HEALTHCARE STRATEGISTS

Executive Summary

Introduction

The South Dakota Department of Health requested an analysis of selected ambulance provider fee schedules and billing practices to decide whether current charges are appropriate, if simplification would be beneficial, and how those charges compare with underlying service costs. This report focuses on three providers and uses the information made available by each organization to identify billing patterns and financial pressures for South Dakota emergency medical services (EMS) agencies.

The scope of work included the following tasks:

1. Discuss the review with the ambulance provider's leadership
2. Analyze existing fee schedules
3. Assess the approach to charges in comparison to costs
4. Determine if simplifying or reducing itemization would be beneficial
5. Ensure consistency with payer and regulatory requirements

Assessment Methodology

The review considered three providers selected for the study. The analysis relied on provider-supplied financial information, fee schedules, billing details, and interview outreach; however, the completeness and comparability of available data varied by provider.

Data Requested

- Current charge list
- 2025 income and expense
- 2025 payer mix
- Trip-level detail for 2025 including type of service, payer type, gross charges, net charges, net collections, trip date, invoice date, payment date

Interviews Conducted

- State EMS Agency Staff
- Provider #1 EMS Leadership
- Provider #2 Finance Director and Hospital Director
- Provider #3 Ambulance Leadership

Discussions and Findings

1. Overview of participating ambulance providers

Provider #1

This municipal organization staffs approximately 27 full-time firefighter-paramedics and two fully staffed fire stations serving 50,000 citizens in two counties. A public agency that provides multiple public safety functions, some expenses are shared across service lines. The city supplied departmental income statements for 2025, allowing a reasonable representation of ambulance service costs. Billing details by primary payer and the current ambulance fee schedule were also provided. This is the largest of the three providers, receiving 3,751 EMS calls and running 2,057 transports in 2025. The city was also able to provide the most detailed and meaningful data for this study.

Provider #2

This county-operated provider is an advanced life support (ALS) ambulance service covering a rural area of approximately 1,800 square miles. It operates three ambulances with 24/7 coverage based at the county hospital, receives approximately 550 calls per year, and performed 443 transports in 2025. The provider submitted an annual income statement, ambulance fee schedule, and detailed payment data. Trip detail was provided in two separate files, which were cross-referenced to create data to support this study.

Provider #3

A community-based ambulance service, Provider #3 offers basic life support (BLS) emergency and non-emergency services in one city. Staffed with a combination of volunteer and paid responders, it answers 911 emergency calls in a rural environment. Management reported 170 transports in 2025.

2. Analysis of existing fee schedules

The fee schedules reviewed for the participating providers are summarized below.

AMBULANCE FEE SCHEDULES - SOUTH DAKOTA			
	Provider #1	Provider #2	Provider#3
ALS1 Emergency	$ 1,350	$ 1,054	n/a
ALS2 Emergency	$ 1,550	$ 1,554	n/a
ALS Non Emergency	$ 1,350	$ 1,054	n/a
BLS Emergency	$ 1,000	$ 930	950
BLS Non Emergency	$ 1,000	$ 859	n/a
SCT	$ 1,550		n/a
Mileage	$ 21	$ 50	18
Call no Transport		$ 145	n/a

Note: Provider #3 is only licensed to run BLS.

Average patient charge based on 2025 averages is calculated below.

AVERAGE PATIENT CHARGE (APC)					
	Average Base	Miles	Charge per mile	Mileage Charge	APC
Provider #1	$ 1,250.00	20	$ 21.00	$ 415	$ 1,665
Provider #2	$ 1,050.00	18	$ 50.00	$ 875	$ 1,925
Provider#3	$ 950.00	36	$ 18.00	$ 648	$ 1,598

Current rates are competitive among the participating providers, but they were not developed to achieve full cost recovery. As a result, these operations continue to depend on other revenue sources, including tax revenues, subsidies, grants, and other local or supplemental funding. The review verifies that the participating agencies rely on bundled pricing, with charges driven by transport base rate and mileage rather than extensive itemization.

3. Analysis of Charges Compared to Costs

Ambulance expenses are rising faster than transport-related revenue for many EMS agencies. This pressure is especially acute in public and rural systems, where readiness costs remain high even when transport volume is limited. Labor, benefits, equipment replacement, fleet maintenance, compliance requirements, and long-distance response coverage all contribute to cost growth. In these environments, transport billing revenue alone is often insufficient to support the full cost of service, creating ongoing reliance on taxes, subsidies, grants, volunteers, or supplemental reimbursement programs.

The data received from Provider #1 and Provider #2 illustrate this widening gap between ambulance revenue and operating cost (Provider #3 has not provided cost data).

2025 FINANCIAL METRICS							
Provider	Net Patient Income	Other Amb Income	Total Ambulance Income	Total Ambulance Expense	Amb Income less Amb Expense	Net Amb Revenue per Trip	Amb Cost per Trip
#1	$ 1,431,474	$ 111,509	$ 1,542,983	$ 3,976,366	$ (2,544,892)	$ 750	$ 1,933
#2	$ 388,970	$ 27,204	$ 416,174	$ 758,668	$ (342,494)	$ 858	$ 1,564
#3	$ 154,088		$ 154,088			$ 906	

Factors driving the disparity between revenue and expenses include:

- Labor, the single largest cost driver, generally comprises 71% of total cost. Crew wage increases are largely tied to labor agreements and typically increase at a higher rate than inflation.
- Other costs, especially fuel, vehicle costs, and insurance, are increasing more than overall inflation.
- Contracted ambulance rate increases are usually tied to inflation or government pricing (i.e., Medicare and Medicaid) and only a small percentage of payers respond. Public sensitivity to high ambulance pricing contributes to the reticence of EMS providers to

increase charges.

- Medicaid rate increases in South Dakota have been nominal, averaging less than 2%. 2026 rates increased 1.25% over 2025.
- Medicare rate increases are tied to inflation and applied annually. Increases are typically around 2% to 3% and apply to 58% of volume per the data collected.

4. Benefits of simplifying or reducing itemization

Providing ambulance care in emergency and non-emergency settings requires specialized staffing, equipment, vehicles, supplies, and medications. In practice, EMS agencies typically use one of two charging models: a chargemaster approach, which itemizes a wide range of individual services and supplies, or bundled billing, which applies an inclusive rate for the transport level plus a separate mileage charge. For most rural and governmental EMS providers, bundled billing is the more practical model because it simplifies administration and aligns more closely with how major payers process claims.

Key advantages of bundled pricing include:

- Clearer for payers. Ambulance bills can be hard to interpret. Bundled charges are easier to read and reduce confusion caused by multiple unfamiliar line items.
- More consistent reimbursement. Commercial insurers are often more likely to process and pay standardized bundled transport charges than highly itemized claims, which can trigger selective denials.
- Simpler to manage. A bundled fee schedule is easier to maintain and update than a large chargemaster with many individual prices.

For South Dakota EMS agencies, bundled pricing is the preferred billing structure. It is generally easier for patients to understand, simpler for agencies to maintain, and more likely to support consistent reimbursement than highly itemized billing.

5. Consistency with Payer and Regulatory Requirements

This review evaluated each provider's billing and compliance practices based on the information available. Effective revenue cycle management (RCM) is essential to maximizing reimbursement, supporting operational sustainability, and maintaining compliance with payer and government requirements.

The primary areas of focus are organized into three levels:

Level 1 Monthly Monitoring
Payer mix trends
Type of service mix trends
Average Patient Charges

Level 2 Benchmarking
- Net collection rate (NCR)
- Accounts receivable over 120 days
- Bad debt write-off rate
- Self-pay collection rate

Level 3 Compliance
- Coding reviews
- Days to first payment
- Denial rate
- Payment on first invoice rate

The provider data reflected 2025 activity captured as of June 2026. Based on the information available, selected key performance indicators (KPIs) were tested for this report. To preserve anonymity, three separate, provider-specific reports were prepared to support individual review and follow-up action.

PROVIDER #1: City-Run, Firefighter-Staffed, Serving Two Counties

This is the largest of the three providers, receiving 3,751 EMS calls and running 2,057 transports in 2025. The city was also able to provide the most detailed and meaningful data for this study. Billing is outsourced to the largest billing service provider serving EMS in the United States.

Level 1 Analysis

The following charts show key metrics that should be reviewed periodically (quarterly or semi-annually) and analyzed when variations between periods are significant. Data used should be at least 6 months old to allow for trailing payments and write-offs.

PAYER MIX		
Payer Type	Trips	Payer Mix
Medicare	594	28.9%
Medicare Advantage	606	29.5%
Medicaid SD	266	12.9%
Medicaid MCO	4	0.2%
Insurance	310	15.1%
Facility	44	2.1%
Other Govt Payors	38	1.8%
Patient	177	8.6%
Third Party Liability (TPL)	18	0.9%
Total	**2,057**	**100.0%**

Findings: Payer mix categories are clearly identified and are consistent with other large billing organizations. Medicare and Medicaid account for 71.5% of all trips, making this provider highly dependent on government fee schedules. Private insurance covers 15% of all trips.

Level 2 Benchmarking

Net Collection Rate (NCR)

NCR measures what is received (actual revenue) compared to what is allowed by each payer (expected revenue). By comparing collections to gross revenue less contractual allowances, a clear picture is drawn on the effectiveness of operational and billing practices. A decline in net collection rate should be promptly researched to determine the cause. Key areas to review include payer mix shifts, type of service shifts, high outstanding accounts receivable, and increased denials.

Creating benchmarks for each payer and tracking changes regularly provide critical insights into potential problems.

NET COLLECTION RATE (NCR)	
Payer	Provider #1
Medicare & Medicare Advantage	87.6%
Medicaid & Medicaid MCO	89.0%
Insurance	73.6%
Facility	55.9%
Other Govt Payors	87.3%
Third Party Liability (TPL)	45.2%

Finding: These NCRs align with common industry benchmarks reflecting sound collection practices in these payer categories.

Self-Pay Collection Rate
This metric is the ratio between payments and gross collections and measures the effectiveness of follow-up, alternative payment options, and ease of making payments for uninsured patients.

SELF PAY COLLECTION RATE	
Provider 1	13.7%

Finding: A self-pay rate of 8% to 12% range is seen in most areas. This result reflects active collection activities. Also, use of alternative payment options positively impacted this metric.

Accounts Receivable Balances and Bad Debt Write-offs
Reviewing these two metrics together highlights several findings.

BALANCES OVER 120 DAYS	
Provider 1	5.1%

BAD DEBT WRITE OFF RATE	
Provider 1	19.2%

Finding: Provider #1 has high bad debt write-offs but low balances over 120 days, indicating that aged accounts receivable are resolved regularly and referred to collections promptly, which increases the likelihood of additional payments.

Level 3 Compliance

Coding review: This provider uses bundled billing, charging only a base rate and allowable mileage. During the interview, we reviewed the billing data with the provider and determined that base charges and mileage were billed correctly.

Other compliance metrics: The data collected did not include first invoice dates, payment dates, or denials. Generally, standard billing reporting does not include this level of detail. Trip-by-trip review or customized reports should be made available to review periodically to track these metrics.

PROVIDER #2: Rural County-Based ALS

As a small, rural ambulance service, provider #2 relies on the county hospital financial resources for ambulance billing.

Level 1 Analysis

The following charts show key metrics that should be reviewed periodically (quarterly or semi-annually) and analyzed when variations between periods are significant. Data used should be at least 6 months old to allow for trailing payments and write-offs.

PAYER MIX		
	Trips	Mix
Medicare	230	47.4%
Medicare Advantage	55	11.3%
Medicaid SD	45	9.3%
Medicaid MCO	1	0.2%
Insurance	50	10.3%
Facility	38	7.8%
Patient	36	7.4%
Transfer to Hospital	30	6.2%
Total	**485**	**100.0%**

Findings: Payer mix categories are clearly identified and are consistent with other large billing organizations. Medicare and Medicaid account for 68.2% of all trips, making this provider highly dependent on government fee schedules. Private insurance covers 10.3% of all trips.

Other represented 6.2% of volume and appears to reflect transports transferred into the hospital billing system. Ambulance reporting does not include billing detail for these trips, which limits visibility into ambulance-specific activity and makes direct comparison less reliable.

Level 2 Benchmarking

Net collection rate

NCR measures what is received (actual revenue) compared to what is allowed by each payer (expected revenue). By comparing collections to gross revenue less contractual allowances, a clear picture is drawn on the effectiveness of operational and billing practices. A decline in net collection rate should be promptly researched to determine the cause. Key areas to review include payer mix shifts, type of service shifts, high outstanding accounts receivable, and increased denials.

Creating benchmarks for each payer and tracking changes regularly provide critical insights into potential problems.

NET COLLECTION RATE (NCR)	
Payer	Provider #2
Medicare & Medicare Advantage	96.8%
Medicaid & Medicaid MCO	96.0%
Insurance	81.9%
Third Part Liability	86.5%

Finding: These NCRs align with common industry benchmarks reflecting sound collection practices in these payer categories.

Self-Pay Collection Rate

This metric is the ratio between payments and gross collections and measures the effectiveness of follow-up, alternative payment options, and ease of making payments for uninsured patients.

SELF PAY COLLECTION RATE	
Patient	2.7%

Findings: A self-pay collection rate of 8% to 12% is common nationally. This lower rate warrants investigation. A likely cause is the movement of patient payments to the hospital system.

Accounts Receivable Balances and Bad Debt Write-offs

BALANCES OVER 120 DAYS	
Balance	6.0%

BAD DEBT WRITE OFF RATE	
Bad Debt	7.5%

Finding: These metrics fall within the normal range, but the transfer of self-pay trips to the hospital billing system likely distorts these figures.

Level 3 Compliance

Coding review: This provider uses bundled billing, charging only a base rate and allowable mileage. An interview with the finance director, hospital management, and billing department provided a deeper dive into coding and compliance.

Findings: Coding of base rates and mileage is accurate. Review of Medicare billings validated compliance with Medicare-specific billing codes and billing of loaded miles.

Other compliance metrics: The data collected did not include first invoice dates, payment dates, or denials. Generally, standard billing reporting does not include this level of detail. Trip-by-trip review or customized reports should be available to review periodically to track these metrics.

PROVIDER #3: Rural BLS Provider

As the smallest ambulance service, provider #3 relies on the county hospital financial resources for ambulance billing.

Level 1 Analysis

The following charts show key metrics that should be reviewed periodically (quarterly or semi-annually) and analyzed when variations between periods are significant. Data used should be at least six months old to allow for trailing payments and write-offs.

PAYER MIX		
	Trips	Mix
Medicare	230	47.4%
Medicare Advantage	55	11.3%
Medicaid SD	45	9.3%
Medicaid MCO	1	0.2%
Insurance	50	10.3%
Facility	38	7.8%
Patient	36	7.4%
Transfer to Hospital	30	6.2%
Total	**485**	**100.0%**

Level 2 Benchmarking

Net collection rate

NCR measures what is received (actual revenue) compared to what is allowed by each payer (expected revenue). By comparing collections to gross revenue less contractual allowances, a clear picture is drawn on the effectiveness of operational and billing practices. A decline in net collection rate should be promptly researched to determine the cause. Key areas to review include payer mix shifts, type of service shifts, high outstanding accounts receivable, and increased denials.

NET COLLECTION RATE (NCR)	
	Provider#3
Medicare	88.8%
Medicaid SD	100.0%
Insurance	61.3%
Motor Vehicle-Other	100.0%
Workers Compensation-Other	48.6%

Findings: Provider #3 does not separately capture Medicare Advantage and Medicaid MCO activity in the primary financial code field, and those accounts appear to be recorded as commercial insurance for reporting purposes, making meaningful NCR analysis difficult. Overall, NCRs are within the normal range. However, Medicare Advantage and Medicaid MCO need to

be tracked separately to be thorough.

Creating benchmarks for each payer and tracking changes regularly provide critical insights into potential problems.

Self-Pay Collection Rate
This metric is the ratio between payments and gross collections and measures the effectiveness of follow-up, alternative payment options, and ease of making payments for uninsured patients.

SELF PAY COLLECTION RATE	
Patient	12.9%

Finding: A self-pay collection rate of 8% to 12% is common nationally.

Accounts Receivable Balances and Bad Debt Write-offs

BALANCES OVER 120 DAYS	
Balance	25.0%

BAD DEBT WRITE OFF RATE	
Bad Debt	2.0%

Finding: Provider #3 carries high-aged accounts receivable (25% of total accounts receivable) and has a very low bad debt write-off rate (2%), suggesting that old balances are stagnant and unlikely to generate additional cash. These aged accounts must be managed more actively, with old accounts sent to collections for resolution.

Level 3 Compliance

Coding review: This provider uses bundled billing, charging only a base rate and allowable mileage.

Finding: Coding of base rates and mileage is accurate.

Other compliance metrics: The data collected did not include first invoice dates, payment dates, or denials. Generally, standard billing reporting does not include this level of detail. Trip-by-trip review or customized reports should be made available periodically to track these metrics and identify billing delays, denial trends, and follow-up opportunities.

Billing and Compliance Findings

Billing and compliance inconsistencies limit comparability across providers. Provider #2 transferred 8% of transports to the hospital billing platform, eliminating ambulance-specific reporting on those accounts. Provider #3 reported accounts receivable over 120 days equal to 25% of total accounts receivable and does not separately capture Medicare Advantage and Medicaid MCO activity in the primary financial code field, making meaningful NCR analysis difficult. Provider #2 reporting also required multiple lookups from different files to approximate 2025 transports and revenue. Despite these limitations, Provider #2 submitted meaningful data and reporting that could serve as a useful model for South Dakota providers.

Appendix

The tables below provide comparison data for the three providers.

PAYER MIX			
	Provider #1	Provider #2	Provider#3
Medicare	28.9%	47.4%	51.3%
Medicare Advantage	29.5%	11.3%	
Medicaid SD	12.9%	9.3%	4.5%
Medicaid MCO	0.2%	0.2%	
Insurance	15.1%	10.3%	33.5%
Facility	2.1%	7.8%	
Other Govt Payors	1.8%		
Patient	8.6%	7.4%	7.4%
Other	0.9%	6.2%	3.3%
Total	**100.0%**	**100.0%**	**100.0%**

Trip Summary			
Payer	Provider #1	Provider #2	Provider#3
Medicare	594	230	138
Medicare Advantage	606	55	-
Medicaid SD	266	45	12
Medicaid MCO	4	1	-
Insurance	310	50	90
Facility	44	38	-
Other Govt Payers	38	-	-
Patient	177	36	20
Other	18	30	9
Total	**2,057**	**485**	**269**

NET COLLECTION RATE (NCR)			
Payer	Provider #1	Provider #2	Provider#3
Medicare & Medicare Advantage	87.6%	96.8%	88.8%
Medicaid & Medicaid MCO	89.0%	96.0%	100.0%
Insurance	73.6%	81.9%	61.3%
Facility	55.9%		
Other Govt Payers	87.3%		
Other		87%	
Motor Vehicle			100.0%
Workers Compensation			48.6%
TPL	45.2%		

SELF PAY COLLECTION RATE			
	Provider #1	Provider #2	Provider#3
Patient	13.7%	2.7%	12.9%

BAD DEBT WRITE OFF RATE			
	Provider #1	Provider #2	Provider#3
Bad Debt	19.2%	7.5%	2.0%

BALANCES OVER 120 DAYS			
	Provider #1	Provider #2	Provider#3
Balance	5.1%	6.0%	25.0%