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Smart Pump EHR Integration Return on Investment



Decisions in your hospital focus on achieving the goals of quality patient care and financial viability. Integrating your smart pumps with your electronic health record (EHR) can help you reach those goals. This paper provides documented examples of hospitals that have experienced significant returns on investment after implementing Smart Pump EHR Integration. It also helps you calculate estimated return on investment for your organization.

A recent article published by the Association for the Advancement of Medical Instrumentation (AAMI) reported that IV pump programming errors can be reduced by 75% by implementing Smart Pump EHR Integration.¹

The reduction of manual inputs leads to time efficiencies and more accurate billing of medicine start and stop times to directly impact a hospital's bottom line with cost savings from enhanced charge capture and reimbursement opportunities up to \$2M a year.²

Smart Pump EHR Integration enhances patient safety and your bottom line. Learn how Smart Pump EHR Integration impacted these two hospitals:

Lancaster General Hospital

Lancaster General Hospital in southeast Pennsylvania recently integrated their smart pumps with their EHR, bringing the hospital measurable results in the areas of patient safety, nursing workflow, and revenue.

Increased Patient Safety: With manual IV pump programming, one incorrect keystroke can result in a 10-fold or even 100-fold overdose. Smart Pump EHR Integration prevents this from happening by electronically transmitting the patient's IV medication order directly from the EHR to the smart pump. All the nurse must do is scan the patient's wristband, IV bag and pump, confirm the Five Rights, then press start.

Enhanced Nurse Workflow: At Lancaster General, Smart Pump EHR Integration reduced the number of keystrokes to program a pump from 17 to 7 and decreased the overall time needed to program pumps by 25%.

Increased Revenue: The accurate documentation of pump start and stop times ensures that Lancaster General accurately tracks and documents IV infusions. Complete documentation generated an additional \$2 million per year in IV medication administration fees from third-party payors.

St. Vincent Healthcare

Smart Pump EHR Integration was implemented at St. Vincent Healthcare in Billings, Montana to improve IV medication safety and documentation at their 286-bed hospital within an 8-hospital health system. St. Vincent saw an astounding reduction in medication errors and an increase in revenue in just a few months. Improvements the hospital experienced included:

- Pre-population of infusion parameters reduced manual keystrokes by 86%
- Total monthly pump alerts decreased on average by 22%
- Patient identification usage on the pump increased significantly from 36% to 81%
- Lost charges for outpatient IV infusions claims due to missing start and stop times decreased by 40%
- Reduction in lost charges represented \$370,000 in new revenue, and the healthcare organization anticipates \$1.78M in additional revenue across its eight-hospital system





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Calculate your hospital's Smart Pump EHR Integration ROI.

The potential for improved patient safety, time savings for nurses, and increased revenue should put Smart Pump EHR Integration near the top of every hospital's interoperability priority list. The table below summarizes how you can estimate return on investment for your organization to help justify this integration project.

Calculate Smart Pump EHR Integration ROI

- 1. Increase IV reimbursements. Work with your Revenue Cycle Department to determine how much reimbursement your organization is currently missing due to incomplete IV documentation. Accurate stop times are an important part of maximizing IV revenue.
- 2. Drug library compliance. Work with your Pharmacy Department and smart pump vendor to determine current drug library compliance levels (they may range anywhere from 30-85%). That compliance rate will approach 100% once Smart Pump EHR Integration is complete.
- **3. Time savings for nurses**. Time how long nurses spend programming IV pumps; that time will decrease by 25% once Smart Pump EHR Integration is complete. Then time how long nurses spend manually documenting IV start and stops times, etc. That time will decrease by nearly 100% once Smart Pump EHR Integration is complete. You can use those numbers to calculate total time savings for nurses.
- Positive patient identification. Measure how often patients are positively identified during IV medication administration. That compliance rate will increase dramatically (to 80-95% or more) once Smart Pump EHR Integration is complete.

Integration has been the focus of iatricSystems[™] for more than 25 years. Smart Pump EHR Integration with Accelero Connect[®] leverages that experience to help your organization improve patient safety and increase revenue.

To learn more about **Smart Pump EHR Integration with Accelero Connect** or other iatricSystems products or services, please contact us using the information below.

References:

1. Pettus et al, March/April, 2017, Reliable and Scalable Infusion System Integration with the Electronic Medical Record, AAMI Biomedical Instrumentation & Technology, <u>https://meridian.allenpress.com/bit/article/51/2/120/142115/Reliable-and-Scalable-Infusion-System-Integration</u>, Accessed June 27, 2017.

2. Miliard, Mike. "How Smart Pump EHR Integration Could Save a Community Hospital \$2 Million." Healthcare IT News, 7 Sept. 2017, www.healthcareitnews.com/news/how-smart-pump-ehr-integration-could-save-community-hospital-2-million.

3. Biltoft, J., & Finneman, L. "Clinical and Financial Effects of Smart Pump-Electronic Medical Record Interoperability at a Hospital in a Regional Health System." American Journal of Health-System Pharmacy : AJHP : Official Journal of the American Society of Health-System Pharmacists, U.S. National Library of Medicine, 15 July 2018, <u>pubmed.ncbi.nlm.nih.gov/29987060/</u>.