STATE OF MAINE DEPARTMENT OF HEALTH AND HUMAN SERVICES, OFFICE OF MAINECARE SERVICES

MaineCare Ambulance Rate Study

January 9, 2017
Overview
On April 29, 2016, the 127th Maine Legislature, Second Regular Session, enacted legislation (Legislative Document 1465) requiring the Department of Health and Human Services (the “Department”) to conduct a study of ambulance services. The Department was directed to engage a 3rd-party consultant to conduct a study of MaineCare payment rates for ambulance services. The rate study must account for provider costs related to ambulance services.

Myers and Stauffer LC (MSLC) was engaged by the Department to conduct the rate study. The rate study consisted of an evaluation of current MaineCare reimbursement rates by comparing rates to other state Medicaid programs and an analysis of provider cost using available cost information.

We conducted this study using data that was readily available; that is, data available in the public domain, data provided to us by the Department, and data from MSLC experience in other states. This consisted of the following data elements:

- MaineCare ambulance rates and reimbursement methodology/policy information.
- MaineCare ambulance claims data. Claims data consisted of claims for service dates in state fiscal years 2015 and 2016.
- Ambulance rates and reimbursement methodologies obtained from researching other state Medicaid agency publications.
- Medicare fee schedule information and Medicare urban/rural classification data.
- Medicare cost report data for hospital ambulance providers.
- Cost data for non-hospital municipal ambulance providers that file a cost report with the Indiana Medicaid program. Cost data from Indiana providers was a readily available data source to MSLC and was used as a means of estimating or approximating the cost of services in Maine and is not intended to represent the actual cost of Maine ambulance providers. Indiana ambulance provider cost data was aggregated into urban and rural classifications, and individual providers are not identifiable in the data.
Rate Analysis
The rate analysis consisted of comparing MaineCare ambulance rates and payments to the rates and estimated payments of other state Medicaid programs. The other state Medicaid programs selected for comparison are the New England states of Connecticut, Massachusetts, New Hampshire, Rhode Island, and Vermont. Medicare rates were also included in the comparison; however, the primary focus of the rate analysis was on Medicaid rates because the relationship between MaineCare rates and Medicare rates is already known given the Department’s rate setting methodology that utilizes Medicare rates as the basis.

Rate Comparison by Service (Procedure) Code
For the ambulance procedure codes covered and reimbursed by the MaineCare program, we compiled and arrayed the rates of Maine and other New England states. A simple comparison of ambulance rates between states revealed somewhat mixed results, i.e., some MaineCare rates are higher than other states and some are lower. Most MaineCare rates are higher than the rates of New Hampshire and Rhode Island but lower than the rates of Vermont. Rates for Connecticut and Massachusetts are mixed with some being higher and some being lower. Given the current MaineCare rate methodology of approximately 65% of Medicare, most rates are lower than Medicare, except for rotary wing ambulance mileage, which is approximately $3 higher.

We did not research other New England states’ rate-setting mechanisms and policies, and we cannot say with certainty whether their rates are based on a percentage of Medicare rates, as is the case in Maine. However, when comparing other New England states’ rates to the Medicare rates for each state, it appears other states may be utilizing Medicare rates as a basis to some extent. Connecticut, Massachusetts, and Vermont have multiple ambulance rates that are the same percentage of Medicare, suggesting that perhaps these states use Medicare rates as a starting point for some rates (but not all). The observed percentages of Medicare are 68% (Connecticut), 62% (Massachusetts), and 80% (Vermont).

Estimated Payment Comparison
Given the mixed results of the rate comparison described above, we believe a more meaningful analysis is a comparison of payments between states. Therefore, in addition to comparing rates, we prepared an analysis of estimated reimbursement amounts between the New England states using each state’s ambulance fee schedule rates and reimbursement methodology. MaineCare ambulance claims data and provider data were used to identify the most commonly provided ambulance runs and the average number of miles for each run for urban and rural providers. A “run” is a term often used in the ambulance community to describe an ambulance run.

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1 Urban and rural classifications were based on the location of the ambulance service in accordance with the Medicare urban and rural definitions used by Medicare Administrative Contractors for various Medicare fee schedule payments, including ambulance. Providers were assigned to an urban or rural area based on zip code using the Medicare zip code to carrier locality crosswalk.
response. Using the example ambulance runs derived from MaineCare ambulance claims, we calculated payment estimates based on each state’s rates. The MaineCare payment was then ranked in relation to the other New England states that had a reimbursement rate for the service. Not all states had a reimbursement rates for every service. For example, only Maine and Massachusetts have a reimbursement rate for fixed wing air ambulance services.

Based on this analysis, MaineCare reimbursement falls at or above the mid-point (50th percentile) of estimated reimbursement amounts by New England states for most ambulance services. For example, the MaineCare payment for a basic life support (BLS) emergency run (billed under procedure code A0427) is on average $263.11 for urban providers, which ranks second out of the six New England states. Based on these estimates, the only instances in which Maine does not fall at or above the 50th percentile of the estimated reimbursement amounts for New England states is for an advanced life support (ALS) emergency run (procedure code A0427) for urban providers (fourth of six) and for a fixed wing air ambulance run (procedure code A0430) for which Maine is the second of the two states with rates for this service.

Reimbursement for ambulance services typically includes payment for the ambulance run plus payment for mileage. It is important to note the impact on total reimbursement that is attributable to differences in the number of miles in an ambulance run or between states’ mileage rates. First, rural providers typically have ambulance runs of longer distances than urban providers and thus on average receive higher reimbursement than their urban counterparts for the same type of ambulance run. Secondly, for ground ambulance services, the MaineCare mileage rate is greater than the Medicaid mileage rates of other New England states, except for Vermont. Therefore, while the MaineCare rate for an ambulance service may be lower than another state, total reimbursement for the service, inclusive of mileage, may be greater on average.

**Cost Analysis**

The second key aspect of our analysis involved estimating provider costs of ambulance services and comparing estimated cost to MaineCare payments. For purposes of this analysis, providers were separated into hospital-based and non-hospital-based ambulance services because of the different cost data available.

**Hospital Providers**

For hospital-based ambulance providers, cost was calculated using the Medicare hospital cost report (CMS form 2552-10) filed by Maine hospitals with the Medicare program. From the Medicare hospital cost report for hospital fiscal years ending in state fiscal year (SFY) 2016, we extracted the cost-to-charge ratio (CCR) for the hospital’s ambulance service. A CCR demonstrates the relationship between a provider’s costs and charges, and this ratio can be
multiplied by a provider’s billed charges from claims data to determine an estimate of the cost of the service billed to the MaineCare program. In this case, we multiplied the CCR by providers’ billed charges from the MaineCare ambulance claims data for SFY 2016 to calculate an estimate of the cost of ambulance services. It is important to note that for hospital-based providers, cost estimates in this analysis represent cost data reported by the provider and are not extrapolated from data from another state.

We identified 10 hospital-based ambulance providers, comprised of 2 urban providers and 8 rural providers. Based on the estimated cost calculations, MaineCare payments are approximately 57% of cost for urban providers and approximately 61% of cost for rural providers.

Non-Hospital Providers
For non-hospital-based (freestanding) ambulance providers, there is no readily available source of Maine provider cost data from which to estimate the cost of ambulance services. Therefore, we utilized cost information from municipal ambulance providers in Indiana. Using another state’s cost data is a way of estimating the cost of services in Maine and is not intended to represent the actual cost of Maine ambulance providers. In this analysis, we estimated cost using two approaches. The first was a cost-to-charge ratio (CCR) approach, similar to the hospital-based analysis, and the second was a cost per run approach.

**Approach 1 – Cost to charge ratio:** This approach utilizes a CCR, similar to the hospital-based analysis described above. From Indiana ambulance provider data, we derived an average CCR for urban and rural providers. Urban and rural classifications were based on the urban and rural definitions used by the Medicare program for application of the Medicare ambulance fee schedule (see footnote on page 3). We multiplied the urban and rural CCRs by Maine urban and rural providers’ billed charges from the MaineCare ambulance claims data for SFY 2016 to calculate an estimate of the cost of ambulance services.

Based on the cost observations from Indiana providers, some municipal ambulance services operated jointly with the municipality’s fire department have higher costs than stand-alone ambulance services. The higher costs appear to be attributable to shared expenses between the ambulance and fire department operations. Examples of shared costs are depreciation expense for a building that houses both fire and ambulance vehicles, paramedic salaries for paramedics that participate in both fire runs and ambulance runs, and administrative overhead expenses. In Indiana’s cost finding methodology, shared costs are allocated between fire and ambulance services, and the ambulance portion is included in the ambulance CCR. Because of this, the CCRs for many municipal fire and ambulance services are higher than the CCRs for many standalone (non-fire department) ambulance services. In computing the cost estimates for this analysis, we have presented two cost options. The first cost option represents the estimated cost using CCRs from standalone ambulance services only. The second option
represents the estimated cost using all CCRs, including both standalone and joint fire/ambulance services.

We identified 136 non-hospital-based ambulance providers, comprised of 55 urban providers and 81 rural providers. Based on the estimated cost calculations under “option 1” (described above), MaineCare payments are approximately 35% of cost for urban providers and approximately 47% of cost for rural providers. Based on the estimated cost calculations under “option 2” (described above), MaineCare payments are approximately 19% of cost for urban providers and approximately 31% of cost for rural providers.

**Approach 2 – Cost per run:** This approach utilizes cost per run information from Indiana ambulance cost report data. We prepared this approach as an alternative to the CCR methodology because on a per-run basis, estimated costs are lower than on a CCR basis. We believe this is primarily due to the fact that unlike other types of providers that are typically able to bill for all covered services rendered, ambulance providers are often not able to bill a payer for services if they respond to a call but do not treat or transport a patient. These include circumstances such as false alarms or the dispatch of the ambulance with cancellation of the run in route or upon arrival (another ambulance service arrived first, patient left the scene of the emergency, etc.). In these instances, most ambulance providers do not record a billed charge but nonetheless still incur costs pertaining to the run. Therefore, an ambulance provider’s CCR may represent some services for which there are costs but no corresponding charges. Analyzing costs on a cost per run basis eliminates the charge issue from the cost estimation.

From Indiana ambulance provider data, we derived an average cost per run for urban and rural providers. Urban and rural classifications were made using the urban and rural definitions used by the Medicare program for application of the Medicare ambulance fee schedule (see footnote on page 3). Like the CCR approach described above, this approach contains two options based on the type of ambulance service. Option 1 represents the estimated cost of standalone ambulance services, and option 2 represents the estimated cost of all ambulance services, including both standalone and joint fire/ambulance services.

Based on the estimated cost calculations under “option 1”, the estimated cost per run was $571 for urban providers and $483 for rural providers. MaineCare payments are approximately 62% of cost for urban providers and approximately 70% of cost for rural providers. Based on the estimated cost calculations under “option 2”, the estimated cost per run was $997 for urban providers and $578 for rural providers. MaineCare payments are approximately 35% of cost for urban providers and approximately 59% of cost for rural providers.

We also reviewed and summarized cost per run information provided by Maine ambulance providers during public testimony for Legislative Document (LD) 1465. Based on provider testimony, the average cost per run ranges from $370 to $914.
Utilization

Using the MaineCare ambulance claims data provided to us by the Department, we prepared several comparisons of ambulance service utilization between SFY 2015 and 2016 claims data. While this is not an analysis of rates, this information could be helpful to identify trends or patterns or evaluate what services or providers would be most impacted by rate changes. A few pertinent observations from the claims data are as follows:

- MaineCare payments increased nominally between the two years (approximately 2%).
- In SFY 2016, hospital ambulance providers represented approximately 7% of the providers in the state but provided approximately 15% of ambulance services.
- Urban providers represent approximately 40% of the providers in the state but provide approximately 50% of MaineCare ambulance services.
- As expected, the highest utilized services are advanced life support (ALS) and basic life support (BLS) services, billed under procedure codes A0426, A0427, A0428, and A0429, and the associated ground mileage procedure code, A0425. Providers would be the most impacted by changes to rates for these services.
- Air ambulance services are provided by 5 providers, of which the largest by MaineCare service volume is Lifelight of Maine and is the entity that would be most impacted by any change in air ambulance reimbursement rates.

Other Considerations and Conclusions

Cost-based vs. Medicare-based Rates

As noted previously, most MaineCare rates are based on a percentage of Medicare rates (currently 65%). Our research of other New England states suggests that these states may also base their rates on Medicare to some extent. Medicaid reimbursement for certain services (e.g., hospital, nursing facility) is limited by federal law to no more than what Medicare would pay. Although Medicaid reimbursement for many other services is not expressly limited by federal law or regulation, many states nonetheless tend to use Medicare as an operative upper limit. It is not uncommon for Medicaid programs to utilize Medicare rates or a percentage of Medicare rates as a basis for Medicaid rates where feasible (i.e., where differences between the Medicare and Medicaid population would not impact the scope of the services being provided). In the case of ambulance services, the Medicare program has long maintained a fee schedule for these services, with geographic adjustments by state and regions within states. This serves as a readily-available resource for states to use as a basis for Medicaid rates.

Cost-based rates require obtaining cost data from providers. Larger institutional providers, such as hospitals or nursing facilities, are adept at cost finding and cost reporting, having been required for many years by Medicare and many Medicaid programs to submit annual cost reports. The Medicare program does not require submission of an annual cost report by
Ambulance providers, so this provider category is not typically accustomed to submitting cost data to the Medicare or Medicaid programs. Many ambulance providers are small providers and do not have sophisticated accounting and finance departments or reporting systems, and it can be challenging for the state and providers to impose cost reporting requirements on them. This, combined with readily-available Medicare rates for most ambulance services, may contribute to the usage by states of Medicare rates in some fashion.

**Conclusions**

Based on our analysis described above, we have presented the following noteworthy observations and conclusions from this study.

- A comparison of the typical ambulance trip and mileage shows that MaineCare ambulance reimbursement generally compares favorably to other New England states. On the basis of payment estimates for commonly-provided ambulance runs and average trip distances, MaineCare payment is at the midpoint or higher when ranked against other New England states. Only Vermont, whose rates appear to be 80% of Medicare, has consistently higher reimbursement than Maine.

- At approximately 65% of Medicare, MaineCare ambulance rates appear similar, relative to Medicare, as the rates of Connecticut and Massachusetts. In addition, MaineCare rates are higher than the rates of New Hampshire and Rhode Island. Increasing rates to a higher percentage of Medicare would put Maine at or near the top of New England states in terms of the highest rates in the region.

- Available cost data suggests that on average, MaineCare payment for hospital-based ambulance services is approximately 60% of the cost of the service. This is based on ambulance cost data filed by Maine hospitals. The relationship between cost and payments will vary from provider to provider.

- Available cost data suggests that on average, MaineCare payment for non-hospital based ambulance services ranges from approximately 42% to 65%, based on estimates of the cost per ambulance run. This is based on ambulance costs observed in another state. The relationship between cost and payments will vary from provider to provider.