safe alternative means.
- **Florida-Specific Challenges:** Florida has 10.7%<sup>77</sup> uninsured rate and significant out-of-network ambulance billing practices. In rural counties there are limited healthcare infrastructure and higher rates of uninsured individuals.

4.2.3 (d): If the coverage is not generally available, to what extent does the lack of coverage result in unreasonable financial hardship.

#### **Key Findings**

- Expensive ambulance costs: Uninsured patients face costs of \$500-\$3,500+ for ambulance rides.
- ➤ **Medical debt**: 6.6% of Floridians have medical debt in collections, with a median amount of \$1,593.90
- ➤ Catastrophic health expenditure: Nearly 1 in 5 (18%) uninsured emergency visits resulted in charges exceeding 40% of a person's post-subsistence income.<sup>91</sup>





- County EMS uncollectable debt: Florida counties report high rates of uncollectible ambulance charges. For example, in 2019 Pasco County had a 30% delinquency rate and wrote off \$67 million in unpaid fees over several years.<sup>92</sup>
- > Systemic financial burden: Millions of dollars in EMS charges go unpaid each year in Florida, reflecting patients' inability to shoulder the burden.

The absence of widespread insurance coverage for EMS in the state of Florida precipitates substantial financial hardship for a significant portion of its population. As of 2023, approximately 10.7% of Florida's residents lack health insurance, rendering them particularly vulnerable to the full economic impact of emergency medical interventions. This financial vulnerability is substantiated by several critical indicators: the excessive out-of-pocket expenses associated with ambulance services, the high prevalence of medical debt among Floridians, and the frequency of health expenditures incurred by uninsured individuals.

Uninsured patients in Florida are often confronted with ambulance service costs ranging from \$500 to more than \$3,500<sup>93</sup>, while ED visits frequently result in financial obligations that surpass an individual's capacity to remit payment. 6.6% of Florida's population carries medical debt in collections, with a median outstanding balance of \$1,593.<sup>90</sup>

Furthermore, the financial strain extends beyond individual households to impact the broader EMS infrastructure within the state. Florida counties consistently report millions of dollars in uncollectible ambulance charges on an annual basis, indicative of a systemic inability of patients to meet these financial obligations.

The following sections present the significant effects of inadequate EMS coverage in Florida.

#### Financial Hardship due to EMS Utilization in Florida

Florida's high rate of people lacking health insurance – about 10.7% of residents as of 2023², means many patients have no coverage for EMS such as ambulance transport and ED care. When emergencies strike, these uninsured individuals face the full brunt of medical bills, often amounting to thousands of dollars. Notably, ground ambulances were excluded from the federal *No Surprises Act* protections, leaving patients vulnerable to hefty out-of-network charges. Florida sees a high incidence of ambulance bills outside insurers' networks. In 2020, over two-thirds (>66.6%) of emergency EMS events in the state resulted in an out-of-network charge, one of the highest rates in the nation (2020 national average being 62.0%). This combination of no insurance coverage and high costs for EMS along with ED costs, frequently results in financial hardship for patients, evidenced by significant out-of-pocket expenses, medical debt, and even the avoidance of needed care due to cost concerns.

# **Out-of-Pocket EMS Costs Without Coverage (Uninsured)**

For patients without insurance, out-of-pocket costs for EMS can be high. In general, an uninsured BLS ambulance trip can run from about \$500 up to \$2,000 or more, while an ALS trip (for more serious emergencies) averages \$850 to \$3,500+ without insurance. These figures far exceed typical costs for insured patients. One 2022 survey found that 61% of insured individuals paid nothing out-of-pocket for their last ambulance ride, whereas only 25% of uninsured patients had a \$0 bill; in fact, 22% of uninsured ambulance patients ended up owing over \$2,000, compared to just 1% of insured patients in that situation. The patients in the situation of the patients in the pa





ED treatment itself adds further cost. Uninsured patients receive bills for all care provided under the federal Emergency Medical Treatment & Labor Act (EMTALA) mandate (which ensures treatment regardless of ability to pay). Research shows that a *single* ED visit can be financially catastrophic for the uninsured. In a 2021 JAMA Health Forum study examining over 41 million ER visits, nearly 1 in 5 uninsured emergency visits (18%) resulted in charges high enough to be a "catastrophic health expenditure" – defined as costs exceeding 40% of a person's post-subsistence income.<sup>91</sup> The risk of such catastrophic bills rose to 22.6% by 2017 and was especially high for low-income patients and those in the South. By 2017, the median ED charge for an uninsured treat-and-release visit (one that doesn't require hospitalization) had grown to about \$2,033.<sup>96</sup> Uninsured patients rely on the ED as a safety net, but then receive fewer diagnostic services and have higher risk of death once hospitalized, compared to insured patients.<sup>77</sup>

# **Out-of-Pocket EMS Costs with Coverage**

Even when insured, Floridians often confront surprise ambulance bills because so many EMS providers are out-of-network. Insurance plan design plays a major role in the financial impact: For example, individuals enrolled in Bronze-tier ACA plans often face 50% coinsurance for ambulance services, meaning they are responsible for half the cost after meeting their deductible. Those in High-Deductible Health Plans (HDHPs) must pay the entire ambulance bill out-of-pocket until they reach their deductible, which can amount to thousands of dollars. The average balance bill (the amount a patient is charged beyond what insurance pays) for an out-of-network ambulance in the U.S. is around \$450 – and in some states, the average exceeds \$1,000. Florida state data has noted that - ambulance billing typically includes a base fee (often around \$940–\$1,277 for emergency calls in 2018–2020) plus mileage, which in Florida averages 7 miles per trip.<sup>80</sup> Without any insurance coverage to defray these expenses, patients must pay the full charges, which can quickly become a crushing financial burden in an emergency.

# Financial Implications caused Due to EMS Medical Debt on the population

Medical debt is a leading cause of personal bankruptcy in the U.S.<sup>97</sup>, and Florida lawmakers have recognized that acute emergency bills contribute heavily to this problem. The financial fallout from these emergency costs is evident in medical debt statistics and personal hardships. Medical debt is a well-documented problem in Florida. As of 2022, 6.6% of Florida's population has medical debt in collection. Often, these debts stem from emergency care. State analyses note that nearly two-thirds of medical debts arise from a one-time or short-term medical expense for an acute need – exactly the kind of expense an uninsured person incurs after an ambulance ride or ED visit. Not having EMS insurance coverage, therefore, frequently turns a medical crisis into a financial crisis.

Patients themselves often suffer lasting harm from unpaid EMS bills. One Florida journalist described how three ambulance trips during a mental health crisis left her with nearly \$4,000 in debt. The unpaid balance damaged her credit and made it difficult to access stable housing, apply for jobs, or purchase necessities. Her story is not an anomaly. As of 2022, an estimated 100 million Americans, about 41% of adults, had some form of medical debt. The Consumer Financial Protection Bureau (CFPB) found that more than half of all debt appearing on credit reports is related to medical bills, with ambulance charges frequently contributing to surprise debt burdens.

In Florida and the broader southern region, medical debt has even been cited as a leading cause of homelessness. <sup>99</sup> When patients are unable to pay their bills, the debt may be turned over to collections or pursued in court. Florida law offers limited protection, such as exemptions for a portion of wages or home equity, but these do not shield families from the stress or financial instability caused by mounting medical bills.

It is worth noting a recent regulatory development: On January 7, 2025, the CFPB finalized a rule titled the Prohibition on Creditors and Consumer Reporting Agencies Concerning Medical Information (Regulation V; Docket No. CFPB-2024-0023; RIN 3170-AA54).<sup>100</sup> This rule restricts the use of medical





debt in credit reporting and lending decisions. While it represents progress in protecting consumers' credit profiles, it does not eliminate the financial burden itself. Providers may still pursue collections, and unreimbursed costs continue to strain local governments and public safety budgets.

The lack of insurance coverage for these alternate EMS contributes to financial debt for patients and revenue shortfalls for EMS providers.

#### Financial Implications Caused Due to EMS Medical Debt on the System

The financial burden of EMS care without adequate insurance coverage affects not only individual patients, but also EMS systems, local governments, and the broader healthcare infrastructure. In Florida, county EMS agencies frequently face millions of dollars in uncollected ambulance bills, reflecting both coverage gaps and the inability of many patients to pay out of pocket.

For example, Pasco County EMS reported a delinquency rate of nearly 30% on ambulance bills as of 2018. Over time, the county has written off more than \$67 million in unpaid charges due to patient nonpayment. In fiscal year 2017–2018 alone, Pasco billed \$20.6 million but was unable to collect \$6.2 million. Pasco billed \$20.6 million but was unable to collect \$6.2 million. Pasco between what the county charges for EMS services and what insurance companies reimburse -- a gap often left to patients. For those without insurance, the full charge (often between \$700 and \$1,000 per transport), is their responsibility, and many are unable to pay.

Palm Beach County has faced similar challenges. In 2018, Palm Beach County Fire-Rescue wrote off \$11.9 million in unpaid ambulance bills. The county reported that it could collect only 64% of transport costs in the 2013–2014 fiscal year. The remaining 36% was attributed to insurance denials, partial reimbursements, and patients with no insurance coverage. Palm Beach typically charged \$750 per ambulance ride, while Medicare reimbursed around \$495 and Medicaid just \$200, leaving uninsured patients fully liable for the balance.<sup>92</sup>

#### **Evidence from Other States: Savings and System Efficiency**

Other states that have implemented EMS reimbursement reform have documented clear cost savings. In Arizona, the state's "Treat and Refer" program, approved by CMS in 2017, allowed EMS agencies to bill Medicaid a flat fee when patients were treated on-scene without transport. 101 By avoiding unnecessary ED trips, agencies reported average savings of \$800 to \$1,000 per diverted call. In Texas, MedStar Mobile Healthcare's treat-and-release program achieved average payer savings of \$1,200 per incident for patients diverted from the ED. Washington State's Medicaid reform, implemented in 2019, introduced payment for non-transport EMS care, and preliminary state evaluations estimated that even partial adoption of treat-and-refer practices could reduce Medicaid emergency transport expenditures by more than 10% annually. These examples suggest that scaling reimbursement for alternate EMS dispositions offers significant return on investment, not only by avoiding high-cost ED visits, but also by reducing ambulance utilization and improving overall system efficiency.





# **Section Summary**

- **Patient-Level Financial Burden**: The evidence strongly indicates that the lack of insurance coverage for EMS in Florida leads to significant financial hardship for individuals.
  - Lack of insurance coverage in Florida leads to significant out-of-pocket EMS costs—often thousands of dollars.
  - These costs contribute to medical debt, credit issues, and even bankruptcy.
  - Florida has one of the highest rates of medical debt in collections in the U.S.
- **Systemic Financial Impact**: Millions of dollars in EMS charges go unpaid each year in Florida, reflecting patients' inability to shoulder the burden. Acute emergency bills are a major contributor to this debt.
- Access and Care Delays:
  - High costs deter patients from seeking emergency care.
  - Many avoid calling ambulances, increasing risk of preventable complications or death.
  - This behavior leads to worse outcomes and higher long-term costs.
- Cost Savings from EMS Reimbursement Reform from Other States: Other states have
  demonstrated that scaling reimbursement for alternative EMS dispositions can avoid unnecessary
  ED visits, reduce ambulance usage, improve system efficiency, and generate a strong return on
  investment.
  - Arizona "Treat and Refer" Program: Approved by CMS in 2017. Allowed EMS agencies to bill Medicaid a flat fee for on-scene treatment without transport. Average savings: \$800–\$1,000 per diverted call.
  - Texas MedStar Mobile Healthcare: Treat-and-release program diverted patients from EDs.
     Average payer savings: \$1,200 per incident.
  - Washington State Medicaid Reform (2019): Introduced payment for non-transport EMS care.
     Preliminary evaluations suggest an over 10% reduction in Medicaid emergency transport spending annually.





## 4.3 Assessment of Public Demand

# 4.3.1 (e): The level of public demand for treatment or service.

# **Key Findings**

- > Strong Public Support: Most 9-1-1 patients favor EMS models that offer on-scene treatment or transport to non-ED sites, with higher satisfaction rates for these services.
- Payment Model Barriers: Medicare, Medicaid, and many private insurers still primarily reimburse only for ED transport, limiting EMS flexibility and innovation.
- Financial Strain on EMS: EMS agencies often prioritize ED trips to maintain funding due to low reimbursement and rising operational costs.
- **EMS Use due to lack of Primary Care**: Limited access to primary care and public misunderstanding lead to EMS overuse for non-emergencies, particularly in low-income and underserved communities.
- ➤ Tourism and Disaster Impacts: Seasonal tourism and hurricanes spike EMS demand, often from uninsured visitors or vulnerable populations during crises, adding financial and logistical pressure.
- > Rural vs. Urban Barriers: Rural areas face long response times, while urban systems are overwhelmed by call volumes from trauma and chronic conditions.
- > **Aging Population Demand**: Florida's increasing elderly population results in high EMS usage for falls and chronic illness, which frequently requires repeated transport.

EMS in Florida has growing public interest in more flexible and patient-centered approaches to emergency care. This section evaluates the public demand for two emerging EMS models: transport to alternate destinations and medically directed on-scene treatment facilitated by telehealth and explores the extent to which Floridians support and utilize these innovative EMS models. The analysis focuses on the demographic, socioeconomic and specific clinical scenarios where patients show the most interest in alternative care options. It explores potential implications and impact of these alternative care options on healthcare utilization, including effects on ED visits, hospital admissions, and overall healthcare costs.

### **Healthcare Infrastructure**

Emerging data suggest the public often favor receiving appropriate care on-scene or at an alternative facility when safe. In a survey of 9-1-1 patients, 58% supported being transported to an alternate destination (like an urgent care) for low-acuity conditions.<sup>3</sup> In the same survey, 86% of respondents agreed EMS should have better access to health records to facilitate alternate dispositions, and 72% supported involving their primary doctor in transport decisions. These findings indicate broad comfort with innovative EMS models, cutting across different demographics and acuity levels. Another study found that many patients are open to alternate transport modes (e.g. taxi or van for minor issues) and destinations, especially younger patients with lower-acuity complaints.<sup>102</sup> In short, a substantial proportion of patients welcome a 9-1-1 response that can offer treatment and transport options beyond the hospital ED.<sup>103</sup> This public openness is driven by desires to avoid crowded EDs, reduce costs, and get faster care for minor emergencies.

Community feedback from areas that have piloted on-scene care programs has been positive. Patients report high satisfaction with treatment-in-place when it resolves their issue without an ED visit. For example, Texas's MedStar/EMS Survey for "TIP through telemedicine calls" averaged 96.7% satisfaction, higher than the 91.7% satisfaction for patients who were transported to the ED.<sup>5</sup> They saw community





trust in EMS actually grew after implementing on-scene telehealth triage, as people appreciated the option to avoid unnecessary hospital trips. Officials note that residents value when EMS can be "more than a method of conveyance to an ED," seeing it as a sign that providers are focused on getting them the right care vs. just a ride.<sup>5</sup> These experiences mirror the growing public preference in Florida and beyond for convenient, patient-centred EMS options that prioritize appropriate care over automatic hospital transport.

### **Financial and Policy-Driven Demand**

Current reimbursement policies from Medicare and Medicaid predominantly compensate EMS agencies for transporting patients exclusively to hospital EDs. This reimbursement structure unintentionally incentivizes EMS providers to transport patients to EDs even when alternative care pathways might be more appropriate and cost-effective. 104

Private insurance reimbursement policies typically offer higher compensation rates compared to Medicare and Medicaid. However, the policies and agreements with private insurers vary, reimbursement often depends on specific contractual terms like payment rates, medical necessity, and prior authorization requirements.

#### **Demand Driven by Social and Structural Barriers**

Limited access to primary healthcare, economic instability, and housing insecurity drives EMS utilization, particularly within low-income and rural communities. Patients frequently utilize EMS as a substitute for primary care, resulting in high call volumes for conditions manageable through alternative care solutions. Of Chronic conditions such as diabetes, cardiovascular diseases, and respiratory illnesses are prevalent causes for emergency dispatches due to inadequate routine healthcare access.

### **Geographic Access**

# Geographic and Demographic Variability in EMS Demand

Rural areas experience unique challenges, including longer ambulance response times, limited healthcare facilities, and chronic workforce shortages. According to the 2020 U.S. Census Bureau, approximately 9.2% of Florida's population resides in rural counties, where EMS agencies struggle with fewer resources, constrained budgets, and significant reliance on volunteer staff. Conversely, urban EMS agencies face the burden of high call volumes due to factors like traffic accidents and violent crime, leading to overburdened crews and reduced service efficiency.

#### **Impact of Extreme Weather Events**

Florida's frequent hurricanes and severe weather events increase EMS demand. The impacts of Hurricane Irma were evident, for example, EMS agencies in counties such as Lee and Pinellas, witnessed elevated calls related to storm injuries, chronic illness exacerbations, and generator-related hazards such as carbon monoxide poisoning. Elderly and pediatric populations are particularly vulnerable, experiencing substantial increases in ED visits and hospital admissions during and immediately after extreme weather events, further straining EMS resources and highlighting the need for alternative care options and disaster preparedness.

## **Tourism-Driven Demand**

Florida's high volume of annual tourism substantially impacts EMS utilization. In 2024, Florida welcomed 142.9 million visitors. The influx of tourists, particularly in popular areas such as Orlando and coastal cities in counties including Walton County, and Volusia County, which hosts the Daytona 500, results in





increased medical emergencies related to trauma, heat exhaustion, and chronic health conditions in elderly visitors. During peak tourist seasons, this increase in population can have a severe impact on EMS and ED utilization.

#### **Socioeconomic Factors**

#### **Public Perception**

EMS is frequently perceived as an accessible option for primary or urgent care, leading to unnecessary use and resource depletion. Severity of symptoms is reported as the deciding factor for seeking emergency care among many adults, yet this perceived severity often exceeds clinical necessity. Poor health literacy further contributes to this gap, with patients frequently viewing their conditions as emergencies requiring immediate attention.

Convenience also influences EMS usage, with individuals often choosing emergency care due to immediate access, no appointment requirements, and availability at all hours. Additionally, limited access to primary care providers (PCPs) due to restricted office hours, lack of same-day appointments, long wait times, transportation barriers, and geographic proximity issues, pushes patients to utilize EMS or EDs even for non-critical health concerns.<sup>107</sup>

Addressing this reliance through improved public awareness and education regarding appropriate EMS utilization, along with implementing alternative care models such as community paramedicine, can reduce inappropriate EMS usage, thereby optimizing resource allocation and improving overall healthcare efficiency.

#### **Age and Medical Condition**

## **Aging Population and Increased EMS Utilization**

The growing population of older adults contributes to higher EMS utilization rates. Older adults frequently require emergency services due to falls, cardiovascular events, respiratory conditions, and complications associated with chronic diseases like diabetes and dementia. Falls alone account for 15.6% of EMS transport among older adults. Hospital readmissions are notably prevalent among older adults, further amplifying EMS usage. Studies indicate that more than one in six EMS transports of older adults are followed by repeated transport of the same patient within 30 days. These statistics underscore the potential benefits of alternative care models focused on preventive measures and chronic disease management to reduce repeat EMS utilization and improve resource allocation efficiency.

# **Section Summary**

- **Factors Influencing Demand for EMS**: Social and structural barriers, geographic access disparities between rural and urban areas, extreme weather events, and tourism drive EMS demand.
  - Geographic Disparities: Rural areas face longer response times and reduced EMS coverage compared to urban centers.
  - Extreme Weather Events: Hurricanes, flooding, and heatwaves elevate EMS call volumes and strain capacity.





- Tourism Impact: Seasonal surges in population (e.g., during holidays or spring break) lead to spikes in EMS demand.
- **Public Perception:** Perception of EMS as more convenient leads to unnecessary use for nonemergent issues. Lack of awareness or trust in alternative care options perpetuates this pattern.
- **Reimbursement Structures**: Financial reimbursement models currently support hospital transport, even when alternatives might be more appropriate.
- **Support for Alternative Care Models**: There's growing public support for alternative care models, including on-scene treatment and transport to non-hospital facilities for low-acuity conditions.

# 4.3.2 (f): The level of public demand for insurance coverage of the treatment or service.

## **Key Findings**

- Cost Sensitivity: Ambulance costs remain a significant deterrent, with 38% of surveyed Americans avoiding emergency services due to cost concerns.<sup>109</sup>
- ➤ Willingness to Pay: Americans broadly support modest tax or premium increases to maintain and improve EMS. Approximately 72%-83% are willing to pay additional amounts annually.
- Fairness and Mandates: The public strongly views EMS coverage as a fairness and public safety issue, favoring mandated coverage to protect against high costs and surprise bills.
- Alternative EMS Acceptance: Public opinion favors integrating treatment-in-place and alternate destinations into EMS, emphasizing cost-effectiveness, patient convenience, and system efficiency.

In recent years, the landscape of EMS in the United States has undergone a significant transformation, driven by evolving public perceptions and pressing healthcare challenges. A comprehensive analysis of public opinion reveals a growing acceptance and demand for alternative EMS models, such as treatment-in-place and alternate destinations, particularly in rural and underserved areas. This shift in perspective is accompanied by a willingness among Americans to financially support EMS improvements through modest tax or premium increases, recognizing EMS as an indispensable public service akin to firefighting. However, this support is tempered by concerns over cost sensitivity, with a substantial portion of the population avoiding emergency services due to financial considerations. These findings underscore EMS evolution, signaling a transition from the traditional "ambulance to ED" model towards a more flexible, multi-faceted approach to emergency healthcare delivery.

The following section examines the complexities of EMS perception and utilization and explores how changing attitudes translate into real-world impacts on EMS systems, patient care, and healthcare policy. examine specific case studies and data that illustrate the challenges and opportunities presented by this evolving landscape of emergency medical services.





#### **EMS Is Considered an Essential Service**

The public widely views emergency medical response as a necessary public good that should be universally accessible. A survey from Motor Vehicle Occupant Safety Survey shows that over 92% of Americans consider 9-1-1 ambulance services essential, and most feel it's fair that EMS be funded like other essential services. This sentiment is about fairness — in a true emergency, no one wants cost or insurance nuances to determine whether they can get care.

However, Florida's current insurance reimbursement policies create a gap. EMS providers are typically reimbursed only if they transport a patient to a hospital, not if care is provided on-scene without transport. Rural EMS officials in Florida have emphasized the challenges this creates, noting that constant changes in federal and state rules often lead to services that were once covered no longer qualifying for reimbursement. This causes confusion and frustration among patients, who may not realize they are responsible for unexpected ambulance bills until after care is provided. EMS leaders stress the importance of proactively informing patients about potential costs to mitigate surprise billing.<sup>111</sup>

Despite this widespread belief in EMS as essential, ambulance costs remain a significant concern for many Americans. A 2024 YouGov poll revealed that 23% of Americans (almost 1 in 4) have avoided calling an ambulance in an emergency because of cost.<sup>95</sup> Many instead rely on other means (driving themselves, having a friend or even a rideshare take them to the hospital) despite needing immediate care. This underscores that ambulance services are often perceived as very expensive, even relative to other medical expenses, prompting cost-conscious behavior.

To address these concerns, Florida has actively explored alternative EMS delivery models. For instance, Miami-Dade County participated in the federal ET3 pilot program, allowing 9-1-1 callers with non-life-threatening issues to be treated via telemedicine or triaged to urgent care centers instead of automatically being sent to a hospital ER.<sup>112</sup> The adoption of such cost-saving innovations in Florida, coupled with no significant reported backlash, indicates local communities are open to more efficient and less expensive EMS alternatives.

Overall, the data suggests Floridians, like other Americans, value emergency care highly but are sensitive to ambulance costs. This balance between recognizing EMS as essential and concerns about its cost signals a readiness to support financially sustainable solutions that maintain the critical nature of EMS while addressing affordability issues.

In rural areas, issues of fairness and necessity are evident. Residents in these regions depend heavily on EMS due to the considerable distance to hospitals. Public sentiment in rural communities strongly favors EMS, even if it requires mandates or taxes, to ensure appropriate care is available when needed. For rural populations, fairness also involves having equal access to emergency care. This is one reason telehealth-enabled treatment-in-place is promising for rural EMS: it can provide higher-level care directly to a patient's home when a hospital is far away. 113 Early programs indicate that rural patients appreciate avoiding long and costly transport if paramedics, with online medical support, can address the issue onsite. 114 In conclusion, rural Americans often exhibit strong support for alternative EMS models due to sheer necessity.

### **Support for Mandated Coverage Protections**

Americans strongly support policies to require coverage or cost protections for emergency services. Nearly 89% of voters nationally favor legislation to protect patients from surprise medical bills, including ambulance bills. <sup>115</sup> In short, there is broad belief that it is necessary for officials to ensure EMS is covered fairly – whether through insurance requirements, price caps, or classifying EMS as an essential service funded by taxes. This public stance on EMS fairness is comparable to support for other required health





benefits. For example, about 79% of Americans support the federal parity law that requires insurance to cover mental health care on equal footing with physical health. The idea of guaranteeing important health benefits resonates strongly with the public, and emergency medical coverage is no exception. Just as mental health, preventive services, or maternity care are seen as must-cover items, EMS responders are viewed as a fundamental necessity that should not hinge on one's ability to pay out-of-pocket.

#### **Acceptance of Treatment-in-Place and Alternate Destinations**

When it comes to newer EMS approaches, public opinion tends to view them as sensible and even necessary innovations as long as patient safety is maintained. In a pre-pandemic study, 58% of patients surveyed said they support being transported to an alternate destination (such as an urgent care or clinic) for minor conditions instead of an ED. Even more (around 72%) agreed with the idea of EMS coordinating with one's primary doctor on care decisions, and 86% supported EMS having greater access to medical records to facilitate on-scene treatment.3 This indicates that a majority of the public is comfortable with a 9-1-1 response that doesn't automatically mean an ED trip, especially if their issue can be handled on-site or with a quick visit to a non-hospital facility. The COVID-19 era likely heightened acceptance for such alternatives, as telemedicine and avoiding unnecessary hospital visits became mainstream. While specific "treatment in place" opinion polls are scarce, the concept aligns with what patients say they want: quick, convenient care without extra cost or hassle. The EMS community itself has embraced this shift, in one national EMS stakeholder survey, 84% of EMS professionals agreed that offering treatment-in-place for appropriate patients is a service EMS should provide. 117 The public's view of necessity is evident in their demand for timely care and their frustration with ED overcrowding. By treating non-critical cases at home or taking them to an urgent clinic, EMS can free up resources for true emergencies. Many consider this approach fair and beneficial for all parties involved: patients are spared from high ED bills and prolonged waiting times, EMS personnel remain available for critical calls, and overall healthcare expenditures are reduced.

**CASE STUDIES:** Real-life stories of ambulance bills have galvanized public opinion and led to concrete changes. For example, a Florida mother received a \$7,075 bill for a 17-mile ambulance ride for her infant son in 2021. Even though insurance paid part, she was left negotiating the balance and paying \$1,000 upfront, this experience made her reconsider ever calling an ambulance again. Her story is not unique and was highlighted in local media to illustrate the burden on families.<sup>118</sup>

In one notable Florida incident, a billing dispute between Florida Blue (the state's largest insurer) and American Medical Response (AMR, a major ambulance company) left patients stuck with collections notices for ambulance bills. One Orlando patient was told by her insurer she only owed \$34 for an ambulance ride, only to have the ambulance company bill her around \$670 and send her to collections. Another patient in Tampa received collections notices for an \$816 ambulance bill that she was advised not to pay due to the dispute. These stories, exposed by local investigative media, created public outrage and pressure on the insurer and provider to resolve the issue. In response, Florida Blue and AMR entered settlement talks and agreed to halt all collection efforts on affected patients. 119

Beyond individual cases, broad advocacy campaigns have leveraged public perception to drive change. Consumer groups collected hundreds of patient stories to put a human face on the ambulance billing problem. At least a quarter of the 700+ surprise bill stories gathered by Consumers Union involved ambulances, a "huge problem" according to the group's experts. These compilations of real stories have been used in legislative hearings and media reports to demand reforms. In summary, case by case, publicized experiences have built a compelling narrative that insurance coverage must improve for ambulance services.





# **Section Summary**

- **Strong Public Support for Alternatives**: Over the past five years, public perception has shifted in favor of integrating alternative EMS services, such as treatment-in-place and transport to non-hospital destinations.
- Public Willingness to Fund Improvements: Americans are increasingly open to funding EMS innovations through insurance premiums or taxes, viewing EMS as an essential public service comparable to firefighting.
- Advocacy efforts: There is strong advocacy for mandatory insurance coverage of EMS, including
  non-transport services. Additionally, there is notable need for protection against surprise billing,
  ensuring that accessing EMS, whether traditional or innovative, does not cause financial distress.
- Shift in Public Expectations: The public is increasingly comfortable with flexible EMS delivery, signaling a major cultural shift away from the outdated "ambulance to ED only" model. EMS is now viewed as a multi-faceted health benefit that should adapt to the needs of diverse populations and care settings.

4.3.3 (g): The level of interest of collective bargaining agents in negotiating for the inclusion of this coverage in group contracts.

#### **Key Findings**

- Limited focus on EMS coverage in collective bargaining agreements: Publicly available collective bargaining agreements in Florida show limited mentions of specific EMS coverage.
- **Evolving EMS landscape:** There's a trend towards alternative EMS delivery models and destinations, which may increase interest in more comprehensive EMS coverage negotiations in the future.
- ➤ National-level advocacy: Major EMS unions have collaborated with industry groups to lobby for policy changes, such as reimbursement for treat-in-place responses during the COVID-19 pandemic.

A review of publicly available collective bargaining agreements in Florida reveals limited information regarding the inclusion of EMS coverage in group contracts. While some agreements may address health insurance benefits in general, specific mentions of EMS coverage are scarce. This suggests that EMS coverage may not be a primary focus in collective bargaining negotiations in Florida. This limited focus may be attributed to several factors, including the historical emphasis on traditional healthcare benefits such as hospitalization and physician visits, the complexity of negotiating EMS coverage due to variations in service delivery and reimbursement rates, and the lack of awareness among union members about the evolving EMS landscape and the potential benefits of expanded coverage.

# Union Publications and Press Releases Discussing Healthcare Benefit Priorities

Union publications and press releases in Florida often highlight healthcare benefit priorities, such as affordable healthcare, prescription drug coverage, and mental health services. However, specific discussions of EMS coverage are less common. This indicates that while healthcare benefits are a significant concern for unions, EMS coverage may not be a top priority in their advocacy efforts.<sup>121</sup>





# **Industry Reports on Trends in Employee Benefits Negotiations**

Industry reports on trends in employee benefits negotiations suggest that employers are increasingly focusing on cost-containment strategies and offering voluntary benefits to meet the diverse needs of their workforce. While some reports mention the importance of emergency medical services, specific discussions of EMS coverage in collective bargaining negotiations are limited <sup>122</sup>. One notable trend is the increasing consolidation in the EMS sector, with larger providers acquiring smaller companies. <sup>123</sup> The COVID-19 pandemic has also impacted EMS, leading to workforce shortages and a shift to online learning. <sup>124</sup> Another trend is the growing emphasis on preventive care in medical plans. <sup>125</sup> This focus on preventive care could potentially reduce the demand for EMS services by promoting early detection and management of health conditions.

Based on the analysis of collective bargaining agreements, union publications, press releases, and industry reports, the level of interest of collective bargaining agents in Florida in negotiating for the inclusion of EMS coverage in group contracts appears to be moderate.

#### **Section Summary**

- Collective Bargaining Landscape: Collective bargaining agreements and union publications
  reveal limited information regarding EMS coverage suggesting limited current prioritization in labor
  negotiations.
- Emerging Interest in Expanded Coverage: With evolving EMS models (e.g., on-scene treatment, alternative destination transport), there may be growing interest in securing broader coverage through negotiations. Cost-containment strategies and rising use of voluntary benefits could motivate employers to offer EMS coverage as a competitive employee benefit.

# 4.4 Assessment of Financial Impact

## **Key Findings**

- ➤ **Total Estimated Savings**: The analysis projects a total estimated savings of \$520 million across all payers, representing a 3.7% reduction in total ambulance events costs or a 0.3% reduction in total health care expenditures.
- Avoidable ED Visits: The study identifies 31% of current ED visits following ambulance transport as potentially avoidable, varying by payor type (38% for Medicaid, 29% for Medicare, and 33% for Commercial).
- ➤ Cost Reduction per Event: The average cost per avoidable ED event is estimated at \$2,133, while the average cost of alternative care is \$1,159 a potential savings of \$974 per event in the best estimate scenario.
- Fiscal Impact by Payor: In the best estimate scenario, potential savings are \$36 million (0.1%) for Medicaid, \$235 million (0.3%) for Medicare, and \$249 million (0.4%) for Commercial payers.





- > **Subgroup Analysis:** The largest savings potential is in trips originating from residential/accident/other settings, totaling \$520 million. Significant savings potential is also noted for hospice patients, particularly within the Medicare population.
- Appropriate Use of Services: The coverage is expected to increase the appropriate use of services by diverting an estimated 31% of current ED visits to more suitable alternative care settings.
- Administrative Expenses: Administrative expenses for insurance companies are not expected to increase significantly, as the coverage leverages existing ambulance and alternative care infrastructure.
- ➤ Total Healthcare Cost Impact: The total impact on healthcare costs is estimated to be a decrease of 0.2% to 0.4% or \$400 to \$641 million across Medicaid, Medicare, and Commercial payors.

Our research shows that high EMS utilization, gaps in insurance coverage, and strong public demand for alternative care models contribute to unnecessary emergency department ED use and increased healthcare costs. A significant proportion of EMS activations and ED visits could be avoided through better triage, expanded on-scene treatment options, and transport to alternative destinations. The following section presents the financial impacts associated with requiring all health benefits contracts issued in Florida to provide coverage for medically directed on-scene treatment and EMS patient transportation to destinations other than a hospital under specified circumstances.

The financial impact portion of the analysis focused on several key assessment criteria, including the impact of coverage on cost and appropriate use of treatments or services, the potential for mandated treatments or services to substitute more expensive options, and the effect on administrative expenses for insurance companies and policyholders.

Milliman reviewed calendar year (CY) 2022 Florida Medicaid, Medicare, and Commercial payor claims data to estimate the potential fiscal impact of introducing medically directed on-scene care during ambulance trips. CY 2022 data represent the most up-to-date and comprehensive information available for this analysis for all three payors, ensuring that the findings reflect current healthcare utilization patterns and costs.

The analysis focused on ambulance trips that resulted in transport to an ED. Specifically, we assessed trips which could have been avoided or treated in an alternative care setting. The fiscal impact was calculated using the following high-level steps:

- Step 1: Identified ambulance trips and associated costs during the EMS event originating with the ambulance claim.
- Step 2: Developed an algorithm to identify emergency department visits during the EMS event that could be replaced with on-scene / telehealth care or with care delivered from an alternative care facility (e.g., urgent care).
- **Step 3:** For emergency department visits flagged in Step 2, we estimated the cost of the substitute services for potential alternative care.
- Step 4: We calculated the fiscal impact as the difference between the cost of care provided absenton-scene care (Step 2) and the cost of alternative care, where appropriate (Step 3).





These steps allowed for a comprehensive evaluation of the potential cost savings and care improvements that could result from the introduction of medically directed on-scene care during ambulance trips. The findings of this analysis are detailed in the following subsections.

There are several considerations the reader should be aware of when reviewing the results of this analysis:

- CY 2022 data is the most recent and complete detailed data available for all three payor types for this
  analysis. Throughout this report we show the fiscal impact both on an expenditure basis and on a percentage basis. The expenditure basis represents the dollar impact estimated if these changes had
  been implemented in CY 2022 and does not represent any changes in the mix of payors, utilization
  changes, or reimbursement changes thereafter. The percentage change basis will translate across
  time periods.
- The coronavirus (COVID-19) pandemic had a major impact on the healthcare industry from late 2019 through 2020. However, its effects on CY 2022 data are expected to be minimal. This report does not include adjustments to remove such events, acknowledging that similar, unforeseen healthcare disruptions at impact levels consistent with those observed in CY 2022 may arise in any given year.
- This fiscal impact does not include any associated costs with implementing this change in service, such as additional training, communication systems to support telehealth, or additional equipment needed to support on-scene care.
- The availability of medically directed on-scene care may lead to changes in utilization of services. We have not estimated these potential utilization impacts.
- Throughout the report we refer to total savings or expenditures, which are a combination of the amount paid by both the payor and the consumer, if any cost sharing is applicable.
- The Medicaid expenditures shown in this report are a combination of federal and state funding.
- There are other types of ambulance claims in Florida not included in this analysis, such as uncompensated care, self-pay, governmental insurance coverage, etc. Therefore, the fiscal impact does not represent the full spectrum of potential reductions in costs across all Florida ambulance claims and associated EMS events.

#### **Cost Reduction and Fiscal Impact**

The analysis projects a total estimated savings of \$520 million across all payers, representing a 3.7% reduction in total ambulance event costs or a 0.3% reduction in total health care expenditures. Table 7 includes fiscal impact separately for Medicaid, Medicare, and Commercial payors. We developed our best estimate, as well as low and high scenarios to reflect that actual experience may not conform to the assumptions in the best estimate. The low and high scenarios do not represent the absolute minimum and maximum impact, and outcomes outside this range are possible.





	Medicaid	Medicare	Commercial	Total
	L	_ow Scenario		
Fiscal Impact (\$M)	(\$28)	(\$181)	(\$192)	(\$400)
Fiscal Impact as % of Total Program	-0.1%	-0.2%	-0.3%	-0.2%
	_	Sout Futbook		
		Best Estimate		
Fiscal Impact (\$M)	(\$36)	(\$235)	(\$249)	(\$520)
Fiscal Impact as % of Total Program	-0.1%	-0.3%	-0.4%	-0.3%
	н	ligh Scenario		
Fiscal Impact (\$M)	(\$45)	(\$289)	(\$307)	(\$641)
Fiscal Impact as % of Total Program	-0.1%	-0.4%	-0.5%	-0.4%

Table 7 Summary of Fiscal Impact

#### **Emergency Department Visit Avoidance**

The study identifies 31% of current ED visits following ambulance transport as potentially avoidable, varying by payor type as shown in Table 8.

	Medicaid	Medicare	Commercial	Total	
ED Visits from Ambulance Trips	372,530	1,040,044	286,728	1,699,302	A
Avoidable ED Visits	142,046	297,592	94,764	534,402	В
ED Avoidable %	38%	29%	33%	31%	C = B /

Table 8 Summary of % of ED Avoidable Visits

## **Alternative Care Acceptance and Subgroup Analysis**

For ED visits that were identified as avoidable, Milliman classified potential alternative care into five types of care, assuming that 65% of the time members would accept this alternative care plan rather than be transported to an ED. For the remaining 35% of members, Milliman assumed that transportation would continue to be provided to an ED.

- a. On-scene care: Care provided on-site by EMS personnel
- b. Telehealth: Medically directed on-scene care provided by EMS but includes a telehealth consultation





- c. Urgent Care: Transportation to an urgent care facility rather than ED.
- d. Recovery center: For alcohol or substance abuse claims, transportation to a recovery center than an ED.
- e. Behavioral Health Facility: For behavioral health claims, transportation to a behavioral health facility rather than ED.

An estimate of the cost of alternative care using the detailed claim data for each payor type was developed. The fiscal estimate is calculated as the impact of replacing the ED related costs with the estimated alternative care costs. Table 9 shows the percentage of ED visits identified as avoidable by payor type, the cost per avoidable event, the modeled alternative care cost per event and the resulting fiscal impact.

	Medicaid	Medicare	Commercial	Total
Total Avoidable ED Visits	142,046	297,592	94,764	534,402
Cost / Avoidable Event	\$671	\$1,960	\$4,867	\$2,133
Alternative Care Costs / Event	\$415	\$1,170	\$2,239	\$1,159
Net (Savings) / Increase Per Event	(\$256)	(\$790)	(\$2,628)	(\$974)
% of Members that Accept Alternative Care	65%	65%	65%	65%
Fiscal Impact (\$M)	(\$36)	(\$235)	(\$249)	(\$520)

Table 9 Summary of Fiscal Impact based on 65% Acceptance of Alternate Care

Subgroup analysis reveals that the largest savings potential is in trips originating from residential/accident/other settings, totaling \$520 million. Significant savings potential is also noted for hospice patients, particularly within the Medicare population.

# **Implementation Considerations**

It is important to note that the current analysis does not incorporate costs associated with implementing new services, and potential long-term utilization changes are not captured in the present model. The actual impact will be contingent upon successful implementation and member acceptance of these new care options.

It is also important to consider that the success of such an initiative would depend heavily on factors such as member acceptance of alternative care options and the effective implementation of new services. The sensitivity of the results to various assumptions also underscores the need for careful planning and monitoring in any real-world application of these findings.

While the potential benefits are clear, decision-makers should also be mindful of implementation costs and possible long-term changes in healthcare utilization patterns, which are not accounted for in the current model. As such, any policy decision based on this analysis should consider these additional factors and potentially include provisions for ongoing evaluation and adjustment.





These findings suggest that the introduction of medically directed on-scene care and telehealth services for ambulance trips and alternate destination transport has the potential to generate substantial cost savings while potentially enhancing the appropriateness of care delivery. However, it is important to note that the actual impact will be contingent upon successful implementation and member acceptance of these new care options.

# 4.4.1 (h): To what extent will the coverage increase or decrease the cost of the treatment or service.

The coverage is estimated to decrease overall costs between \$400 million to \$641 million or 0.2% to 0.4% of total healthcare expenditures costs across all payers. This represents potential savings of 45 million (0.1%) for Medicaid, \$89 million (0.4%) for Medicare, and \$307 million (0.5%) for Commercial payers in the best estimate scenario.

The fiscal impact summary for CY 2022 provides a comprehensive analysis of the net savings per event for Medicaid, Medicare, and Commercial payors. This analysis helps to understand the financial implications of introducing on-scene and telehealth care during ambulance trips.

The fiscal impact was calculated using several steps, including identifying ambulance trips and associated costs, developing an algorithm to flag ED visits that could be replaced with on-scene or telehealth care, estimating the cost of substitute services, and calculating the difference between the cost of care provided absent on-scene care and the cost of substitute services.

The fiscal impact summary shows the net savings per event for Medicaid, Medicare, and Commercial payors. Additionally, the fiscal impact as a percentage of ambulance events and total program expenditures were calculated. This percentage change basis translates across time periods and provides a clearer picture of the financial impact.

Several considerations noted in the analysis:

- The fiscal impact does not include associated costs with implementing the change in service, such as additional training, communication systems to support telehealth, or additional equipment needed to support on-scene care.
- The availability of medically directed on-scene care may lead to changes in utilization of services, which were not estimated.
- The fiscal impact does not represent the full spectrum of potential reductions in costs across all Florida ambulance claims and associated events of care.

Overall, the fiscal impact summary for CY 2022 shows that introducing medically directed on-scene and telehealth care during ambulance trips can lead to significant net savings per event for Medicaid, Medicare, and Commercial payors, while also highlighting several important considerations that need to be taken into account.

# 4.4.2 (i): To what extent will the coverage increase the appropriate uses of the treatment or service.

The coverage is expected to increase the appropriate use of services by diverting an estimated 31% of current ED visits to more suitable alternative care settings. This includes on-scene care, telehealth consultations, urgent care facilities, recovery centers, and behavioral health centers.





The availability of medically directed on-scene care has the potential to change the utilization of services, leading to more appropriate uses of treatment or service. This analysis developed an algorithm to identify ED visits during the episode of care that could be replaced with medically directed on-scene care or care delivered from an alternative care facility.

The algorithm was designed to flag ED visits that were preventable and could instead be treated with medically directed on-scene care or care delivered in an alternative care facility. This approach aims to reduce unnecessary ED visits and ensure that patients receive the most appropriate care for their condition.

By identifying and redirecting these visits, the coverage can increase the appropriate use of treatment or service, ensuring that patients receive care in the most suitable setting. This not only improves patient outcomes but also optimizes resource utilization and reduces overall healthcare costs.

Overall, the availability of medically directed on-scene care can lead to significant changes in the utilization of services, promoting more appropriate uses of treatment or service and enhancing the efficiency of healthcare delivery.

# 4.4.3 (j): To what extent will the mandated treatment or service be a substitute for a more expensive treatment or service.

The mandated treatment serves as a substitute for more expensive ED visits in many cases. The average cost per avoidable ED event is estimated at \$2,133, while the average cost of alternative care is \$1,084 - a potential savings of \$1,049 per event in the best estimate scenario.

The financial impact analysis provides a detailed assessment of how the mandated treatment or service can serve as a substitute for more expensive alternatives. This is particularly relevant for ED visits flagged as avoidable, where the cost of substitute services for potential alternative care was estimated.

For ED visits identified as avoidable, the analysis estimated the cost of substitute services for potential alternative care. This involves identifying ED visits that could be replaced with medically directed onscene care or care delivered from an alternative care facility. The fiscal impact was calculated as the difference between the cost of care provided absent-on-scene care and the cost of substitute services.

Several steps were taken to estimate the fiscal impact:

- 1. Identifying Ambulance Trips and Associated Costs: The analysis began by identifying ambulance trips and associated costs during the episode of care originating with the ambulance claim.
- Developing an Algorithm: An algorithm was developed to identify ED visits during the episode of
  care that could be replaced with on-scene or telehealth care or with care delivered from an
  alternative care facility.
- 3. Estimating the Cost of Substitute Services: For ED visits flagged as avoidable, the cost of substitute services for potential alternative care was estimated.
- 4. Calculating the Fiscal Impact: The fiscal impact was calculated as the difference between the cost of care provided absent on-scene care and the cost of substitute services.

By replacing avoidable ED visits with medically directed on-scene care or alternative care facilities, the mandated treatment or service can serve as a cost-effective substitute for more expensive treatments. This approach not only reduces unnecessary ED visits but also ensures that patients receive appropriate care in a more suitable setting, ultimately leading to significant cost savings.





4.4.4 (k): To what extent will the coverage increase or decrease the administrative expenses of insurance companies and the premium and administrative expenses of policyholders.

Administrative expenses for insurance companies are not expected to increase, as the coverage leverages existing ambulance and alternative care infrastructure. Some initial investment may be required for telehealth capabilities and staff training.

The analysis does not estimate potential changes in administrative expenses for insurance companies and policyholders. This means that while the fiscal impact summary provides valuable information on the net savings per event for Medicaid, Medicare, and Commercial payors, it does not account for the additional administrative costs that may arise from implementing the new services.

For individuals that receive healthcare through Commercial insurers, the premium paid by policyholders will change with the overall change in estimated health care coverage (0.3% to 0.5% reduction) after adjusting for any increased administrative expenses borne by the insurers.

# 4.4.5 (I): The impact of this coverage on the total cost of health care.

The total impact on total healthcare costs is estimated to be a decrease of 0.2% to 0.4% or \$400 to \$641 million across Medicaid, Medicare, and Commercial payors.

## **In-depth Data Analysis**

The following data sources were used to develop the fiscal impacts of providing medically directed onscene care.

- Commercial data was summarized from Milliman's proprietary Consolidated Health Cost Guidelines Source Database (CHSD): Milliman has assembled multi-year, multi-line-of-business, longitudinal claims and enrollment data structures for use in product development, internal research and client engagements. Several national and regional health plans and employer groups contribute their enrollment and claims detail to the CHSD. This includes Commercial, Individual, Medicaid, Medicare Advantage, and Medicare Supplement members' claims and enrollment across all states. In Florida, approximately 40% of the membership within Commercial enrollment in CY 2022 is included in the CHSD. We used the Florida specific membership and cost information for this analysis and scaled the results to represent the full Commercial Florida market of approximately 12 million individuals in CY 2022.
- Medicare data was summarized from CMS RIFS: CMS RIF files, or Research Identifiable Files, are data files provided by the Centers for Medicare & Medicaid Services (CMS) that contain detailed beneficiary-level information. These files include a wide range of data elements such as demographics, enrollment information, claims data, and health care utilization records. RIF files are typically used by researchers and policymakers to conduct in-depth analyses of healthcare trends, outcomes, and expenditures. Because they contain identifiable information, access to RIF files is strictly controlled and requires adherence to privacy and security protocols to protect beneficiary confidentiality, of which Milliman has a data use arrangement (DUA) to use these files in our consulting services. Within these files we summarized CY 2022 Medicare FFS (Traditional Medicare) and Medicare Advantage membership and claims.
- Medicaid data was summarized from the Florida Medicaid Data: Under a data use agreement with the
  Florida Agency for Health Care Administration (AHCA Agreement NO DUA117) we summarized CY
  2022 members and claims data from the Florida Medicaid Management Information System (FMMIS).





This data includes all fee-for-service and managed care program membership and claims.

Properties	CHSD	CMS RIFs	Florida Medicaid	
Population Size by Line of Business	Commercial = 60 million lives nationwide	100% of Medicare FFS and Medicare Advantage lives	<b>Medicaid:</b> 5 million lives and \$25B+ in paid claims	
Performance	Commercial =	FFS Medicare = Membership, utilization and unit cost	FFS Medicaid = Membership, utilization and unit cost	
Performance Metrics	Membership, utilization and unit cost	Medicare Part C = Membership, utilization and derived costs	Managed Care Medicaid = Membership, utilization and unit costs	

Table 10 Milliman Dataset Properties

#### **Methodology and Assumptions**

Step 1: Identified ambulance trips and associated costs during the EMS event originating with the ambulance claim.

Our analysis used CY 2022 membership and claims data, which is the most recent available year of Florida claims data across all three populations included in our analysis: Commercial, Medicare, and Medicaid. To the extent that nationwide databases are leveraged, we identify Florida claims based on the location specified on the claim itself (as opposed to any member eligibility records). Throughout the report we refer to total savings or expenditures, which are a combination of the amount paid by both the payor and the consumer, if any cost sharing is applicable.

To identify the ambulance trips and associated claims we established EMS event, using the following steps.

- 1. We identify ambulance claims that may be impacted by introducing medically directed on-scene care with the following HCPCS codes:
  - a. A0427
  - b. A0429
  - c. A0433
  - d. A0998
- 2. We identify an EMS event as all claims incurred from the date of the ambulance visit plus one day, including the ambulance claim itself and any resulting claims that are incurred within the next day (i.e., on-scene care, transportation, emergency department (ED), inpatient, etc.). We include the day after the ambulance visit to appropriately flag claims if the EMS event spans two days (i.e., an ambulance trip occurs in the evening and the individual is not admitted to the ED until early the next morning).
  - a. In rare instances where a member receives multiple ambulance trips on the same day, we group the ambulance claims into a single EMS event.
  - b. In rare instances where a member has ambulance trips on consecutive days, we group the ambulance claims into a single EMS event.
- We grouped EMS events based upon the population type or the original site of the ambulance trip.





in the following order. These groupings are established to later apply logic to identity if the EMS event has potential alternative care opportunities if medically directed on-scene care is available.

- a. If an individual is receiving hospice services, either in their home or in a facility based on a review of claim data within the same month as the EMS event, we assigned the EMS event into a population group of "Hospice."
- b. If an individual was not transported to an Emergency Department (ED) we assigned the EMS event as "No ED Trip."
- c. Two-character modifier codes for ambulance claims are used to provide additional information about the service provided, specifically related to the origin and destination of the ambulance transport. We used the first character of the modifier code (i.e., the origin of the ambulance transport) to group EMS events into three buckets based on the origin of the EMS event; Medical Facilities, Skilled Nursing Facilities (SNF), and Residence / Accident / Other.

Modifier	Description	Grouping
D	Diagnostic or therapeutic site other than P or H when these are used as origin codes	Medical Facility
Е	Residential, domiciliary, custodial facility (other than an 1819 facility)	Residence / Accident / Other
G	Hospital-based dialysis facility	Medical Facility
Н	Hospital	Medical Facility
I	Site of transfer (e.g., airport or helicopter pad) between modes of ambulance transport	Medical Facility
J	Non-hospital-based dialysis facility	Medical Facility
N	Skilled nursing facility (SNF)	SNF
Р	Physician's office	Medical Facility
R	Residence	Residence / Accident / Other
S	Scene of accident or acute event	Residence / Accident / Other

Table 11 Origin of EMS Event Mapping

- 4. For members included in the Hospice or SNF groupings, we excluded any hospice or SNF claims included in the EMS event.
- 5. To review the fiscal impact by demographic and geographic areas, we grouped EMS events into the following using information on the membership record (rather than the ambulance claim). Member ages are calculated as of the ambulance claim date.





a. Demographic Buckets: We modeled four distinct age groups:

i. Child: Ages 0 to 14ii. Youth: Ages 15 to 24iii. Adult: Ages 25 to 64iv. Senior: Ages 65+

- b. Geographic Buckets: We modeled two distinct geographic groups:
  - i. Commercial: Zip code or county level information is not available in the CHSD database, rather Metropolitan Statistical Areas (MSAs) are the geographical designation available. Given MSAs are based on population centers, this often includes both mixed / suburban and urban areas. Therefore, we include one bucket for mixed / suburban / urban and a separate bucket for rural.
  - ii. **Medicaid and Medicare data**: Counties (determined by the location of the ambulance claim) were assigned as rural, mixed / suburban, or urban as outlined by the North Highland team. Given we are unable to distinguish mixed / suburban and urban in the Commercial data, we combine these two groups in the Medicaid and Medicare data as well.

Exhibit 2, in Appendix A, includes the CY 2022 count of EMS events by population type (Medicaid, Medicare, or Commercial) and the EMS event type group assigned (Hospice, No Trip, Medical Facility, SNF, or Residence / Accident / Other). Exhibit 3 includes the CY 2022 count of EMS events for the demographic and geographic buckets.

Step 2: Developed an algorithm to identify emergency department visits during the EMS event that could be replaced with medically directed on-scene care or with care delivered from an alternative care facility (e.g., urgent care).

Using the primary diagnosis field specified on the ambulance claim, we developed an algorithm to identify emergency department (ED) visits that were preventable and could instead be treated with medically directed on-scene care or care delivered in an alternative care facility. Our flagging methodology uses the publicly available algorithm developed by New York University<sup>126</sup> (NYU algorithm) as a framework with additional criterion applied based on review of the data and discussion with clinicians.

Prior to applying the NYU algorithm, we identified EMS events in the following categories and identified them as 100% avoidable or 100% non-avoidable:

- Hospice Individuals 100% avoidable: Individuals that are receiving hospice care should clinically receive palliative care in their facility or residence. Hospice claims span the entire period during which hospice services are provided (often multiple weeks or months); we classified EMS events as hospice-related if the EMS event falls within the span of a hospice claim.
- 2. Inpatient Admissions 100% non-avoidable: If an individual is admitted for an inpatient stay during the EMS event, we assume that this individual needed to be transported, regardless of their diagnostic data.
- 3. EMS events originating from a medical facility 100% non-avoidable: If an individual was sent to an ED from a different medical facility (as identified by the modifier code in Step 1 above), we assumed the transport was necessary, regardless of their diagnostic data.

Next, we applied the NYU algorithm to claims. This algorithm assigns a probability that claim falls into each of the following buckets, as shown by the flow chart below. Please note that a given claim may fall within



multiple of these above buckets:

- 1. Non-emergent claims
- 2. Emergent Claims Primary Care Treatable
- 3. Emergent Claims ED Care Needed Preventable / Avoidable
- 4. Emergent Claims ED Care Needed Not Preventable / Avoidable
- 5. Mental health related claims
- 6. Alcohol related claims
- 7. Substance abuse related claims
- 8. Injury related claims
- 9. Unclassified (not found in NYU's algorithm see below)

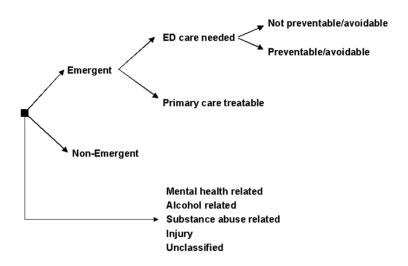


Figure 10 EMS Claim Buckets using NYU algorithm

For emergent and non-emergent claims, the NYU algorithm fully distributes a claim probability across emergent and non-emergent buckets. We identity non-emergent and emergent – primary care treatable as avoidable ED visits and emergent - emergent care needed (buckets 3 and 4) as non-avoidable. These claims are defined by the NYU algorithm as follows:

- Bucket 1: Non-emergent claims:
  - The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours.
- Emergent claims:
  - Bucket 2: Emergent Primary Care Treatable Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests).





- Bucket 3: Emergent ED Care Needed Preventable / Avoidable Emergency department care
  was required based on the complaint or procedures performed / resources used, but the emergent
  nature of the condition was potentially preventable / avoidable if timely and effective ambulatory
  care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.).
- **Bucket 4:** Emergent ED Care Needed Not Preventable / Avoidable Emergency department care was required, and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.).

For all other claim types, the NYU logic categorizes each claim into a single bucket. We applied the following logic, based upon discussions with clinicians, to determine what percentage of each of these claims should be considered avoidable vs. which percentage of these claims should be considered non-avoidable:

- Buckets 5, 6, and 7: Mental Health, Alcohol, or Substance Abuse Related: We reviewed the most frequent ICD-10 codes and categorized each as avoidable, likely avoidable, likely not avoidable, or not avoidable. We assigned probabilities of 0%, 25%, 75%, 100%, respectively, to each category; this percentage of each claim was categorized as "Emergent ED Care Needed Not Avoidable" while the remaining percentage for each claim was categorized as "Mental Health Avoidable," "Alcohol Avoidable," or "Substance Abuse Related Avoidable."
- Bucket 8: Injury: If an imaging claim was present during the ED visit, we assumed that the individual would need to be transported to an ED as those technologies are currently not available for medically directed on-scene care. We thus re-categorized injury claims with an associated imaging claim as "Emergent ED Care Needed Not Avoidable," but categorized the remaining injury claims as "Injury Avoidable."
- Bucket 9: Unclassified: We reviewed the most frequent unclassified ICD-10 codes that were unclassified and determined whether an ED visit was avoidable, likely avoidable, likely not avoidable, or not avoidable. We assigned probabilities of 0%, 25%, 75%, 100%, respectively, to each category; this percentage of each claim was categorized as "Emergent ED Care Needed Not Avoidable" while the remaining percentage for each claim was categorized as "non-emergent." If any ICD-10 codes will still unclassified, we conservatively bucketed these claims as 100% "Emergent ED Care Needed Not Avoidable."

Each diagnosis code was thus distributed, such that the total probability across all buckets was 100%. We consider the following categories to be non-avoidable vs. avoidable:

- Non-Avoidable ED visits:
  - Emergent ED Care Needed Preventable
  - Emergent ED Care Needed Not Preventable
- Avoidable ED visits:
  - Non-emergent
  - Emergent Primary Care Treatable
  - Mental Health Avoidable
  - Alcohol Avoidable
  - o Substance Abuse Related Avoidable
  - Injury Avoidable

Within a given diagnosis code, we calculate the following:





- Total EMS events (A)
- Total EMS events excluded due to the presence of an inpatient claim or a medical source modifier code
   (B)
- Total EMS events not excluded due to an inpatient claim or medical source modifier code (C = A B)
- The total avoidable ED visit percentage for the diagnosis code (the sum of all avoidable ED visits percentages above) (D)
- The maximum number of ED visits that can be flagged as avoidable (E = min [C, A x D])
- The percentage of ED visits not excluded due to an inpatient claim or medical source modifier code, which we assume to be avoidable (F = E / C)

For all EMS events not excluded due to an inpatient claim or medical source modifier code, we thus assume that F% of the EMS events and F% of total costs are avoidable. This F% of the EMS events are further distributed across each avoidable bucket above, proportional to the percentage in each bucket. We correspondingly assume (1-F%) of EMS events not excluded due to an inpatient claim or medical source modifier code, and 100% of all EMS events excluded due to an inpatient claim or medical source modifier code are non-avoidable. A sample calculation for one ICD-10 can be found in Exhibit 5.

# Step 3: For emergency department visits flagged in Step 2, we estimated the cost of the substitute services for potential alternative care.

For avoidable ED visits identified as potentially replaceable with medically directed on-scene care or with care delivered from an alternative care facility (e.g., urgent care) in Step 2, we identified five areas of potential alternative care in lieu of being transported to an ED. For medical related claims, these alternative care options may provide more appropriate care that is cost-effective relative to an ED visit. For behavioral health and SUD-related claims, these alternative care options are likely more expensive than an ED visit; however, they deliver more appropriate care and may result in lower costs for the individual over a longer period (i.e., avoid further ED trips):

- On-scene Care: Care provided on-scene by EMS staff
- Telehealth: care provided on-scene by EMS staff through directions from a medical professional via telephone, video, or other form of communication
- Urgent Care: An individual is transported to an urgent care facility rather than an ED for treatment of medical conditions
- Recovery Center: An individual is transported to a recovery center rather than an ED for treatment
  of substance or alcohol abuse related claims
- Behavioral Health Center: An individual is transported to a behavioral health center rather than an ED for treatment of mental health related claims

We assigned avoidable ED visits into the five alternative care groupings as shown in Table 12 based upon their grouping from Step 2. These probabilities are assigned separately for the Medicaid, Medicare, and Commercial populations using the underlying distribution of claims in Exhibit 4.



Grouping	On-scene	Telehealth	Urgent Care	Recovery Center	Behavior al Health Center
Hospice	100%				
Non-emergent claims	100%				
Emergent – Primary Care Treatable		33%	67%		
Injury	100%				
Substance / Alcohol Abuse				100%	
Behavioral Health					100%

Table 12 Alternative Care Probability and Avoidable ED Visits

The alternative care probabilities in Table 12 above are based upon clinical need, however, members may still elect to be transported to an ED rather than receiving alternative care. As outlined in the main report, in surveys 58% to 69% of members were open to receiving alternative care rather than being transported to an ED. Therefore, we apply a 65% rate of member acceptance of alternative care assumption. For example, this lowers the percentage of avoidable ED visits for hospice individuals from 100% to 65% and assumes the remaining 35% will still be transported to the ED.

The substitute cost of each alternative care option was estimated based on a review of the cost of these service types compared to an ED visit, separately for the Medicaid, Medicare, and Commercial populations using the same data sources described earlier in this report. We used the following methodology for each type of service, with the population specific estimated cost per EMS events included in Exhibit 4.

#### On-scene Care:

- The estimated cost of on-scene only care was estimated by reviewing the ambulance only portion of claims that did not transport an individual to an ED.
- **Telehealth**: The total estimated cost of telehealth includes the cost of on-scene care, as described above, plus an estimated cost of telehealth consultation. The telehealth consultation was estimated by reviewing claims with place of service (POS) code 02 and 10.
  - POS 02 Telehealth Provided Other than in Patient's Home (Used when the patient receives telehealth services at a location other than their home (e.g., clinic, hospital, or other medical facility).
  - POS 10 Telehealth Provided in Patient's Home
     Used when the patient is receiving telehealth services from their home.
- Urgent Care: The total estimated cost of the urgent care episode includes the cost of ambulance transportation to the urgent care center and the cost of care in the urgent care facility. We did not adjust the
  current ambulance costs for these claims and only adjusted the non-ambulance claims based on the
  observed relativity of urgent care to ED costs.





- Recovery Center and Behavioral Health Center: The total estimated cost of the recovery centers
  and behavioral health centers includes the cost of ambulance transportation to the center and the cost
  of care in the center (both facility and professional charges). We did not adjust the current ambulance
  costs for these claims. The recovery center cost was estimated by reviewing outpatient setting claims
  that we identified using the following criterion:
  - Facility Costs: Revenue Codes 0912, 0913, 0944, or 0945.
  - Professional Costs: Claims associated with the facility claims identified above that include POS 52, 53, 54, 55, 56, or 57.

# Step 4: We calculated the fiscal impact as the difference between the cost of care provided absent on-scene care (Step 2) and the cost of substitute services (Step 3).

We estimated the fiscal impact of providing medically directed on-scene care or transportation to alternative care facilities by removing the costs of ED visits flagged as avoidable in Step 2 and replacing those costs with the estimated cost of alternative care from Step 3. Note, this fiscal impact does not include any associated costs with implementing this change in service, such as additional training, communication systems to support telehealth, or additional equipment needed to support medically directed on-scene care.

Table 13 includes the CY 2022 fiscal impact separately for Medicaid, Medicare, and Commercial payors. Additional details of the calculation by subgroup are included in Exhibit 4. There are other payor types of ambulance claims in Florida not included in this analysis, such as uncompensated care, self-pay, governmental insurance coverage, etc. Therefore, the dollar amount in the fiscal impact shown in Table 13 does not represent the full spectrum of potential reductions in costs across all Florida ambulance claims and associated EMS events. Therefore, it may be more appropriate to review the fiscal impact as a percentage change in expenditure.

	Medicaid <sup>1</sup>	Medicare <sup>1</sup>	Commerci al	Total
Total EMS Events	430,003	1,097,830	306,953	1,834,786
ED Visits	372,530	1,040,044	286,728	1,699,302
Total Avoidable ED Visits	142,046	297,592	94,764	534,402
Avoidable ED Visit %	38%	29%	33%	31%
Cost / Avoidable ED Visit	\$671	\$1,960	\$4,867	\$2,133
% of Members that Accept Alternative Care	65%	65%	65%	65%
Cost Per EMS Event including Alternative Care	\$415	\$1,170	\$2,239	\$1,159
Net (Savings) / Increase Per EMS Event	(\$256)	(\$790)	(\$2,628)	(\$974)
Fiscal Impact (\$M)	(\$36)	(\$235)	(\$249)	(\$520)
Cost of EMS Events (\$M)	\$927	\$8,885	\$4,423	\$14,235

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Cost of EMS Events including Alternative Care (\$M)	\$964	\$9,120	\$4,672	\$14,755
Fiscal Impact as % of EMS Events	-3.9%	-2.6%	-5.6%	-3.7%
Total Florida Program Expenditures (\$M)	38,300	72,625	67,995	178,920
Fiscal Impact as % of Total Program	-0.1%	-0.3%	-0.4%	-0.3%

<sup>&</sup>lt;sup>1</sup> Individuals that are dually eligible for both Medicaid and Medicare may be double counted in the event counts; however, the costs per event represent the Medicaid and Medicare specific amounts paid by each payor.

## Table 13 Overall Summary of Fiscal Impact

## **Subgroup Results**

As outlined in Step 1, we assigned EMS events based upon the population type, the origin of the ambulance trip, or if there was not a transport to an ED. The fiscal impact is shown for each subgroup in Table 14. While many savings are attributed to claims that begin in a residential, accident, or other setting there are significant savings that may be achieved from individuals that are currently receiving hospice services if onscene care is substituted for trips to the ED, particularly for the Medicare population. If hospice individuals continue to be transported to the ED, the savings potential will be lower than shown in this report.

	Fiscal Impact in Millions (\$)			Fiscal Impact % Of Events				
	Medica id	Medica re	Commerc ial	Total	Medica id	Medicar e	Commerc ial	Total
Total	(\$36)	(\$235)	(\$249)	(\$520)	-3.9%	-2.6%	-5.6%	-3.7%
From Medical Facilities	\$0	\$0	\$0	\$0	0.0%	0.0%	0.0%	0.0%
From Hospice	(\$3)	(\$21)	(\$2)	(\$26)	-60.6%	-45.5%	-55.5%	-47.5%
From SNF	(\$4)	(\$21)	(\$3)	(\$27)	-5.9%	-1.7%	-3.4%	-2.0%
From Residential / Accident / Other	(\$30)	(\$193)	(\$244)	(\$467)	-4.6%	-2.9%	-7.1%	-4.3%
No Trip	\$0	\$0	\$0	\$0	0.0%	0.0%	0.0%	0.0%

Table 14 Fiscal Impact Summary: Population or Claim Origin Subgroups

## **Demographic and Geographic Results**

As outlined in Step 1, we assigned members into a demographic based upon the individual's age and geographic bucket based upon the population density of their county of residence. Table 15 shows the fiscal impact on the dollar and percentage basis for each subgroup. When reviewing results split by these sub-buckets the fiscal impact on a percentage basis is consistent across all geographic buckets, but there



is more potential for savings on younger populations.

	Fiscal Impact in Millions (\$)				Fiso	cal Impact %	of EMS Event	S
	Medicaid	Medicare	Commercial	Total	Medicaid	Medicare	Commercial	Total
Total	(\$36)	(\$235)	(\$249)	(\$520)	-3.9%	-2.6%	-5.6%	-3.7%
Child	(\$4)	n/a	(\$8)	(\$12)	-2.5%	n/a	-4.7%	-3.6%
Youth	(\$4)	(\$0)	(\$20)	(\$24)	-4.0%	-3.6%	-7.4%	-6.4%
Adult	(\$22)	(\$34)	(\$209)	(\$266)	-3.8%	-2.9%	-5.8%	-4.9%
Senior	(\$5)	(\$201)	(\$12)	(\$218)	-6.9%	-2.6%	-3.5%	-2.7%
Rural	(\$1)	(\$6)	(\$10)	(\$17)	-3.9%	-2.5%	-4.1%	-3.3%
Mixed	(\$35)	(\$229)	(\$239)	(\$503)	-3.9%	-2.7%	-5.7%	-3.7%

Table 15 Impact Summary: Demographic and Geographic Subgroups

#### **Sensitivity Testing**

There are many assumptions used to develop the fiscal impact estimates included in this report that if these services are administered differently, actual savings may not emerge as modeled in this report. To test the sensitivity of some of the assumptions, we performed testing on the fiscal impact for the following assumptions:

## Injury Claims

- Sensitivity 1: We classified injury claims that were transported to the ED as not-avoidable if there was an imaging claim present within the EMS event. This reflects that in the current environment most ambulances are not equipped to perform these services on-scene. Over time if investments are made to equip the ambulances with portable imaging equipment, more of these claims could be treated on-scene with telehealth. For Sensitivity 1 in Table 16, we adjusted our assumption to have 50% of claims identified as not avoidable in our baseline scenario to be treated using telehealth.
- Sensitivity 2: We classified injury claims that were transported to the ED as not-avoidable if there
  was an imaging claim present within the EMS event. For Sensitivity 2 in Table 16, we adjusted our
  assumption to have 50% of these claims to alternatively be transported to an urgent care facility.

## • Emergent – Primary Care Treatable

- Sensitivity 3: For claims identified as Emergent Primary Care Treatable the baseline assumes that 33% can alternatively be treated through Telehealth and the remaining 67% by transporting to an urgent care facility. In Sensitivity 3, we modified this distribution to be evenly split between the two alternative care options as 50% / 50%.
- Sensitivity 4: For claims identified as Emergent Primary Care Treatable the baseline assumes that 33% can alternatively be treated through telehealth and the remaining 67% by transporting to an urgent care facility. In Sensitivity 4, we modified this distribution to be 67% Telehealth and 33%



urgent care.

### Hospice

Sensitivity 5: For individuals we flagged as currently receiving hospice services, we assumed that all care could be performed on-scene, given individuals on hospice should be receiving palliative care in their home or facility rather than be transported to an ED. In Sensitivity 5, we modified this assumption to assume that 50% of EMS events also use telehealth to support the medically directed on-scene care.

# Acceptance of Alternative Care

Sensitivities 6 and 7: The baseline scenario assumes that when alternative care is available, members will accept this alternative care 65% of the time and request to continue to be transported to an ED 30% of the time. In Sensitivity 6, we increased that acceptance rate to 80% and in Sensitivity 7 we lowered that acceptance rate to 50%.

	All Popu	ulations	Change from Best Estimate		
Sensitivity	Fiscal Impact in Millions (\$)	Total Fiscal Impact (%)	Fiscal Impact in Millions (\$)	Total Fiscal Impact (%)	
Best Estimate	(\$520)	-0.29%			
1. Increase portable imaging for injury claims	(\$450)	-0.25%	\$70.1	0.04%	
2. Divert injury claims to urgent care	(\$514)	-0.29%	\$6.5	0.00%	
<ol> <li>Increase urgent care for Emergent – PCP treata- ble</li> </ol>	(\$531)	-0.30%	(\$10.9)	-0.01%	
4. Increase telehealth for Emergent – PCP treatable	(\$542)	-0.30%	(\$21.9)	-0.01%	
5. Hospice treated with telehealth	(\$519)	-0.29%	\$1.4	0.00%	
6. More members accept alternative care	(\$641)	-0.36%	(\$120.1)	-0.07%	
7. Fewer members accept alternative care	(\$400)	-0.22%	\$120.1	0.07%	

Table 16 Fiscal Impact Summary: Sensitivity Testing





# **Section Summary**

- Total Estimated Savings: The analysis projects significant cost reductions across all payers.
  - Total estimated savings of \$520 million across all payers.
  - Represents a 3.7% reduction in total ambulance events costs.
  - Equated to a 0.3% reduction in total health care expenditures.
- Avoidable ED Visits: A substantial portion of current ED visits following ambulance transport are identified as potentially avoidable.
  - 31% of current ED visits following ambulance transport identified as potentially avoidable.
  - Varies by payor type: 38% for Medicaid, 29% for Medicare, and 33% for Commercial.
- Cost Reduction per Event: The analysis shows significant potential savings per avoidable ED
  event.
  - The average cost per avoidable ED event estimated at \$2,133.
  - The average cost of alternative care is estimated at \$1,159.
  - Potential savings of \$974 per event in the best estimate scenario.
- Fiscal Impact by Payor: The potential savings vary across different payer types.
  - Medicaid: \$36 million (0.1%) potential savings.
  - Medicare: \$235 million (0.3%) potential savings.
  - Commercial payers: \$249 million (0.4%) potential savings.
- Subgroup Analysis: The analysis reveals varying potential savings across different subgroups.
  - Largest savings potential in trips originating from residential/accident/other settings, totaling \$520 million.
  - Significant savings potential noted for hospice patients, particularly within the Medicare population.
- Appropriate Use of Services: The coverage is expected to increase the appropriate use of services.
  - Estimated to divert 31% of current ED visits to more suitable alternative care settings.
  - Includes on-scene care, telehealth consultations, urgent care facilities, recovery centers, and behavioral health centers.
- Administrative Expenses: The impact on administrative expenses is expected to be minimal.





- Administrative expenses for insurance companies are not expected to increase significantly.
- Coverage leverages existing ambulance and alternative care infrastructure.
- Some initial investment may be required for telehealth capabilities and staff training.
- Total Healthcare Cost Impact: The analysis projects a decrease in overall healthcare costs.
  - Estimated decrease of 0.2% to 0.4% in total healthcare costs.
  - Translates to \$400 to \$641 million reduction across Medicaid, Medicare, and Commercial payors.

# 5. Conclusion

This report outlines the benefits of requiring coverage for EMS-based on-scene care and transportation to non-hospital locations under specific circumstances in Florida, according to Statute 624.215. The results of this study reveal multiple opportunities for improving the efficiency, effectiveness, and accessibility of emergency medical services across the state:

Highlight	Benefit
Cost Savings	Projected total savings of \$520 million across all payers, representing a 3.7% reduction in total ambulance event costs, demonstrating substantial financial benefits.
Improved Care Delivery	31% of current ED visits following ambulance transport identified as potentially avoidable, highlighting the opportunity to provide care in alternative settings.
Public Demand and Satisfaction	Florida faces primary care shortages in 66 of 67 counties, estimating a need for 1,338 additional providers to meet demand. Strong public support for EMS models offering on-scene treatment and transport to non-ED sites, aligning with patient preferences.
Addressing Financial Constraints	Potentially reducing out-of-pocket costs and surprise billing for patients, particularly the uninsured and underinsured, as well as systemwide cost savings.
Geographic Barriers and Socioeconomic Differences	Proposed changes have the potential to address differences in EMS access and quality between urban and rural areas, promoting equitable healthcare delivery.





However, the successful implementation of this requirement would require careful consideration of several factors:

- Implementation Costs: While administrative expenses for insurance companies are not expected to increase, there may be initial investments required for telehealth capabilities and staff training.
- Stakeholder Acceptance: The success of this initiative depends heavily on acceptance by patients, EMS providers, and healthcare facilities. Comprehensive education and outreach programs would be crucial to ensure understanding and adoption of new care models.
- **Ongoing Evaluation**: Regular assessment of the impact on care quality, patient outcomes, and overall healthcare costs would be necessary to ensure its continued effectiveness and to make any required adjustments.

In summary, the findings of this report support the consideration of required coverage for medically directed, EMS-based on-scene care and transportation to non-hospital destinations under specific circumstances. This change has the potential to transform Florida's EMS system into a more efficient, cost-effective, and patient-centered model of care. By aligning with public demand, addressing financial hardships, and promoting more appropriate use of healthcare resources, this initiative could enhance the quality and accessibility of emergency medical services for all Floridians. Our observed recommendations to support these improvements are provided in Appendix C.





# 6. Appendices

## **Appendix A- Financial Impact Study Exhibits**

#### **Caveats and Limitations**

Milliman prepared this deliverable for the specific purpose of evaluating the potential fiscal impact of North Highland implementing an on-scene EMS service offering. This deliverable may not be appropriate, and should not be used, for other purposes.

This deliverable is intended solely for the internal use and benefit of North Highland and Florida Department of Health, and it is only to be relied upon by these entities. Milliman recognizes that materials it delivers to the entities may be public records subject to disclosure to third parties; however, Milliman does not intend to benefit, and assumes no duty or liability to, parties other than the entities who receive this work.

In preparing this material, we relied on several sources of data and information. Those data sources and information include the Medicare 100% dataset, Milliman proprietary commercial datasets, FMMIS encounter data, and other supporting information from North Highland. We did not audit any of the data sources or other information, but we did assess the data and information for reasonableness. If the data or other information used is inadequate or incomplete, the results will be likewise inadequate or incomplete.

Milliman has developed certain models to estimate the values included in this email. The intent of the models was to evaluate the potential fiscal impact of North Highland implementing an on-scene EMS service offering. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOPs). The models, including all input, calculations, and output, may not be appropriate for any other purpose.

Results will differ from the estimates included in the provided exhibits. It is certain that actual experience will not conform exactly to the assumptions used. Actual amounts will differ from projected amounts to the extent that actual experience is better or worse than expected.

The results of this deliverable are technical in nature and are dependent upon specific assumptions and methods. No party should rely on these results without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Jill Bruckert, Adam Laurin, and Douglas Rodrigues are actuaries at Milliman, they are members of the American Academy of Actuaries, and they meet the Qualification Standards of the Academy to render the actuarial communication contained herein. To the best of their knowledge and belief, this communication is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.





	Exhibit 1			
Fi	orida Department of <mark>H</mark>	lealth		
	North Highland			
January 1, 2022 -	December 31, 2022 In	curred Claims Pe	eriod	
To	otal EMS Events by M	arket		
	Medicaid	Medicare	Commercial	Total
Total EMS Events	430,003	1,097,830	306,953	1,834,786
From Medical Facilities	40,508	74,211	35,613	150,332
From Hospice	3,604	26,644	908	31,156
From SNF	51,667	126,654	4,628	182,949
From Residential / Accident / Other	276,751	812,535	245,580	1,334,866
No Trip	57,473	57,786	20,225	135,484
	Medicaid	Medicare	Commercial	Total
Von-Avoidable ER Visits	230,484	742,277	191,966	1,164,72
From Medical Facilities	40,508	74,211	35,613	150,33
From Hospice			-	130,332
From SNF	29,905	99,345	3,296	132,54
			1,983	73,64
ER visit resulting in IP admit	4,179	67,481		
Injury Claims	3,644	12,485	310	16,43
BH Claims	97	85	6	18
SUD Claims	15	-	3	1
Other Claims	21,970	19,294	994	42,25
From Residential / Accident / Other	160,071	568,721	153,057	881,84
ER visit resulting in IP admit	57,552	391,367	77,558	526,47
Injury Claims	18,629	<i>65,44</i> 3	19,900	103,97
BH Claims	636	399	405	1,44
SUD Claims	1, 107	986	1,790	3,88
Other Claims	82,147	110,526	53,404	246,07
	Medicaid	Medicare	Commercial	Total
Avoidable ER Visits	142,046	297,592	94.764	534,402
From Medical Facilities	142,040	291,392	34,704	334,402
From Hospice	3,604	26,644	908	31,150
From SNF				
	21,762	27,224	1,332	50,31
ER visit resulting in IP admit		4 000		
Injury Claims	3,315	1,938	105	5,35
BH Claims	503	561	32	1,09
SUD Claims	38		22	6
Other Claims	17,906	24,725	1,173	43,80
From Residential / Accident / Other	116,680	243,724	92,524	452,92
ER visit resulting in IP admit	-	-	-	-
Injury Claims	14,788	8,680	5,698	29,16
BH Claims	3,084	3,864	3,073	10,02
SUD Claims			3,625	7,63
JOD CIAITIS	1,925	2.089	3,023	7,03
		2,089 229.091		
Other Claims	96,883	229,091	80, 128	406,10
Other Claims	96,883 <b>Medicaid</b>	229,091 <b>Medicare</b>	80, 128 Commercial	406,102 <b>Total</b>
	96,883 Medicaid 57,473	229,091 Medicare 57,786	80, 128  Commercial 20,225	406,102 Total 135,484
Other Claims	96,883 <b>Medicaid</b>	229,091 <b>Medicare</b>	80, 128 Commercial	406,102 <b>Total</b>
Other Claims No Trip % of Episodes that are ER Avoidable	96,883  Medicaid 57,473  Medicaid 38%	229,091  Medicare 57,786  Medicare 29%	80, 128  Commercial 20,225  Commercial 33%	406,102  Total  135,484  Total  319
Other Claims No Trip	96,883  Medicaid  57,473  Medicaid	229,091  Medicare 57,786  Medicare 29% 0%	80, 128  Commercial 20,225  Commercial	406,100  Total  135,48  Total
Other Claims  lo Trip  6 of Episodes that are ER Avoidable From Medical Facilities From Hospice	96,883  Medicaid 57,473  Medicaid 38% 0% 100%	229,091  Medicare 57,786  Medicare 29%	80, 128  Commercial 20,225  Commercial 33% 0% 100%	406,10  Total 135,48  Total 31' 0' 100'
Other Claims  lo Trip  6 of Episodes that are ER Avoidable From Medical Facilities	96,883  Medicaid 57,473  Medicaid 38% 0%	229,091  Medicare 57,786  Medicare 29% 0%	80, 128  Commercial 20,225  Commercial 33% 0%	406,10  Total 135,48  Total 31 0 100
Other Claims  lo Trip  6 of Episodes that are ER Avoidable From Medical Facilities From Hospice	96,883  Medicaid 57,473  Medicaid 38% 0% 100%	229,091  Medicare 57,786  Medicare 29% 0% 100%	80, 128  Commercial 20,225  Commercial 33% 0% 100%	406,10  Total 135,48  Total 31 0 100 28
Other Claims  To Trip  To of Episodes that are ER Avoidable  From Medical Facilities  From Hospice  From SNF	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29%	406,10  Total  135,48  Total  31  0 100 28
Other Claims  lo Trip  6 of Episodes that are ER Avoidable From Medical Facilities From Hospice From SNF ER visit resulting in IP admit	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0%	406,10  Total  135,48  Total  31  0  100  28  0 25
Other Claims  To Trip  To of Episodes that are ER Avoidable  From Medical Facilities  From Hospice  From SNF  ER visit resulting in IP admit Injury Claims BH Claims	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0% 48% 84%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84%	406,10  Total 135,48  Total 31 0 100 28 0 25 85
Other Claims  To Trip  To of Episodes that are ER Avoidable  From Medical Facilities  From Hospice  From SNF  ER visit resulting in IP admit Injury Claims BH Claims SUD Claims	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0% 48% 84% 72%	229,091  Medicare 57,786  Medicare 29% 100% 22% 0% 13% 87%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88%	406,10  Total 135,48  Total 31 0 100 28 0 25 85
Other Claims  To Trip  To of Episodes that are ER Avoidable From Medical Facilities From Hospice From SNF ER visit resulting in IP admit Injury Claims BH Claims SUD Claims Other Claims	96,883  Medicaid  57,473  Medicaid  38%  0%  100%  42%  0%  48%  84%  72%  45%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13% 87%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 54%	406,10  Total  135,48  Total  31  00  100  28  0  25  85  77  51
Other Claims  To Trip  To of Episodes that are ER Avoidable  From Medical Facilities  From Hospice  From SNF  ER visit resulting in IP admit Injury Claims BH Claims SUD Claims Other Claims From Residential / Accident / Other	96,883  Medicaid  57,473  Medicaid  38%  0%  100%  42%  0%  48%  84%  72%  45%  42%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13% 87% 56% 30%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 54% 38%	406,10  Total  135,48  Total  31  0  100  28  0  25  85  77  51
Other Claims  To Trip  To of Episodes that are ER Avoidable  From Medical Facilities  From Hospice  From SNF  ER visit resulting in IP admit  Injury Claims  BH Claims  SUD Claims  Other Claims  From Residential / Accident / Other  ER visit resulting in IP admit	96,883  Medicaid  57,473  Medicaid  38%  0%  100%  42%  0%  48%  84%  72%  45%  42%  0%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13% 87% 56% 30% 0%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 54% 38% 0%	406,10  Total  135,48  Total  31  0  100  28  65  77  51  34
Other Claims  To Trip  To of Episodes that are ER Avoidable From Medical Facilities From Hospice From SNF ER visit resulting in IP admit Injury Claims BH Claims SUD Claims Other Claims From Residential / Accident / Other ER visit resulting in IP admit Injury Claims	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0% 48% 84% 72% 45% 45% 42% 0% 44%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 133% 87% 56% 30% 0% 12%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 54% 38% 0% 22%	406,10  Total  135,48  Total  0  100  28  0  25  85  777  51  34  0  22
Other Claims  No Trip  No of Episodes that are ER Avoidable From Medical Facilities From Hospice From SNF ER visit resulting in IP admit Injury Claims BH Claims SUD Claims Other Claims From Residential / Accident / Other ER visit resulting in IP admit Injury Claims BH Claims BH Claims BH Claims	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0% 48% 84% 72% 45% 45% 42% 0% 44% 83%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13% 87% 56% 30% 0% 12% 91%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 544% 38% 0% 22% 88%	406,10  Total  135,48  Total  0  100  28  0  25  85  77  51  34  0  22  87
Other Claims  No Trip  % of Episodes that are ER Avoidable From Medical Facilities From Hospice From SNF  ER visit resulting in IP admit Injury Claims BH Claims SUD Claims Other Claims From Residential / Accident / Other ER visit resulting in IP admit Injury Claims SUD Claims BH Claims SH Claims BH Claims BH Claims SUD Claims	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0% 48% 84% 72% 45% 45% 42% 0% 44% 83% 63%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13% 87% 56% 30% 0% 12% 91% 68%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 54% 38% 0% 22% 88% 67%	406,10  Total  135,48  Total  0'  100'  28'  0'  255'  85'  77'  51'  34'  0'  22'  87'  66'
Other Claims  No Trip  % of Episodes that are ER Avoidable From Medical Facilities From Hospice From SNF  ER visit resulting in IP admit Injury Claims BH Claims Other Claims Other Claims From Residential / Accident / Other ER visit resulting in IP admit Injury Claims BH Claims BH Claims BH Claims	96,883  Medicaid 57,473  Medicaid 38% 0% 100% 42% 0% 48% 84% 72% 45% 45% 42% 0% 44% 83%	229,091  Medicare 57,786  Medicare 29% 0% 100% 22% 0% 13% 87% 56% 30% 0% 12% 91%	80, 128  Commercial 20,225  Commercial 33% 0% 100% 29% 0% 25% 84% 88% 544% 38% 0% 22% 88%	406,10  Total  135,48  Total  31





	Exhibit	2		
	Florida Depart me			
	North High	hland		
	January 1, 2022 - December 31, 2		iod	
	Total EMS Event Co	osts by Market	•	
				<b>-</b>
T-1-1 FMO F1-	Medicaid	Medicare	Commercial	Total
Total EMS Events	<b>927,431,464</b> 190,063,987	8,884,747,762	4,422,550,331	14,234,729,557
From Medical Facilities From Hospice	4,546,313	742,591,733 46,052,808	842,462,633 3,544,176	1,775,118,353 54,143,297
From SNF	65,461,658	1,210,658,602	78,309,892	1,354,430,152
From Residential / Accident / Other	647,528,234	6,687,719,095	3.463.703.371	10,798,950,700
No Trip	15.213.554	48.777.837	21,127,310	85.118.70
THE THE	-, -,-	-, ,-		, -, -
N 4 111 EB 15 1	Medicaid	Medicare	Commercial	Total
Non-Avoidable ER Visits	815,318,117	8,110,770,046	3,926,803,774	12,852,891,937
From Medical Facilities	190,063,987	742,591,733	842,462,633	1,775,118,353
From Hospice	-	4 404 704 007	70.040.454	4 005 000 00
From SNF	57,827,321	1,164,794,897	73,240,451	1,295,862,669
ER visit resulting in IP admit	44,158,564	1,101,849,157	68,353,543	1,214,361,264
Injury Claims	2,321,376	24,088,944	1,196,697	27,607,017
BH Claims	37,555	93,296	40,834	171,685
SUD Claims	7,029	- 20 700 500	4,313	11,342
Other Claims From Residential / Accident / Other	11,302,797	38,763,500	3,645,064	53,711,361
	567,426,809	6,203,383,416	3,011,100,690	9,781,910,915
ER visit resulting in IP admit	490,509,209	5,856,543,393	2,621,134,555	8,968,187,157
Injury Claims	14,525,659	119,156,188	109,932,818	243,614,665
BH Claims	418,893	70,999	1,431,900	1,921,792
SUD Claims	812,404	246,491	6,863,516	7,922,411
Other Claims	61,160,644	227,366,345	271,737,901	560,264,890
	Medicaid	Medicare	Commercial	Total
Avoidable ER Visits	95,282,233	583,297,537	461,216,297	1,139,796,067
From Medical Facilities	-	-	-	-
From Hospice	4,546,313	46,052,808	3,544,176	54,143,297
From SNF	10,634,495	52,909,050	5,069,440	68,612,985
ER visit resulting in IP admit	-	-	-	-
Injury Claims	1,660,107	2,420,688	197,606	4,278,401
BH Claims	251,698	742,739	144,272	1,138,709
SUD Claims	15,641	-	50,501	66,142
Other Claims	8,707,049	49,745,623	4,677,061	63,129,733
From Residential / Accident / Other	80,101,425	484,335,679	452,602,681	1,017,039,785
ER visit resulting in IP admit	-	-	-	-
Injury Claims	7,816,985	15,100,131	15,314,897	38,232,013
BH Claims	1,826,595	3,382,774	11,934,991	17,144,360
SUD Claims	1,274,541	619,331	13,312,468	15,206,340
Other Claims	69,183,304	465,233,443	412,040,325	946,457,072
	Medicaid	Medicare	Commercial	Total
No Trip	15,213,554	48,777,837	21,127,310	85,118,701
	Medicaid	Medicare	Commercial	Total
% of Costs that are ER Avoidable	10%	7%	11%	8%
From Medical Facilities	0%	0%	0%	0%
From Hospice	100%	100%	100%	100%
From SNF	16%	4%	6%	5%
ER visit resulting in IP admit	0%	0%	0%	09
Injury Claims	42%	9%	14%	139
BH Claims	87%	89%	78%	879
SUD Claims	69%		92%	859
Other Claims	44%	56%	56%	549
From Residential / Accident / Other	12%	7%	13%	99
ER visit resulting in IP admit	0%	0%	0%	09
Injury Claims	35%	11%	12%	149
BH Claims	81%	98%	89%	909
SUD Claims	61%	72%	66%	669
Other Claims	53%	67%	60%	639
No Trip	N/A	N/A	N/A	N/
	14/74	14/7	147.1	- 11





	January 1, 2022 - Dec	Exhibit 3 la Department of Hea North Highland cember 31, 2022 Incu ic and Geographic S	rred Claims Period	
	Medicaid	Medicare	Commercial	Total
EMS Events	modicald	moulou.	o o i i i i i i i i i i i i i i i i i i	10.0.
Demographic Bu	ckets			
Child	39,998	-	12,335	52,333
Youth	50,208	1,167	27,208	78,583
Adult	231,004	159,445	245,555	636,004
Senior	108,793	937,218	21,855	1,067,866
Geographic Buck	rets			
Rural	16,363	29,979	13,418	59,760
Mixed	413,640	1,067,851	293,535	1,775,026
EMS Event Costs				
Demographic Bu	ckets			
Child	\$157,845,320	\$0	\$175,678,056	\$333,523,376
Youth	\$113,316,884	\$4,195,477	\$264,402,793	\$381,915,154
Adult	\$587,468,212	\$1,169,953,432	\$3,634,352,372	\$5,391,774,016
Senior	\$68,801,047	\$7,710,598,853	\$348,117,111	\$8,127,517,011
Geographic Buck	rets			
Rural	\$34,874,667	\$238,866,511	\$240,126,237	\$513,867,415
Mixed	\$892,556,797	\$8,645,881,251	\$4,182,424,094	\$13,720,862,142
Cost per EMS Ever	nt			
Demographic Bu				
Child	\$3,946		\$14,242	\$6,373
Youth	\$2,257	\$3,595	\$9,718	\$4,860
Adult	\$2,543	\$7,338	\$14,801	\$8,478
Senior	\$632	\$8,227	\$15,928	\$7,611
Geographic Buck	rets			
Rural	\$2,131	\$7,968	\$17,896	\$8,599
Mixed	\$2,158	\$8,097	\$14,248	\$7,730

# **NORTH** HIGHLAND

# Milliman

								Exhibit										
								Florida Departme North High	ent of Health									
							January 1, 202	2 - December 31, 2 native Care Costs	2022 Incurred Clai	ms Period								
							Alter	Medica										
	Av	voidable ER Visit	s			Alternative Car	e Destination %				Alte	rnative Care Desti	ination Cost Per E					
	Events	Costs	Costs Per Event		Telehealth	Urgent Care	Recovery Center	Behavioral Health Facility	Emergency Department	Onscene Care	Telehealth	Urgent Care	Recovery Center	Behavioral Health Facility	Emergency Department	Alternative Care Costs	Fiscal Impact (\$)	Fiscal Impact (%
roidable ER Visits From Medical Facilities	142,046	95,282,233	\$671													\$58,949,426 \$0	-\$36,332,807 \$0	
From Medical Facilities	-															\$0	- 40	,
From Hospice	3,604	4,546,313	\$1,261	65%	-		-		35%	\$86					\$1,261	\$1,793,413	-\$2,752,900	
From SNF	21,762	10,634,495	\$489													\$6,784,222	-\$3,850,273	
ER visit resulting in IP admit																\$0	\$0	
Injury Claims	3,315	1,660,107	\$501	65%				ī	35%	\$86					\$501	\$767,027	-\$893,080	
BH Claims	503	251,698	\$500				-	65%						\$1,349		\$529,135	\$277,437	
SUD Claims	38	15,641	\$412	- 000/	400/	- 0.40/	65%	•	35%	600	6450	6074	\$1,349		\$412	\$38,794	\$23,153	
Other Claims	17,906	8,707,049	\$486	29%	12%	24%	-		35%	\$86	\$158	\$374			\$486	\$5,449,267	-\$3,257,782	
From Residential / Accident / Other ER visit resulting in IP admit	116,680	80,101,425	\$687													\$50,371,790 \$0	-\$29,729,635 \$0	
Injury Claims	14,788	7,816,985	\$529	65%					35%	\$86					\$529	\$3,565,632	-\$4,251,353	
BH Claims	3,084	1.826.595	\$529 \$592	0576				65%		400				\$1,349	\$592	\$3,343,540	\$1,516,945	
SUD Claims	1.925	1,274,541	\$662				65%		35%				\$1,349	ψ1,040	\$662	\$2,133,847	\$859.306	
Other Claims	96.883	69.183.304		27%	12%				35%	\$86	\$158	\$529	ψ1,040		\$714	\$41,328,771	-\$27.854.533	
Outer Ciairis	30,000	03,103,304	\$714	2170	1270	2370			3576	\$00	\$150	<b>\$328</b>			\$7.14	ψ41,320,771	-927,004,300	,
No Trip	N/A	N/A	N/A													N/A	N/A	
								Medica	re									
	Av	voidable ER Visit	s			Alternative Car	e Destination %				Alte	rnative Care Desti	nation Cost Per E					
	Events	Costs	Costs Per Event	Onscene Care	Telehealth	Urgent Care	Recovery Center	Behavioral Health Facility	Emergency Department	Onscene Care	Telehealth	Urgent Care	Recovery Center	Behavioral Health Facility	Emergency Department	Alternative Care Costs	Fiscal Impact (\$)	Fiscal Impact (%
pidable ER Visits	297,592	583,297,537	\$1,960													\$348,214,386	-\$235,083,151	
From Medical Facilities	-															\$0	\$0	)
From Hospice	26,644	46,052,808	\$1,728	65%		-	-	-	35%	\$518					\$1,728	\$25,081,077	-\$20,971,731	
From SNF	27,224	52,909,050	\$1,943													\$31,920,016	-\$20,989,034	L
ER visit resulting in IP admit	21,224	52,909,050	\$1,943													\$31,920,016	-\$20,989,034 \$0	
Injury Claims	1,938	2,420,688	\$1,249	65%					35%	\$518					\$1,249	\$1,499,151	-\$921,537	
BH Claims	561	742,739	\$1,324	0.576				65%		φ510				\$1,155		\$681,299	-\$61,440	
SUD Claims	301	142,133	ψ1,524				0%		3570					ψ1,155	\$1,024	\$001,239	\$01,440	
Other Claims	24,725	49,745,623	\$2,012	31%	11%	23%			35%	\$518	\$668	\$1,146			\$2,012	\$29,739,565		
	- 1,1.20	,,	42,0.0		,.					40.0	****	*.,			72,0.12	4-0). 00,000	<b>4</b> =0,000,000	
From Residential / Accident / Other	243,724	484,335,679	\$1,987													\$291,213,293	-\$193,122,386	6
ER visit resulting in IP admit	-															\$0	\$0	)
Injury Claims	8,680	15,100,131	\$1,740	65%					35%	\$518					\$1,740	\$8,204,852	-\$6,895,279	
BH Claims	3,864	3,382,774						65%						\$1,155		\$4,086,039	\$703,265	5
SUD Claims	2,089	619,331	\$296				65%		35%				\$1,155		\$296	\$1,785,715	\$1,166,384	
Other Claims	229,091	465,233,443	\$2,031	31%	11%	23%	-		35%	\$518	\$668	\$1,153			\$2,031	\$277,136,686	-\$188,096,757	
		,																
No Trip	N/A	N/A	N/A													N/A	N/A	<u> </u>
								Commer	cial							1		
		voidable ER Visit					e Destination %	Behavioral	Emergency				nation Cost Per E	vent Behavioral	Emergency	Alternative Care	Fiscal Impact	
	Events	Costs	Costs Per Event	Onscene Care	Telehealth	Urgent Care	Recovery Center	Health Facility	Department	Onscene Care	Telehealth	Urgent Care	Recovery Center	Health Facility		Costs	(\$)	Fiscal Impact (%
oidable ER Visits	94,764	461,216,297	\$4,867													\$212,142,461	-\$249,073,836	
From Medical Facilities	-	-														\$0	\$0	)
From Hospice	908	3,544,176	\$3,903	65%					35%	\$570					\$3,903	\$1,576,837	-\$1,967,339	
From SNF ER visit resulting in IP admit	1,332	5,069,440	\$3,806													\$2,423,007 \$0	-\$2,646,433 \$0	
ER visit resulting in IP admit Injury Claims	105	197,606	\$1,882	65%					35%	\$570					\$1,882	\$0 \$108,082	\$0 -\$89,524	
BH Claims	105	197,606	\$1,882 \$4,509	65%				65%		\$5/0				\$2,180		\$108,082 \$95,847	-\$89,524 -\$48,425	
SUD Claims	22	50.501	\$2,296				65%		35%				\$2,180	Ψ2,100	\$2,296	\$48.855	-\$1,646	
Other Claims	1.173	4.677.061	\$3,987	28%	12%	25%			35%	\$570	\$692	\$850	Ψ=,100		\$3,987	\$2,170,223	-\$2.506.838	
	.,	.,,	\$2,001	2070	12,10	2070			0070	\$570	-002				40,007	Ţ <u></u> , <u>J,</u>	\$2,000,000	
From Residential / Accident / Other	92,524	452,602,681	\$4,892													\$208,142,617	-\$244,460,064	ı
ER visit resulting in IP admit	-															\$0	\$0	)
Injury Claims	5,698	15,314,897	\$2,688	65%		-			35%	\$570					\$2,688	\$7,472,059	-\$7,842,838	
BH Claims	3,073	11,934,991	\$3,884	-		-		65%						\$2,180		\$8,532,470	-\$3,402,521	
SUD Claims	3,625	13,312,468	\$3,672	-		-	65%		35%				\$2,180		\$3,672	\$9,796,911	-\$3,515,557	
			05.110	000/	4001	25%			0.004	\$570	\$692	2000			\$5,142	0400 044 4777	2000 000 110	
Other Claims	80,128	412,040,325	\$5,142	28%	12%	25%			35%	\$5/0	\$092	\$932			\$5,142	\$182,341,177	-\$229,699,148	)
Other Claims  No Trip	80,128 N/A	412,040,325 N/A	\$5,142 N/A	28%	12%	25%		·	35%	\$570	\$092	\$932			\$5,142	\$182,341,177 N/A	-\$229,699,148 N/A	B

# NORTH HIGHLAND Milliman

Exhibit 5A Diagnosis Code: R112 (Nausea with NYU Algorithm - Avoidable Bud	)	
	NYU Algorithm	
ER Visit Category	Percent Distribution	Percent of Subtotal
Non-Avoidable ER Visit:		
Emergent - ED Care Needed - Preventable/Avoidable	0.00%	0.00%
Emergent - ED Care Needed - Non Preventable/Avoidable	17.14%	100.00%
Total Non-Avoidable	17.14%	100.00%
Avoidable ER Visit:  Non-emergent	37.14%	44.83%
Emergent - Primary Care Treatable	45.71%	55.17%
Mental Health - Avoidable	0.00%	0.00%
Alcohol - Avoidable	0.00%	0.00%
Substance Abuse Related - Avoidable	0.00%	0.00%
Injury - Avoidable	0.00%	0.00%
Total Avoidable	82.86%	100.00%

	Exhibit 5B Diagnosis Code: R112 (Nausea with vomiting, unspecified) Sample Calculation	
A	Total ER Visit Count	10,000
	ER Visit excluded due to an Inpatient claim or Medical Modifier Code	1,000
C = A - B	Other ER Visits	9,000
D	Total Avoidable Percentage <sup>1</sup>	82.86%
$E = min(C, A \times D)$	Maximum ER Visit Count Flagged as Avoidable	8,286
F = E / C	Percentage of Not-Excluded ER Visits Assumed to be Avoidable	92.06%
<sup>1</sup> Exhibit 5A 'Percei	nt Distribution' Column 'Total Avoidable' Value	





Exhibit 5C Diagnosis Code: R112 (Nausea with vomiting, unspecified) Distribution of Avoidable ER Visits								
	Percent of Not-Excluded ER Visits							
Avoidable ER Visits:	Percent of Total Avoidable <sup>1</sup>	Assumed to be Avoidable <sup>2</sup>	In Avoidable Category					
	Α	В	C = A * B					
Non-emergent	44.83%	92.06%	41.27%					
Emergent - Primary Care Treatable	55.17%	92.06%	50.79%					
Mental Health - Avoidable	0.00%	92.06%	0.00%					
Alcohol - Avoidable	0.00%	92.06%	0.00%					
Substance Abuse Related - Avoidable	0.00%	92.06%	0.00%					
Injury - Avoidable	0.00%	92.06%	0.00%					
Total Avoidable	100.00%	92.06%	92.06%					
<sup>1</sup> Exhibit 5A 'Percent of Subtotal' Column								
<sup>2</sup> Exhibit 5B Calculation Step 'F'								





# **Appendix B- Recommendations**

Florida can transform its EMS system into a more efficient, cost-effective, and patient-centered model of care. This evolved system would be better aligned with the actual utilization patterns and needs of Florida's diverse population, ultimately leading to improved health outcomes and more sustainable healthcare delivery.

The path forward requires a collaborative effort from policymakers, healthcare providers, EMS agencies, and community stakeholders. By addressing the challenges identified in this analysis and embracing innovative approaches to emergency care, Florida can lead the way in creating a next-generation EMS system that serves as a model for other states across the nation.

Based on these findings, we propose the following recommendations to improve EMS utilization and overall emergency care in Florida:

- **1.Develop Alternative Care Pathways:** Implement and expand programs for alternative destination transport, particularly for mental health crises, low-acuity conditions, and chronic disease management. This could include partnerships with urgent care centers, mental health facilities, and primary care providers.
- **2. Enhance Community Paramedicine Programs:** Expand community paramedicine initiatives to provide in-home care for frequent EMS users and patients with chronic conditions. This approach can reduce unnecessary EMS calls and ED visits while improving patient outcomes.
- **3. Integrate Telemedicine:** Incorporate telemedicine consultations into the EMS response system to provide real-time medical guidance, potentially reducing unnecessary transport and ED visits.
- **4. Address Geographic Barriers:** Develop targeted strategies to improve EMS resources and response times in rural areas. This may include innovative staffing models, increased funding, and partnerships with local healthcare providers.
- **5. Reform Payment Models:** Consider payment reform that aligns reimbursement with appropriate care delivery, rather than solely rewarding transport. This could incentivize alternative care pathways and community paramedicine programs.
- **6. Improve Public Awareness:** Launch public awareness campaigns to educate the population about appropriate EMS use, available healthcare alternatives, and the importance of preventive care.
- **7. Enhance Data Collection and Analysis:** Implement standardized data collection across all EMS agencies in Florida to facilitate ongoing analysis and continuous improvement of the system.
- **8. Foster Inter-agency Collaboration:** Promote collaboration between EMS agencies, hospitals, primary care providers, and mental health services to create a more integrated and efficient emergency care system.





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