Rural Hospital Increases Physician Utilization with Telemedicine

Baystate Health brings ‘big-city’ specialist access to two community hospitals using AGNES™ Software from AMD Global Telemedicine

Based in western Massachusetts, Baystate Health is a not-for-profit healthcare organization serving more than 750,000 people throughout western New England. Its health system includes an academic medical center, community hospitals, health plan, homecare and hospice. With a workforce of about 11,500 team members, Baystate Health is the largest private employer in the region.

Baystate Health’s telemedicine program now links physicians at Baystate Medical Center in Springfield with patients and physicians at more rural community-based Baystate Franklin Medical Center, Baystate Mary Lane Hospital and Baystate Wing Hospital. Medical areas utilizing telemedicine include critical care for ICU consults, inpatient and outpatient neurology, infectious disease, geriatrics, psychology, and cardiology among others.

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Allie Paquette
Application Analyst
Imaging and Clinical Systems

Challenges

• Rural medical centers have limited access to specialists, which leads to expensive patient transfers and long wait times for specialist appointments at community hospitals.

• Lack of visual link for Springfield-based specialists consulting on ICU inpatients at community hospitals is sub-optimal.

• Difficulty scheduling medical consultations requires Springfield-based specialists to travel upwards of one hour each way to rural community hospitals.

Results Achieved by Organization:

• Improved patient care by enabling patients at community hospitals to see more specialists and with significantly shorter wait times.

• Reduced the costs and time resources associated with delivering patient care at rural, community-based medical centers.

• Empowered 30 physicians with access to real-time clinical exams and medical data for their remote patients in rural areas of western Massachusetts.

• Increased physician utilization by eliminating unnecessary travel time and allowing physicians to devote their time savings to patient care.

• 100% positive feedback from telemedicine patients regarding their overall telemedicine experience.

The AMD Solution

- AGNES Interactive Software
- Clinical Assist Cart
- General Examination Camera
- Digital Stethoscope
- Digital Otoscope

Organization:

Baystate Health

Customers:
Steve Merritt, Manager, Imaging and Clinical Systems
Allie Paquette, Application Analyst, Imaging and Clinical Systems

Location:
Springfield, Massachusetts

Application:
Rural Hospital Medical Center
Tackling a Troubling Trend

Across the nation, the number of community hospitals closing or struggling continues to grow, resulting in the creation of ‘medical deserts’ without nearby access to emergency and specialty care. At the same time, the importance of these hospitals becomes increasingly evident; community hospitals provide accessible and affordable care, drive rural economies, play critical roles in large-scale emergencies and natural disasters, and serve as community health leaders.

To combat this troubling trend, forward-thinking healthcare systems such as Baystate Health in western Massachusetts are supporting their community hospitals in new and innovative ways. In line with its mission of “improving the health of the people in our communities,” Baystate leaders saw the opportunity to better connect patients at its rural, community hospitals with specialists at its Springfield-based academic medical center and Level I trauma center using cutting-edge medical technology.

“We realized that with the right partner, we could leverage the recent advancements in telemedicine to provide patients with access to medical specialists right where they were,” says Dr. Talati, who is the medical director of Emergency Medicine at Baystate Franklin Medical Center. “Not only would this better utilize our community hospitals, it would also improve efficiency in the healthcare system by eliminating the need to travel long distances for both our patients and our physicians.”

Like most community hospitals, Baystate’s community hospitals offer limited access to specialist physicians onsite. Typically, specialists would travel to the rural hospitals several times a month from Springfield to see patients. However, this often resulted in long waits for specialist appointments at the community hospitals. In addition, physicians at the community hospitals, particularly in the intensive care unit, would frequently consult with Springfield-based specialists via phone, but if an in-person consult was needed the specialist would have to travel to the community hospitals or the patient would be transferred.

Luckily, just as leaders at Baystate Health were envisioning a solution to these challenges, the state government of Massachusetts also recognized the importance of supporting community hospitals. In early 2014, its Health Policy Commission awarded $10 million to 28 community hospitals with the goal of enhancing the delivery of efficient, effective healthcare across the state. Among the grant recipients were Baystate Mary Lane Hospital and Baystate Franklin Medical Center, which each received funding to help realize the vision of expanding access to high quality specialty care at rural community hospitals through telemedicine.

The Right Partner

With the plan and funding in place, Baystate Health significantly expanded its telemedicine program. Though it already had a small ‘telesstroke’ program in place, Baystate knew that it would need a scalable solution that could deliver more. “The telesstroke program was really just videoconferencing, but for this application we wanted a solution that would be very clinically driven with a single platform for both video conferencing and medical devices,” says Paquette.

When a vendor introduced them to AGNES Interactive™ software from AMD Global Telemedicine, it was clear this was a solution that could meet their goals. “With AGNES, I found that the overall platform, integration and user interface were significantly better and easier to use for our clinical staff than anything else we had seen,” says Paquette. “We really appreciated the ability for the remote physician to be able to use AGNES to view live images from the medical devices, right from their computer’s Web browser.”

The Baystate Health telemedicine implementation team also appreciated the all-in-one design of AMD’s telemedicine carts. “It makes it so simple when all the devices and software are fully integrated upfront – it’s easy to understand how it all works together and nothing is hidden behind the scenes,” says Paquette. “The package made it clear that AMD had experience with every aspect of a telemedicine program: the technology, devices and integration. That gave us the confidence we needed to go forward.”

Baystate moved forward quickly with the purchase and implementation of three Clinical Assist carts equipped with AGNES Interactive software and a number of AMD medical devices, then deployed these telemedicine systems at their two community hospitals.

Within just three months they had trained 12 nurses and medical assistants at the community hospitals to use the new equipment and more than 30 physicians at the Springfield hospital to perform AGNES medical consultations across a wide variety of specialties including critical care, infectious diseases, geriatrics, psychology, neurology, and cardiology.

Expanding Access

Through its use of telemedicine, Baystate Health has achieved benefits for its patients, physicians and healthcare system as a whole. For patients, telemedicine means increased access to specialty care right where they live. Patients in the critical care units – and the physicians caring for them – can now benefit from live telemedicine consultations with Springfield-based specialists without the need to wait for the specialist to travel to them or endure costly and inconvenient hospital transfers.

Outpatients can also see specialists much more quickly without the need to travel to Springfield thanks to live telemedicine exams. “We had two patients who needed to be seen by neurology for serious health issues,” says Lorri Horton, Practice Manager at Baystate Mary Lane Hospital. “These patients would have waited a couple months to be seen in the provider’s office, however with telemedicine they were both seen within a week.”

The feedback from Baystate Health patients seen via telemedicine has been overwhelmingly positive. “We have consistently received positive feedback from these patients, with 100-percent of patients saying they are either ‘satisfied’ or ‘very satisfied’ with their overall telemedicine experience,” says Paquette.

Telemedicine has also created many benefits for physicians and the hospital system including better utilization of its community hospitals and the ability to avoid unnecessary patient transfers within the system. In addition, by eliminating the need for specialists to drive to rural community hospitals for outpatient appointments or inpatient consultations, physician utilization is increased and physicians can devote the time savings to delivering patient care.

“Before we implemented telemedicine, I would drive two hours roundtrip see three patients a month at Mary Lane Hospital – there were frequently no-shows, so it was not the best use of my time,” says Dr. Stuart Anfang, Baystate Medical Center’s Chief of Adult Outpatient Psychiatry. “Now I can see those patients via telemedicine while remaining productive in my Springfield office and my patients are very satisfied with the telemedicine they were both seen within a week.”

The future belongs to those who believe in the power of dreams.

For more information on Baystate Health visit www.baystatehealth.org.