



CLIENT CASE STUDY

Invicta Medical

COMPANY OVERVIEW

Invicta Medical is a pioneering medical research and development company focused on creating innovative treatments for obstructive sleep apnea. With a lean development team of just two members, Invicta Medical exemplifies the agile startup approach in the medical device industry.

The company is on the cusp of a significant milestone, utilizing an External Pulse Generator in clinical trials in Australia, a crucial step in their path to market.

CHALLENGE

As a startup navigating the complex landscape of medical device development, Invicta Medical faced several challenges:

Limited internal resources:

With only two developers on staff, the company needed to augment its capabilities without the long-term commitment of hiring full-time employees.

Specialized expertise requirements:

The project demanded deep knowledge of Nordic Semiconductor's nRF52840 and nRF5340 microcontrollers, as well as Bluetooth Low Energy (BLE) technology in a medical context.

Tight timelines:

To align with critical company objectives and maintain momentum in their research, Invicta Medical needed to complete product development rapidly without compromising quality or safety.

Regulatory compliance:

As with all medical devices, ensuring compliance with stringent regulatory standards was paramount.



INVICTA MEDICAL

"The Dojo Five team, as well as their processes, helped to simplify our project from beginning to end. Consistent communication played a major role in the success of our project.

Their experienced team of experts helped us save both time and expenses throughout the build process.

Quick onboarding and no long-term commitment saved us from needing to hire an internal resource."

Jason Sutor

Director of External Sales - Invicta Medical

SOLUTION

After encountering Dojo Five at the Sensors Converge conference, Invicta Medical recognized a potential solution to their embedded development needs.

The decision to partner with Dojo Five was based on several factors:

Specialized expertise:

Dojo Five's proven experience with Nordic Semiconductor BLE technology and medical device development aligned perfectly with Invicta Medical's needs.

Flexible engagement model:

Dojo Five offered on-demand resourcing, allowing Invicta Medical to access high-level expertise without long-term commitments.

Medical device experience:

Dojo Five's background in medical devices suggested they could navigate the unique challenges and regulatory requirements of the industry.



IMPLEMENTATION

The collaboration between Invicta Medical and Dojo Five was characterized by:

SEAMLESS INTEGRATION:

Dojo Five worked closely with Invicta Medical's internal team, effectively becoming an extension of their development capabilities.

REGULAR COMMUNICATION:

Weekly meetings were established to ensure alignment, track progress, and address any emerging issues promptly.

AGILE METHODOLOGY:

The teams adopted an agile approach, allowing for quick iterations and adaptations as the project progressed.

KNOWLEDGE TRANSFER:

Throughout the engagement, Dojo Five shared insights and best practices, enhancing Invicta Medical's internal capabilities.



RESULTS

The partnership yielded significant benefits for Invicta Medical:

ACCELERATED DEVELOPMENT:

Dojo Five's expertise allowed Invicta Medical to complete their External Pulse Generator development in time for critical clinical trials in Australia.

COST-EFFECTIVE SCALING:

By leveraging Dojo Five's on-demand resources, Invicta Medical avoided the costs and commitments associated with full-time hires while still accessing top-tier embedded development skills.

RISK MITIGATION:

Dojo Five's experience in testing and BLE technology helped reduce both timeline risks and potential patient safety issues, critical factors in medical device development.

ENHANCED QUALITY:

The combination of Dojo Five's expertise and Invicta Medical's internal knowledge resulted in a high-quality product ready for clinical trials.

REGULATORY READINESS:

Dojo Five's familiarity with medical device regulations helped ensure the product was developed with compliance in mind from the start.

KEY TAKEAWAYS & RECCOMENDATIONS

A

Strategic partnerships:

For startups in specialized fields like medical devices, partnering with experts can significantly accelerate development and reduce risks.

B

Communication is crucial:

Regular, structured communication (e.g., weekly meetings) is essential for maintaining alignment and addressing issues proactively.

C

Internal champion:

Having an internal resource who can effectively liaise with the external team ensures continuity and enables quick decision-making.

D

Flexible resourcing:

On-demand access to specialized skills can be a game-changer for startups, offering expertise without the overhead of full-time hires.

E

Look beyond local:

While Invicta Medical appreciated the ease of working with an onshore team, they recommend considering expertise and fit as primary factors when selecting development partners.

CONCLUSION

Invicta Medical's partnership with Dojo Five demonstrates how strategic collaboration can empower medical device startups to punch above their weight.

By leveraging specialized embedded development expertise, Invicta Medical was able to accelerate their product development, manage risks effectively, and progress towards bringing their innovative sleep apnea treatment to market.

This case study illustrates the potential of flexible, expertise-driven partnerships in driving innovation in the medical device industry.

WHY CHOOSE US?

By partnering with Dojo Five, companies can access advanced embedded software development expertise, enabling them to meet aggressive timelines while laying a solid foundation for long-term project success.



Visit DojoFive.com to learn more about what Dojo Five can do for your embedded project.

Or contact us for a **complimentary demo** of EmbedOps and our embedded services offerings at hello@dojofive.com