

Rush Health Systems

After-Hours Remote Processing of Medication Orders for Critical Access Hospitals

Who we are

Rush Health Systems, based in Meridian, MS, focuses on making healthcare as accessible as possible for the citizens of East Central Mississippi and West Alabama. To accomplish this, Rush is continually investing in new and updated facilities and in the latest treatment and care.

A 215-bed hospital located in Meridian, MS, Rush Foundation Hospital is dedicated to providing cutting edge technology, quality care and services to all our patients. We take pride in continuing the growth and development of healthcare programs and specialties based on the needs of our community. Rush Foundation Hospital is affiliated with Rush Health Systems which also includes [The Specialty Hospital of Meridian](#), a long term acute care hospital that offers long-term choices for non-permanent patients who require extended recovery time within a hospital setting. Other Rush Health Systems affiliates include five, 25 bed critical access hospitals located in the region: [Laird Hospital](#) in Union, MS, [H.C. Watkins Memorial Hospital](#) in Quitman, MS, [Scott Regional Medical Center](#) in Morton, MS, [John C. Stennis Memorial Hospital](#) in DeKalb, MS and [Choctaw General Hospital](#) in Butler, AL; Medical Foundation, Inc., a network of providers with primary care and specialty clinics located in East Mississippi and West Alabama; and [Rush Medical Group](#), a multi-specialty physician group located in Meridian, MS provides specialized care for all ages. All of this makes evident the Rush tradition of dedication to continually growing, developing and offering comprehensive healthcare services to the people of the community.

Challenge

Our company's five critical access hospitals have a pharmacist on-site for eight hours per day, Monday-Friday. On weekends and holidays, the pharmacies are closed, with the pharmacists providing on-call coverage as required by Board of Pharmacy regulations. Seeing an opportunity to improve the quality and safety of care delivered to our patients, Rush Health Systems set out to implement a process to assure that all new medication orders for patients admitted to our critical access hospitals would be reviewed by a pharmacist within 24 hours. Achieving this would require addressing several challenges, including:

1. Involvement of several hospitals across East Mississippi and West Alabama
2. Different medical staffs with varying prescribing habits
3. Multiple Boards of Pharmacy (MS and AL) with varying regulations
4. Determining how best to apply technology to our particular situation

The process was facilitated by several factors, including:

1. Leadership support
2. Standardization of information systems
3. Standardization of many pharmacy policies and procedures
4. Previous work done to standardize drug formularies across the health system

Summary prepared by Jason Payne, RPh, MBA, Director of Operations/Special Projects for Rush Health Systems. Inquiries may be directed to jason.payne@rushhealth.com.

The Rush Model

We explored several options, including the use of a remote order processing service. Ultimately, we decided that an "in-house" model best suited the needs of our health system. Under the Rush model, pharmacists serving the Mississippi Critical Access Hospitals (CAHs) provide remote order processing on weekends and holidays for all of the health system's Mississippi CAHs. This is done on a rotating basis, with the covering pharmacist providing order processing for all four of the Mississippi CAHs using a laptop or personal computer.

Due to different state regulations related to pharmacy practice in Alabama, a unique solution was sought for our Alabama Critical Access Hospital. At the time, the Alabama Board of Pharmacy did not allow order processing from remote order processing centers, so a remote order service was not an option. State regulations also did not allow pharmacists to review orders using a laptop or other device from home. For these reasons, we approached the Alabama Board of Pharmacy with a request to allow pharmacists at Rush Foundation Hospital, our acute care medical center in Meridian, MS, to review and process medication orders for our Alabama located facility. Working together, Rush Health Systems and the Alabama Board of Pharmacy were able to craft a plan that met the needs of our Alabama patients. The pharmacy at Rush Foundation Hospital obtained an Alabama pharmacy permit. Several pharmacists at Rush Foundation Hospital already held an Alabama pharmacist license, and another went through the reciprocity process. While not all pharmacists at Rush Foundation Hospital hold an Alabama license, all of those involved in processing orders for the Alabama located facility do.

Cost

There is some cost associated with this project, in terms of both equipment and personnel. Equipment cost consists primarily of computers and related equipment for the pharmacists, and is detailed as follows:

1. Five laptop computers (one for each CAH): \$3,522
2. Five monitors and video cards: \$1,139. Our pharmacists use a dual screen configuration for order entry in which the medication order being reviewed is displayed on one screen and the pharmacy information system is displayed on the other.
3. Five scanners: \$3,395. The scanners are used for transmitting copies of handwritten medication orders.

Personnel cost is related to pharmacist compensation for the review of medication orders for all four of the Mississippi CAHs. The after-hours order processing service is offered on Saturdays, Sundays and company recognized holidays, and the pharmacists are compensated at a rate of \$500/day. Annual personnel cost for the service is approximately \$55,500.

Additional personnel cost can be incurred if pharmacist license transfer is required. While the cost of license transfer varies by state, the Mississippi to Alabama transfer process costs approximately \$1,000 per pharmacist.

Summary prepared by Jason Payne, RPh, MBA, Director of Operations/Special Projects for Rush Health Systems. Inquiries may be directed to jason.payne@rushhealth.com.

Lessons learned

1. Understand the laws in your state: The idea of remote processing of medication orders is gaining traction in the pharmacy profession. Each state's Board of Pharmacy is at a different point in addressing this trend from a regulatory perspective. Working closely with your state's Board of Pharmacy and keeping them informed of your progress is crucial.
2. Be creative: There are several companies that offer remote processing of medication orders for hospitals. In many cases, this may be the ideal solution. However, it is worthwhile to consider leveraging the capabilities within your own health system. Partnering with other hospitals within the state may also be a viable option.
3. Standardize: The process of implementing after-hours medication order processing will be made easier to the extent that health systems can standardize practices related to medication use.
4. Research and Collaborate: Professional organizations such as the American Society of Health Systems Pharmacists offer guidelines and best practices on this topic. Also, communication among directors of pharmacy is invaluable for sharing ideas and experiences.

Results

Rush Health Systems' critical access hospitals completed their first full month under the new processes in July 2013. During the weekends and holiday in July, RHS pharmacists processed 1,272 pharmacy related orders for CAH patients. Of those, 1,265 (99.4%) were processed within 24 hours. Seven orders "fell out" of the 24 hour window due to errors in the transmission of the orders. This particular aspect of the medication use process was reviewed, and Pharmacy and Nursing worked together to implement process changes to enhance the reliability of medication order transmission.

Data for specific CAHs is given in the chart on the next page.

	July 2013
A HOSPITAL:	
Total weekend/holiday orders	287
# reviewed by pharmacist within 24 hours	287
% Compliance	100%
B HOSPITAL:	
Total weekend/holiday orders	362
# reviewed by pharmacist within 24 hours	362
% Compliance	100%
C HOSPITAL:	
Total weekend/holiday orders	276
# reviewed by pharmacist within 24 hours	269
% Compliance	97.5%
D HOSPITAL:	
Total weekend/holiday orders	91
# reviewed by pharmacist within 24 hours	91
% Compliance	100%
E HOSPITAL:	
Total weekend/holiday orders	256
# reviewed by pharmacist within 24 hours	256
% Compliance	100%
RUSH HEALTH SYSTEMS:	
Total weekend/holiday orders	1,272
# reviewed by pharmacist within 24 hours	1,265
% Compliance	99.4%

Summary prepared by Jason Payne, RPh, MBA, Director of Operations/Special Projects for Rush Health Systems. Inquiries may be directed to jason.payne@rushhealth.com.