



EAGLE TELEMEDICINE NIGHT COVERAGE SOLUTIONS

Why They Work for Hospitals and Physicians



Eagle Telemedicine Night Coverage Solutions

EXECUTIVE SUMMARY

It's a collision course: The physician shortage is growing. So are patients' expectations of prompt, quality care. Will the healthcare industry ever reconcile these two opposing forces?

Perhaps there is no silver bullet. Perhaps a combination of multifaceted solutions is the answer. Incentives for wellness. Greater responsibility and autonomy for NPs and PAs. Increased use of telemedicine to deliver physicians wherever they are needed, serving the underserved.

Particularly in the hospital setting, telemedicine is bringing relief in key areas. Small, rural hospitals use it to avoid transferring patients. EDs use it to improve their response to victims of stroke and other neurological crises. And hospitals of all sizes are finding telemedicine of value in solving their night coverage challenges—closing gaps in ED coverage, providing quick response to cross-coverage calls, and easing

physician stress while supporting consistent, quality care 24/7.

This paper takes a look at how telemedicine is working for night coverage, and why it has proven to be ideally suited for this demanding aspect of hospital care.

AN URGENT NEED

The physician shortage is an all-too-familiar story. The American Association of Medical Colleges (AAMC) estimates that the shortage over the next decade will range between 61,700 and 94,700 physicians. To alleviate the problem, the AAMC has called for several plans of attack, including increased federal support for residency positions and improved use of technology.¹

Hospitals are feeling the pinch. To remain competitive with the dwindling supply of doctors, hospitals are pressured to offer hospitalists (physicians who specialize in inpatient hospital care) higher salaries and more flexible schedules, yet the demand still outpaces the supply. (Only one in 15 internal medicine students specializes as hospitalists.) In fact, overall hospitalist compensation has more than doubled in the last 15 years.

At an even higher premium are physicians willing to work the night shift. Hospitals pay night doctors as much as 25% above the rate for those who work typical daytime hours.



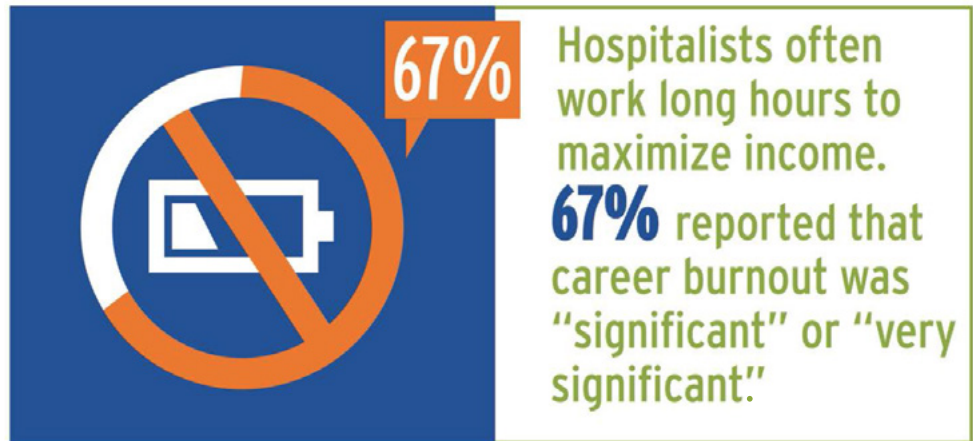
Rural Hospitals Hit Hard

It's a losing battle, particularly for small, rural hospitals, where the fewest admissions occur between 12 a.m. and 7 a.m., meaning fewer billable hours for physicians on staff. Lower admission rates often do not warrant a full-time nocturnist in these facilities, so rural hospitalists often work more night or split shifts. That's not an ideal solution, either.

It can be exhausting for hospitalists to round all day and go home, only to return in the middle of the night to admit a patient. Adding to the pressure is this unalterable fact: Although hospitals in rural communities have smaller care teams with fewer resources, they must meet the same standards as their larger counterparts with greater resources. Small wonder, then, that rural hospitals are increasing hospitalist pay 5-6% every six months just to retain their physicians.

Night Coverage a Challenge for Larger Hospitals, as Well

In larger hospitals, nighttime admissions are more frequent, and nocturnists and ED physicians are often expected to do double-duty by handling a flood of floor calls. The result? A high-stress working environment is made even more stressful.



In both scenarios, rural and metropolitan, the pressure is mounting for physicians. In fact, in a recent study, a staggering 67% of hospitalists reported that career burnout was "significant" or "very significant."

So what can be done about the night staffing dilemma?

Hospitals of all sizes—in rural and metropolitan locations—are discovering that telemedicine can save the day (and nights).

TELEMEDICINE DEFINED

Telemedicine covers a broad spectrum of services, including email communication and smartphone diagnosis of patients. There is also two-way videoconferencing, which is the type we offer to hospitals. In our typical hospital scenario, a cart or robot on wheels with a two-way videoconferencing monitor brings a patient face-to-face with a phy-

sician, who is "beamed in" from a remote location. This enables the physician and patient to have direct interaction. The technology enables the physician to monitor the patient remotely with a stethoscope, otoscope, and blood pressure gauge. It can also transmit still images such as photos and X-rays for interpretation by the physician.

In addition, our systems enable physician documentation to go directly into the hospital's Electronic Medical Record (EMR) system. This makes for a seamless experience that is integrated with a hospital's existing processes.

BRINGING THE DOCTOR TO THE PATIENT

Telemedicine's intent is not to take over or supplant person-to-person physician care. Rather, its key value is augmenting and supporting physicians and clinical staff by ad-



dressing staffing gaps. It can be a game-changer in circumstances where physician resources are scarce, or physician burnout is leading to a cycle of attrition.

According to the American Telemedicine Association (ATA), over half of all U.S. hospitals use some form of telemedicine today. Acceptance of this new model of care is widespread. Not long ago, telemedicine was a transformative idea that worked in certain specific situations, but wasn't quite ready for prime time. Because the computers and videoconferencing networks involved in early telemedicine took time to "boot up," telemedicine units often ended up being used as coat racks in Emergency Departments and nursing stations. They just weren't advanced enough for the fast-on-your-feet requirements of everyday hospital care.

All that has changed, however. The latest telemedicine videoconferencing and diagnostic stations—"robots"—are always on, able to respond instantly when they are needed, even in the most intense ED scenarios when seconds can mean life or death for a patient suffering a stroke or other emergency. No longer coat racks, the robots have become an integral part of the clinical team—day and night.

NIGHT COVERAGE: 3 SCENARIOS THAT WORK

1 *In the Rural Hospital: Quick Telenoctrnlist Response for Patient Care, Admissions*

A typical night in a rural hospital with up to 50 beds might be covered by a community physician on call who is carrying a beeper, responds to floor calls, and drives to the hospital when needed. It has worked this way for years but has its drawbacks. Response can be slow, and with more young physicians desiring a quality of life that doesn't include being on-call at night, it's a model whose shelf life is nearing its end.

With telemedicine, response time averages a little over a minute between the time a nurse calls for a telehospitalist's help and the time the physician is on the screen, ready to interface with the patient. Typically, one remote physician is involved each night from a pool of two or three physicians who have been assigned to a particular hospital. The telehospitalist will take patient handoffs from the daytime providers of care, whether an NP, PA or physician. If a patient has a change in status or a lab result comes back or symptoms develop any time during the night, the telehospitalist is ready to respond.

Sometimes a telephone call is all that is needed—for example, if a nurse has a question about a patient's low potassium reading. But frequently, the videoconferencing technology comes into play. The doctor is able to evaluate the patient and deliver diagnostic and treatment plans that are appropriate. It works much the same as if the physician were physically there in the building.

The telehospitalist can also handle admissions from the ED in the same manner.

2 *In the Metropolitan Hospital: Cross-Cover Call Relief*

Mid-sized and large hospitals in metropolitan areas might have a full-time nocturnist or two on-duty, and the job can be overwhelming. Not only might the physician(s) be responsible for handling admissions from the ED, but also might be assigned to respond to cross-cover calls on 50-100 patients or more in the hospital. While tele-nocturnist care had its introduction in the rural setting, larger hospitals are beginning to see its value in augmenting the care its on-site nocturnists provide, and significantly relieving their stress levels.



The telehospitalist on duty at night can take all the calls from nurses on floors and in the units. That physician, from his or her remote location, reviews charts, evaluates patients, gives orders on diagnosis and treatment, writes notes, and in the morning, gives handoffs at the beginning of the shift, informing day-time staff of any change in patient status during the night.

The telenoctrurnist model was not designed initially as an admission service, but since the technology and capabilities are there to do admissions, larger hospitals that use telenoctrurnists for cross-cover calls also find value in giving them admission responsibilities at busy times in the ED, where they can relieve onsite teams if a surge occurs.

Some hospitals do engage physicians to be available at night for telephone consultations. But we see a growing interest from hospitals who want to handle cross-cover calls by telemedicine rather than by phone, so physicians can actually “see” the patient.

3 For Hospitals of All Sizes: NP/PA Backup

Telemedicine is also an effective way of supporting nurse practitioners (NPs) and physician assistants (PAs) on the night shift—a good long-term investment for any hospital, since these professionals are

in far greater supply than physicians. The numbers speak for themselves. In 2010, there were about 155,000 practicing NPs in the U.S. That number is expected to grow by 57%, to 244,000 in 2025. The PA supply is expected to grow by about 73% by 2025, from 74,000 to 128,000.²

With telemedicine, NPs and PAs have ready access to physicians offsite who can guide and advise clinical staff in providing comprehensive local care. If an NP or PA is the assigned clinical team leader at night and there is a change in a patient’s status, he or she can evaluate the patient and manage the situation (if the patient is exhibiting symptoms in the realm of the NP’s or PA’s expertise and experience). If outside that “comfort zone,” the NP or PA can consult with the telehospitalist. And the telehospitalist is always available for new admissions.

The scenario is the same for new admissions. In this way, NPs and PAs learn from the telehospitalists, expand their expertise, and build their confidence. And they are doing it while not disturbing the day-time, onsite physician staff, who can get their rest at home uninterrupted and return to work fresh the next morning. Telehospitalists can participate in daily and nightly rounds via live videoconferencing, and are available 24/7 as part of the clinical team.

Who Likes Telemedicine?

- **Patients**—All ages receptive to it, not just younger patients.
- **Administrators**—Appreciate the cost savings, census increases, and viable solution to the growing physician shortage.
- **Physicians**—Appreciate the work-life balance, 24/7 coverage, and quick access to specialists.

WIDESPREAD ACCEPTANCE OF TELEMEDICINE

In our daily work as a provider of telemedicine services to leading hospitals across the country, we see how pervasive the acceptance of telemedicine is. Administrators like the ROI (some report savings of up to 40% because they have ready access to physicians, but are sharing the expense with other hospitals, thus benefitting from an economy of scale). They also like the census increases, and the way telemedicine helps them deal with the challenges of the physician shortage. Physicians appreciate the work-life balance, the 24/7 coverage, and the quick access to specialists that telemedicine provides.

Even the argument that telemedicine is impersonal is rapidly falling by the wayside. In fact, we hear from many



patients that they feel telemedicine is more personal than a face-to-face visit with a physician in a hospital. They appreciate the fact that the physicians beamed to their bedside through videoconferencing technology are totally focused on them, and not distracted by pagers or other interruptions. And older patients, we find, accept telemedicine as readily as younger ones. In our surveys, we find that 96% of Eagle Telemedicine patients would recommend telehospitalist services to a friend or family member.

BENEFITS OF TELENOCTURNIST CARE

By bringing compassionate, caring, knowledgeable physicians to the bedside promptly when they are needed, telemedicine is receiving rave reviews. We have provided this service to hospitals over the past 8 years and have admitted more than

10,000 patients via telemedicine. The experiences have been highly favorable from the patients' perspective, helping increase their satisfaction with the overall services the hospitals provide.

The fast response is a huge factor. In recent months, we have measured an average response time of one minute and nine seconds from the time nurses have called telehospitalists to the time the physician is interacting with the patient.

Cost savings are significant since hospitals aren't paying "full freight" for one physician, but rather sharing those costs with other facilities that use telemedicine services. And the growth potential is significant, too. One of our partner hospitals increased nighttime admissions by 50% with a telenoctrurnist program that greatly reduced transfers of patients to distant tertiary facilities.

Quick Response, Big Savings

- **Average telehospitalist response time: 1 minute, 9 seconds**
- **Up to 40% savings on night coverage**
- **50% nighttime admission increases**

And with the reduction in physician stress and burnout, telemedicine contributes to a sustainable work schedule for physicians, and stable staffing for hospitals.

As a firm founded by physicians with years of hospitalist experience, we know that for too long, hospitals simply had to accept the fact that nights were really hard, really expensive, or both. With telemedicine, finally, there is a viable and cost-effective alternative.

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