

# The future of infusion pump software




Healthcare information is everywhere, but it is not always being used to its fullest capacity. There is still a long way to go for fully integrated healthcare across the care continuum. Despite many advances in the use of patient data, there are several medical devices that are behind in the development process.

Compared to other clinical care devices, data from infusion pumps is still in the early stages of being fully integrated into the electronic medical record. As of 2017, IHS Markit estimated that infusion-related software accounted for **15%** of revenues when compared to infusion hardware.




Revenue from infusion pumps will grow at a CAGR of **5.0%** from 2017 to 2022, increasing from **\$2.00 billion** in 2017 to **\$2.56 billion** in 2022.



The United States accounted for **64.5%** of global revenue for infusion software in 2017.



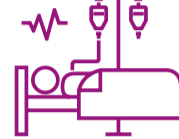
The fastest revenue growth for infusion software is projected for the Asia Pacific region, a CAGR of **9.4%** from 2017 to 2022.




The infusion pump market is becoming less focused on the pump technology, and more focused on the associated software. The uptake of products with connectivity capability is now increasing.



Demand is increasing further as more patients are transferred to lower-acuity wards, where there is less intensive care and a nurse is responsible for several patients at a time.



As reimbursement is reduced or even retracted if preventable, adverse events occur, the need for ensuring the patient is sufficiently monitored and remains safe is heightened. As technology progresses and uptake increases, the efficiency of healthcare is expected to improve.



## Drug error reduction software (DERS)

Drug error reduction software (DERS) was by far the largest software segment. It accounted for **77.1%** of global revenues in 2017. Demand for safety software that reduces errors is increasing globally.

DERS's percentage of the overall software market is projected to fall, as demand from other infusion software types, such as interoperability, clinical work-flow and tracking/billing software increases.

DERS includes: drug libraries that store drug names and dosing limits; bar-coding to ensure patients receive the correct medication; and feedback systems.

Compared to the number of pumps being sold, the number of smart pumps that have DERS is still very small in emerging regions. As the infusion pump market becomes more established in these countries, there is great potential for growth.


The United States has led the adoption of software that enables clinical care devices to communicate with healthcare information systems and patient electronic medical records. This has been fueled by the Health Information Technology for Economic and Clinical Health (HITECH) Act.




## What is the future?

Further development in infusion technology has enabled infusion systems to connect to the electronic medical record via interoperability software. Interoperability software provides the ability to communicate and exchange data accurately, effectively, securely, and consistently with different information technology systems, software applications, and networks, in various settings.

Cybersecurity and perceived risks also continue to be limiting factors in the use of connectivity and interoperability software; both the United States and United Kingdom have provided guidance on the management of risks to be included in product development.



Revenue for infusion software is predicted to grow with a CAGR of **6.3%** from **\$230.6 million** in 2017 to **\$310.7 million** in 2022.



IHS Markit projects revenues for interoperability software used with infusion technology to double from an estimated **\$12.4 million** in 2017 to **\$25.0 million** in 2022, growing at a rate above that of infusion hardware.



## Infusion Pumps & Dedicated Sets Report – 2018

The 2018 edition of the Infusion pumps and dedicated infusion pump set markets. This report provides in-depth global coverage of the infusion pump and dedicated infusion pump set markets, through quantitative analysis supported by qualitative commentary. Additional analysis of the emerging software market and installed base is also provided.

Market size estimates are provided in terms of revenues, unit shipments and average selling price, using a base year of 2016 and forecasts for 2017 through to 2022. This is supported by country market sizing analysis and sub-regional competitive analysis for both the infusion pump and dedicated infusion pump set markets.



**KELLY PATRICK**  
 Research Manager, Healthcare Technology  
[Kelly.patrick@ihsmarkit.com](mailto:Kelly.patrick@ihsmarkit.com)