

# MANAGEMENT FOCUS

— For Providers of Emergency Medical Services —

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## DOES UH<sub>U</sub> ACCURATELY MEASURE WORKLOAD?

Unit Hour Utilization (UhU) as a measure of ambulance service productivity and staff workload has confused many and sparked debate for more than two decades. To benchmark value and workload, a variety of factors must be considered to construct a valid comparison.

UhU is an indicator of productivity. UhU is defined as a fully equipped and staffed vehicle available or on assignment for an hour. Initially, UhU was used to benchmark systems by considering only the UhU associated with transports (UhU-T). Transports were associated with revenue, productivity and profitability. But by itself, UhU-T is not a true indicator of actual workload.

Calls canceled enroute, patients gone on arrival, and patient assessments that did not require transport are not reflected in the UhU-T. To address these factors, a complementary ratio was developed and systems began also measuring UhU for responses (UhU-R) to benchmark the workload associated with non-transport incidents. Some systems also began to measure post moves or the UhU for the total time deployed for coverage (UhU-TD) to better understand the true workload experienced by field personnel.

**Measuring UhU.** The basic UhU-T ratio is determined by dividing the number of transports by the system's net available unit hours available for coverage. Unit hours "lost" to the system due to vehicle failures, out of service training or meetings, long distance transfers, etc. must be factored to determine the net unit hours available to accurately reflect workload.

Assume a system has 2,650 transports per week and that planned unit hours are 8,050. The resulting UhU-T is .33. However, the system

squanders 1,057 unit hours by not paying attention to the amount of time ambulances are unavailable for coverage. The picture changes when lost unit hours are subtracted. There are still 2,650 transports but with only 6,993 available hours, the UhU-T increases to .38. The same mathematical equation can be used to determine UhU-R and UhU-TD.

Time-on-Task also has to be considered to accurately benchmark UhU. Time-on-task is defined as the average time a unit is committed to manage an incident (e.g.

from dispatch until the unit is available for another assignment). When the UhU concept was first developed most systems required approximately 60 minutes to manage a transport. The time on task has to be factored into the equation when developing UhU ratios. For example, in a rural system, where the average transport takes 90 minutes, using an unadjusted unit hour distorts the productivity picture.

Another common factor that distorts time on task and productivity measures is hos-

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## NON-MEDICARE: THE OTHER PAYERS

When medical transportation organizations develop and implement billing and collection procedures, they focus on Medicare rules and regulations. This is the result of Medicare being the largest payer for ambulance services and because the Centers for Medicare and Medicaid Services (CMS) has the most complex set of rules and the harshest consequences.

Ignoring the policies and rules associated with other payers, specifically insurance companies and managed care organizations, can lead to legal and financial problems for medical transportation organizations. Assum-

ing Medicare rules and regulations apply to all insurance payers can be a false assumption. Insurance companies have increased their focus on reimbursement for ambulance services, and many services are experiencing problems - both financial and legal.

A large insurance company recently filed suit against a private ambulance service in the eastern U.S. accusing the service of filing fraudulent claims. The State's Attorney General's office joined in the litigation because some of the claims were filed on behalf of the State's employee insurance

plan. The charges accused the ambulance service of "up-coding" by claiming that ambulance calls were ALS when no ALS procedures were provided and that transports were upgraded to the specialty care transport (SCT) level without medical necessity or appropriate personnel staffing the ambulance.

False assumptions were made by the ambulance service. The service contended that since Medicare paid ALS for all ambulance transports prior to the implementation of the Medicare fee schedule, insurance companies

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# EMS & HOSPITAL TRENDS & NOTES



**AutoPulse: Does it work or not?** A non-invasive cardiac support pump, Zoll's AutoPulse, was hailed as the next major innovation in cardiac arrest management. Now, with a randomized trial suspended, a device removed with question of patient harm, and many wondering if it is worth the investment. Three presentations at the American Heart Association meeting in Dallas were expected to highlight improvement in

short-term survival only and not in the discharged alive rate.

**EMS Errors – Are Patients Safe?** In 1999, the Institute of Medicine released *To Err is Human*, which estimated 98,000 patients die annually at the hand of medical mistakes in the hospital. Citing a lack of research and a less systematic set of checks and balances in the pre-hospital environment, a University of Pennsylvania professor, Zachery Meisel, writes in *Slate* magazine that patients may be even more at risk in the back of an ambulance.

**Are We Prepared for a Pandemic?** With the Bush

Administration warning of a potential flu pandemic and fresh memories of a problematic response to Hurricane Katrina, a new article in *Government Executive* raises the concern that America is not ready. The author cites a lack of coordination, no clear lead agency, and an ill prepared National Disaster Medical System as some of the issues.

**EMS Patient Privacy Alters Policy.** In another example of the implications of added patient privacy expectations being extended to EMS, the Washington DC Fire & EMS Department has been instructed by federal officials within a division of the

US Department of Health & Human Services to terminate or alter its ride along program. The change would only effect non-medical riders such as reporters and city officials.

**PA Hoping to Attract Future EMSers.** In an effort to meet looming staffing shortages for certified providers, EMS leaders from across the state have banded together in a new recruiting campaign called Roll With It ([www.rollwithit.com](http://www.rollwithit.com)). With a flashy website and high energy trailer to play in theaters, the campaign aims to attract young people by highlighting the dramatic aspect of street medicine.

## DOES UH<sub>U</sub> ACCURATELY MEASURE WORKLOAD?

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pital off-load delays. These delays can be due to paperwork, care transfer issues, or staff playing hide and seek with dispatch. Off load delay is the most common reason for increased time on task, throughout North America. This “productivity leakage” is increasing the cost of maintaining response times by 5-10% in some suburban systems. In others, response times increase and patients pay the price.

**Schedules.** Another factor to consider in building a valid comparison is the length of shifts employed and the schedule pattern. Typically, shorter shifts can tolerate higher UhU measures than 24 hour shifts. High UhUs coupled with long shifts and little oppor-

tunity for rest are a potential risk factor and employee satisfaction issue. Some services utilize power units dur-

ing peak demand periods to contribute extremely high productivity, preserve coverage and maintain a lower overall UhU for the remaining units in the system.

A wide variety of productivity measures, including transports, responses, deployment, and time on task must be used to accurately determine the appropriate workload for each system. The goal is to fully balance and optimize multiple variables including caller demand, geographic coverage needs, clin-

ical implications, employee schedules and satisfaction, and fiscal realities. There is no one right answer or sim-

plified formula that can be uniformly applied.

Why is UhU Important? Accurately benchmarking your system can demonstrate value. When buying a home or car, the goal is to get the most value you can by paying a fair price without overpaying. In some cases, a home's fair market value or the “blue book price” for a similarly equipped auto can be used to establish if the investment is reasonable. For an effective comparison, you have to know what specific features

were used in the equation.

Similarly, accurately measuring UhU, response times, and other productivity factors compared to costs help EMS and community leaders determine whether systems are providing communities optimal value.

$$UhU = \frac{\text{Transports}}{\text{Available UH}}$$

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## NON-MEDICARE: THE OTHER PAYERS

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were also obligated to reimburse at the ALS level. Prior to the fee schedule, Medicare allowed "all ALS" reimbursement in some cases where the ALS ambulance service was mandated by municipal ordinances or when no BLS units were available. The insurance company's policy was to cover ambulance services at the ALS level, only when ALS treatment was provided to the patient and it was not required to follow Medicare reimbursement practices.

**Ambulance Service Coverage.** Most insurance companies provide coverage for ambulance services, but the coverage may vary widely. Some only cover emergency service; others exclude air medical coverage, while most insurance companies cover a wide variety of medical transportation services.

The coverage levels not only vary from one insurance company to another, but can be different based on the specific insurance policy of the insured. For example, large insurance companies have a wide variety of plans which provide differing coverage levels for ambulance services. Reimbursement levels for one member may be very different from another based on the specific plan.

Most insurance companies have a medical necessity requirement for use of ambulance services and some require prior authorization for long-distance or air medical transports. The medical necessity requirements may not be as stringent as Medicare's, but the specific requirements are defined by

the individual's plan.

**Benefit Levels.** As with coverage, the benefit or amount paid by the insurance companies can vary widely. Three primary methodologies are used to determine benefit levels: percent of charges, a flat or capped amount, or pre-defined usual and customary rate (UCR).

Based on the plan, the benefit level often varies based on whether the call was due to an emergency event or routine transport. For example, insurance may cover

company" with no definitive methodology defined to derive the final amount. This is particularly true for the "high dollar" air medical claims where the UCR is often arbitrary and significantly below the cost of providing the service.

Some insurance policies limit the total amount that can be reimbursed for ambulance services on an individual transport or annual basis. The amount may be capped at \$150 per transport with a limit of 2 transports

ALS1-E, ALS2, SCT, mileage, etc.). The ICD-9 codes describe the illness or injury.

The definitions for the codes are specific and providers need to fully understand the requirements for each and accurately reflect the patient's condition or diagnosis with the ICD-9 codes. The patient care documentation determines the level of service and diagnosis codes that must be utilized. If information is not specifically included in the documentation, the code cannot be used. For example, a patient should not be diagnosed with an acute myocardial infarction when the ambulance call report

(ACR) only documents chest pain radiating into his left arm, diaphoresis, and shortness of breath. Using the A.M.I. code is called assumption coding since the heart attack is not specifically documented on the ACR.

Similarly, the codes for level of service must be accurate based on the documentation on the ACR. If a higher level ALS intervention or 3 I.V. drugs are not documented on the ACR, the service cannot file a claim for ALS2 level.

**Summary.** Non-Medicare payers may have their own definitions for coverage and benefit levels for ambulance services. Each ambulance provider must understand and follow the procedures for each payer and ensure that accurate coding is supported on each and every claim for reimbursement. Failure to fully comply puts the ambulance transport service at unnecessary risk.

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### *Ignoring rules and policies of other payers can lead to legal and financial problems.*

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100% of emergency ambulance transport charges and only 70% for non-emergency transports.

Typically, the insured's plan will define a specific benefit level such as 80% of the total charges or UCR. Ambulance service providers often question how the UCR is calculated. Unfortunately, the origin of this rate is often questionable or cannot be determined. Many times the insurance companies will state that the UCR is "determined from the amount on ambulance service claims filed with their

in a given year. Regardless of whether the ambulance provider believes that these "caps" are realistic or not, they are defined in the insured's policy.

**Coding.** One common practice among commercial insurance and Medicare payers is the use of defined codes on the claim forms. These codes are the Healthcare Common Procedure Coding System (HCPCS) and the International Classification of Diseases, Ninth Revision (ICD-9). The HCPCS define the level of service (BLS, BLS-E, ALS1,

### *IN THE SPOTLIGHT*

At the annual Air Medical Transport Conference and board meeting of the Association of Air Medical Services in Austin, TX, Edward R. Eroe was elected president of the association. A partner and CEO of MedServ Air Medical Transport, a sister company to Fitch & Associates, Eroe has a progressive background in healthcare and medical transportation. His term began October 26th.

## THE IMPORTANCE OF GRIT

Since the dawn of time, researchers have been in search of the secret attributes of those that are successful and those that are not. Surprisingly, a person's IQ or root intelligence alone is not sufficient. Daniel Goleman, PhD has argued for over a decade that emotional intelligence competencies or human competencies are the keys to achievement. One of the competencies highlighted by Dr. Goleman as essential is persistence, also known as grit.

Grit, or the ability to persevere and stick with something until it's completed, may be one of the most significant indicators of achievement according to researchers. West Point, the US Military Academy, is very concerned with the turnover of its cadets. It has found through assessments, that grit is the biggest indicator of suc-

cess; beating out high school class rank, SAT scores, faculty recommendations, and athletic achievement. It's so important that every incoming cadet is tested at the start of the year.

If grit can be so influential on a person's achievement, how can managers mentor their employees to develop this competency? Here are a few thoughts.

**1. Promote Optimism.** Optimists have greater ability to stick to a difficult path that leads to a positive future. Emphasizing a positive outlook, keeps focus up to the horizon.

**2. Criticize Constructively.** Developing grit involves learning from mistakes. That growth can only happen when management feedback is balanced and includes discussion of an employee's initiative, success, and areas of

improvement.

**3. Challenge.** Creating attainable, but demanding work goals push people and allow them to see success.

**4. Practice Grit.** People learn through modeling, and if their leaders practice grit, so will they.

**5. Encourage Success.** Traditionally, managers aimed to create well rounded employees. Today, attention is being redirected at focusing on what people do well and encouraging it, instead of dwelling on their deficits.

**6. Passionate Pursuit.** It's simple to chase a passion and helping an employee find theirs and setting them on a course to reach it, makes it easier for them to overcome obstacles

**7. Deal with and Learn from Failure.** Failing is hard, but those that go on to succeed go through the grieving stages, then learn

from the experience, and get up and get going.

Developing grit in your employees may be the single best skill set you can give them. Turning every interaction into a grit building session can go a long way toward creating a resilient and unstoppable team. Take the time, make the effort, and make grit a part of your management toolbox.

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