



SMART REMOTE MONITORING

White Paper



## Revolutionizing Cardiac Device Management

How an Automated and Dynamic Approach  
Maximizes Revenue



Patients always come first for care providers, but there's no denying that financial sustainability is also a top goal for healthcare organizations. Providers cannot deliver high-quality care that saves lives without optimizing the revenue cycle and ensuring appropriate reimbursement.

Unfortunately, billing and reimbursement are major pain points for providers across all specialties,

including Electrophysiologists and Cardiologists. The struggle to keep revenue flowing from accurately capturing billable services to submitting and following up on claims is real and ongoing.

That challenge is becoming more complex as healthcare embraces more decentralized, holistic, and value-based care. New services and devices, such as communications outside of traditional appointments and cardiac remote monitoring (CRM) devices, are expanding the different types of billable activities.

Remote monitoring strategies facilitate the delivery of care beyond the clinic and into the patient's home, necessitating the implementation of sophisticated revenue-capture tools to guarantee appropriate remuneration for time and effort. Intelligently automating the billing process allows for the assurance that legitimate revenue streams are optimally utilized to further enhance patient care.



## Why are practices failing to take advantage of cardiac remote patient monitoring?

Remote patient monitoring (RPM) devices range from relatively simple Bluetooth scales and blood pressure monitoring tools to the most advanced cardiac implantable electronic devices (CIED). The use of both categories of devices is exploding as technology becomes more affordable and patients become more comfortable with the idea of doing more to manage their health.

For example, over 300,000 Americans receive a CIED to manage various conditions yearly, including atrial fibrillation (aFib).<sup>1</sup> Now recognized as a growing epidemic, up to 6 million people suffer the effects of aFib each year, with numbers projected to reach up to 16 million by 2050.<sup>2</sup>

Due to a lack of knowledge of the most accurate and precise billing codes associated with pacemakers, implantable loop recorders (ILRs), and defibrillators, many clinics are missing out on potential revenue opportunities.



In most medical centers, an average of only 20-25% of patients is billed consistently for CIED remote monitoring care, leaving as much as **80% of received services unbilled**. To put this in perspective, that would be an annual loss of almost **\$400,000** for a provider monitoring 1,000 patients. This lost revenue is cumulative over time, adding up with each missed monthly cycle, and contributes significantly to the financial hardship experienced by many care providers.

As with many other areas of healthcare technology, the CRM landscape is fragmented and poorly standardized. Each CIED manufacturer uses a unique process to collect data and manage device connection issues - and there are significant gaps in how manufacturers communicate with patients and their care providers.

For example, medical teams might not even know if a device stops transmitting data. While technical assistance is usually available to patients, some manufacturers fail to send proactive alerts to the care team. As a result, up to 19% of patients with CIEDs are not actively transmitting data at any given time. Just under three-quarters of medical centers state that at least 10% of their patients are not transmitting as desired, creating patient safety risks and lost revenue opportunities for their care providers.<sup>3</sup>

Even if devices function as intended, providers may still be unable to optimize their billing for them. The rules around remote monitoring reimbursement constantly shift as the market segment matures, leaving providers scrambling to keep up with the latest guidelines and most appropriate Current Procedural Terminology (CPT) codes for services.

For instance, until recently, Medicare had restrictions regarding how frequently providers could report routine defibrillator and pacemaker checks per year. The common practice was to conduct two in-person device checks and to report two remote monitoring services annually.

Many providers have overlooked updated codes that allow them to provide an improved standard of care for patients with newer remote code practices. These practices include reporting four remote monitoring services and performing as many in-person checks as medically necessary (generally 1 or 2 annually).

Another significant opportunity missed is the two device checks and one office visit that are typically medically necessary within the 90-day postoperative window following pacemaker and defibrillator implants. With constantly changing reimbursement guidelines, this oversight is understandable.

## Increase Revenue with Automated Billing Capture

Improving process efficiency is crucial for healthcare providers, especially when it comes to managing cardiac data and remote care billing workflows. To achieve this, providers must adopt the right solutions to manage patient data, inform patients of transmission issues and identify correct CPT codes for billing. Automating these processes can help develop a more robust and comprehensive billing cycle, increase revenue and reduce administrative burdens. Universal, alert-based cardiac remote monitoring platforms are a solution being utilized to manage all aspects of remote care, including revenue optimization.





With universal remote monitoring platforms, providers can integrate data from devices across all manufacturers, allowing for seamless data transfer and improved patient care coordination between the clinic and the patient's home. This integration enables automatic billing data transfers from devices to the EMR, improving the accuracy of billing codes, and reducing administrative effort.

Automating billing capture is crucial in improving revenue efficiency for hospitals and clinics offering remote services. By adopting solutions like CRM, providers can optimize billing workflows, lighten administrative responsibilities, and improve patient care coordination. With these solutions in place, healthcare providers can focus on delivering exceptional patient care while maximizing revenue.

## Revenue Optimization with Implicit Cardiac Remote Monitoring

Implicit's AI-powered CRM offers numerous advantages in terms of revenue optimization. This feature-rich solution, with its unique capabilities, can help to effectively manage the difficulties often encountered with remote monitoring.

For example, Implicit's novel billing engine optimizes scheduling based on actual transmission dates and generates reports matching all the appropriate CPT codes, ensuring providers accurately capture billable services. This approach streamlines the reimbursement process from start to finish, eliminating the need for manual tasks and bolstering the efficiency of the billing process.

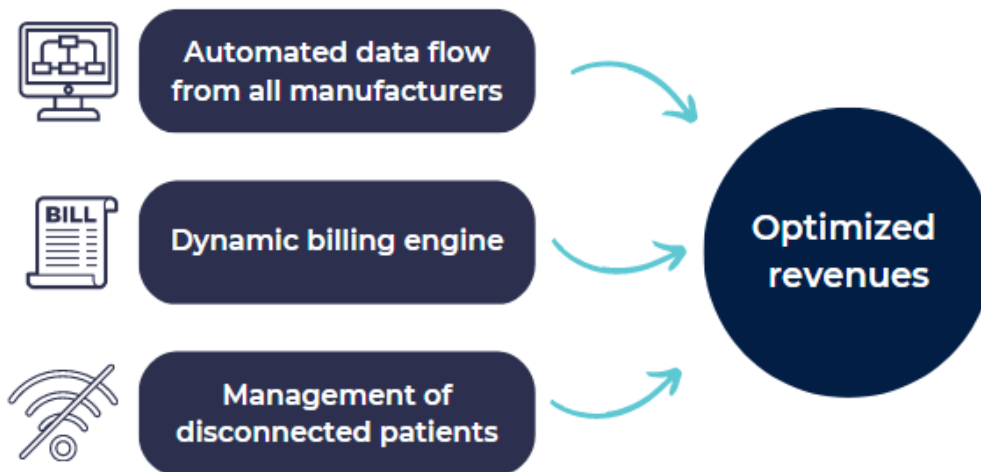
The financial burden of disconnected patients can be significant for clinics; however, there are strategies that can be employed to reduce the number of lost encounters. Automated notifications to providers when a device goes offline can help to identify and address disconnections as soon as possible. Additionally, educating patients on the importance of staying connected and providing technical support to those who experience difficulty are also effective measures for mitigating disconnections.

Implicit offers a unique feature that is designed to help patients remain connected. When a patient loses connection to the manufacturer's website, this feature will automatically notify the patient's medical team as well as send an automated SMS message to the patient in order to identify and record the cause of the disconnection and help them reconnect.

This feature facilitates automatic reconnection with patients who have discontinued data transmission, resulting in an increased claims capture rate and fewer missed transmissions.

The Implicity platform provides users with a comprehensive suite of tools, including visually rich and personalized report creation, which can be shared with patients. This feature helps to maintain patient engagement and satisfaction with their care.

Through the provision of relevant and timely information, patients are empowered to become proactive in their own health and work with their healthcare providers. The potential implications of this kind of patient-provider collaboration are far-reaching and could have a significant impact on outcomes and satisfaction with care.



## Analyzing the ROI of Billing Automation

Organizations can easily incur costs of hundreds of thousands of dollars due to missed billing schedules. The breakdown below highlights the sharp contrast between practices with and those without the Implicity solution.

# Patients Monitored Remotely	Avg. Annual Revenue w/out Implicity <sup>4</sup>	Avg. Annual Revenue with Implicity <sup>5</sup>	Avg. Additional Revenue with Implicity
100	\$9,728	\$43,776	\$34,048
1,000	\$97,280	\$437,760	\$340,480
10,000	\$972,800	\$4,377,600	\$3,404,800

With Implicity's automated cardiac remote monitoring solution, healthcare providers can achieve a **350% revenue optimization, increasing billing compliance from 20% to 90%.**

Many clinics already benefit from using universal CRM platforms to optimize their billing processes. One of these is Piedmont Cardiovascular in North Carolina where cardiologist Dr. Ganji reported an increase to 90% in billing compliance after implementing Implicity's AI-powered solution.

Automating the billing process for remote monitoring services ensures that all billable services are captured and submitted on time. Financial viability is an essential component of delivering quality patient care. Streamlining processes and minimizing administrative overhead frees up vital resources to focus on delivering optimal patient care.

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## About Implicity

Implicity is a software company that provides a universal cardiac remote monitoring and research platform to clinics and service companies, helping them provide the best remote care to cardiac patients. As a digital Medtech, Implicity develops AI and knowledge based algorithms to reduce healthcare professionals' workload and allows them to potentially predict patient health status.

The Implicity platform aggregates, normalizes and standardizes data from all implantable cardiac electronic device across all major manufacturers. In addition to having an FDA cleared solution and multiple CE markings, Implicity has been the first private company authorized to access the Health Data Hub<sup>6</sup>, one of the world's largest patient databases, supporting the development of its AI solutions to improve care for patients with chronic heart failure conditions. Implicity covers more than 80,000 patients in 160 medical facilities across the United States and Europe. <http://www.implicity.com>

<sup>1</sup>Greenspon A.J., Patel J.D., Lau E., et al. (2011) 16-year trends in the infection burden for pacemakers and implantable cardioverter-defibrillators in the United States 1993 to 2008. *J Am Coll Cardiol* 58:1001–1006.

<sup>2</sup>Jelena Kornej, Christin S. Börschel, Emelia J. Benjamin and Renate B. Schnabel (2020) Epidemiology of Atrial Fibrillation in the 21st Century. *AHA Circulation Research*. 2020; 127:4–20

<sup>3</sup>Observed in 22,105 patients with Medtronic and Abbott implanted cardiac devices, remotely monitored on 7 May 2021—Implicity internal data.

<sup>4</sup>Based on the following assumptions:

- Using the average national reimbursement rates of \$30 billed 4x a year for code 93294 (Med - PM), \$38 billed 4x a year for code 93295 (Med - ICD), \$24 billed 4x a year for code 93296 (Tech - ICD/PM), \$27 billed 8x a year for code 93297 (Med - ICM), \$27 billed 12x a year for code 93298 (Med - ILR), \$40 billed 8x a year for code G2066 (Tech - ICM), and \$40 billed 12x a year for code G2066 (Tech - ILR).

<sup>5</sup>Considering a 90% billing compliance.

<sup>6</sup>Health Data Hub is a health data platform put in place by the French government to combine existing health patient databases and facilitate their usage for research and development purposes.