



DIGITAL PATIENT FOLLOW-UP

THE CHALLENGES OF HOSPITAL CIOs AS THE FUTURE OF HEALTHCARE IS RESHAPED

DISCUSSION SUMMARY

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This report is based on discussions from the CIONET Healthcare Circle event, powered by Johnson & Johnson, held on April 11, 2024. The primary focus of the event was Digital Patient Follow-Up. The event was chaired by Herman van Bolhuis, Founder of CIONET Netherlands. Appreciation goes to Corné Mulders, CIO of HagaZiekenhuis, for shaping the interactive discussion.

INTRODUCTION

Hospital CIOs are navigating a rapidly changing landscape as healthcare technology advances. They face several challenges, including: Fragmentation from the fast adoption of medical technology. Late involvement of IT departments. And the emergence of 'shadow IT' systems

Additionally, the lack of digital expertise among leaders makes decision-making difficult. However, there are opportunities for improvement: Early engagement between medical technology firms and hospital IT can create value for stakeholders. Integrating IT into the organization's broader framework is essential. And Increasing digital literacy among leadership is crucial.

Success hinges on collaboration and knowledge sharing. Roles such as CDOs, CIOs, and CTOs are becoming more strategic within healthcare operations. By tackling these challenges and fostering collaboration, hospital CIOs can guide their institutions toward a more innovative future in healthcare.



IT STRATEGY VS. INTEGRAL STRATEGY

During the discussions with CIOs from various hospitals, we explored whether these institutions had developed distinct digital strategies or integrated IT as a part of their overall hospital strategy. The findings were diverse: while some hospitals are still in the process of crystallizing their strategies, most have incorporated digital strategies within their broader organizational framework. However, it's noteworthy that digital strategy is rarely the leading component. A few hospitals, on the other hand, maintain a separate IT strategy.

COLLABORATE ON YOUR DIGITAL HEALTHCARE STRATEGY

The rapid advancement in medical technology offers numerous tools for doctors and patients, yet uncoordinated adoption can lead to an over-proliferation of applications. This creates a 'shadow IT' environment, where the IT department is unaware of the number and types of applications in use, and clinicians may overlook essential technical and legal requirements.

The key to addressing this issue is fostering close collaboration between clinicians and IT departments. IT can help select appropriate applications, but small-scale proofs of concept, often initiated by start-ups and clinicians, are frequently not scalable. This highlights the importance of involving IT early.

In hospitals, IT is critical, and failures can halt operations. Clinicians often view IT as secondary, leading to independent initiatives that bypass IT. To mitigate risks, hospitals can route all initiatives through the purchasing department, involving IT if the product relates to technology. Aligning new initiatives with the hospital's IT strategy ensures innovation with IT involvement from the start.

THE NEED FOR DIGITAL SKILLS IN HOSPITAL LEADERSHIP

Our panel emphasized the growing need for digital skills on hospital boards of directors. As healthcare embraces digital technologies to enhance patient care and operational efficiencies, digitally savvy board members are crucial. These members can navigate the complex healthcare technology landscape, identify improvement opportunities, and oversee the hospital's digital transformation.

Their expertise ensures alignment between IT and medical staff, fostering cohesive strategy execution. Moreover, board members with digital skills can assess cybersecurity, oversee protocols, and guide the organization in mitigating risks. This holistic approach to digital strategy and IT integration is essential for hospitals to stay ahead in the evolving healthcare landscape.

COPYING INSTEAD OF REINVENTING THE WHEEL: HEALTHCARE CIOs DISCUSS COLLABORATION

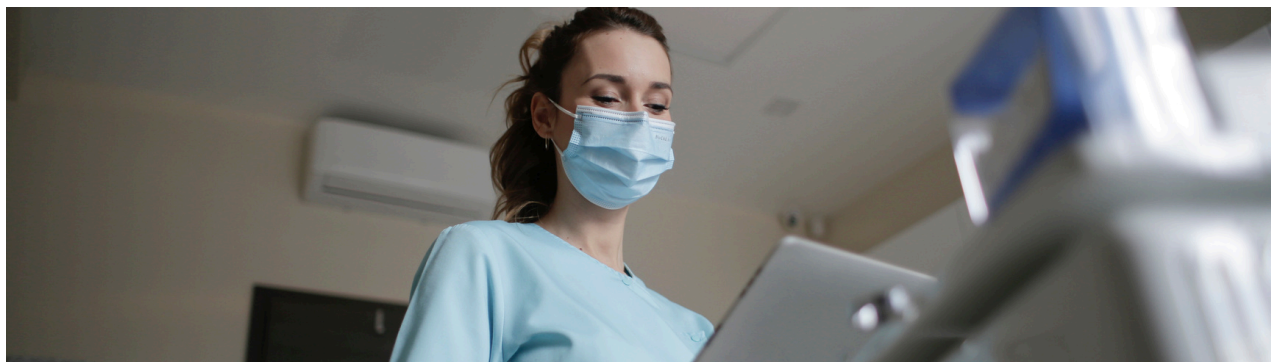
Healthcare CIOs highlighted a significant concern: the tendency to continuously reinvent the wheel rather than leveraging existing solutions that work well elsewhere. This approach, although often well-intentioned, frequently results in unnecessary costs and risks. It appears that this challenge is deeply ingrained in the culture of many hospitals, where even in terms of medical protocols and best practices, sharing is limited. However, we unanimously concluded that copying proven solutions from others is the least risky, cheapest, and most effective way to implement new systems and processes. This insight underscores the need to apply this approach much more frequently.

SEEKING COHESION, NOT REINVENTING THE WHEEL: LEARNING FROM OTHER HOSPITALS

An initiative involving healthcare organizations, insurance companies, and local municipalities aims to improve patient outcomes through integrated care and cross-domain collaboration. The goal is to organize effective care for complex needs within the healthcare chain, with a focus on home care integration and patient flow.

A key project, the Customized Care Team, addresses prolonged hospital stays. A successful crisis team now permanently manages patient admission, flow, and discharge. This initiative identifies problems, envisions ideal solutions, and integrates them into regular processes, leveraging collaboration across various domains. Stakeholders contribute resources and perspectives, fostering collaboration central to the program's success. Research on inappropriate admissions and management has provided valuable insights. The initiative emphasizes using data to structure aid and experimenting with new methods like the Customized Care Team, connecting existing tools and programs for cohesion.

The goal is to replicate successes in other regions, sharing strategies and best practices to enhance efficiency and patient care. Collaboration and learning from others are key to a successful future in healthcare.



NAVIGATING HEALTHCARE INNOVATION: INTEGRATION WITH IT OR INDEPENDENT PURSUITS

In the evolving healthcare landscape, integrating innovation with IT is a key focus for Chief Information Officers (CIOs). Discussions among healthcare leaders highlight the strategic placement of innovation departments within IT and the collaborative role of vendors in driving progress. Some hospitals exemplify this by housing their innovation departments within the ICT division, recognizing that digital possibilities will drive future healthcare innovation.

Many hospitals, however, lack dedicated innovation departments or adequate funding for such initiatives. A consensus from these discussions is that innovation thrives through collaboration with vendors, enhancing efficiency and fostering creativity. Some hospitals' recent initiative, the Innovation Information Point for patients, showcases this collaborative ethos. Located in the Netherlands, this hub helps patients navigate digital tools and offers insights into ongoing innovation projects. Staffed by volunteers, it features interactive sessions with computers and highlights future construction projects integrating new technologies.

The hospital's commitment to innovation includes "robot Jamie," adding a dynamic element to patient engagement and education. Looking forward, CIOs emphasize aligning IT and innovation departments strategically. While embedding innovation within IT optimizes resources, external partnerships are crucial for driving meaningful change. As healthcare digitizes, initiatives like some hospitals' Innovation Information Point demonstrate the importance of collaboration and innovation in shaping the future of healthcare delivery.



LEADERSHIP ROLES IN HEALTHCARE IT: CDO, CIO, OR CTO?

In the evolving world of healthcare IT, the roles of Chief Digital Officer (CDO), Chief Information Officer (CIO), and Chief Technology Officer (CTO) have transformed significantly. Discussions among healthcare CIOs reveal the essential skills needed for leadership in this field. Information and Communication Technology (ICT) has transitioned from a support role to a vital part of hospital operations. For example, at Haga Hospital, the Digitalization & ICMT department is integrated with Integral Capacity Management and four Care Units, embedding ICT into core processes.

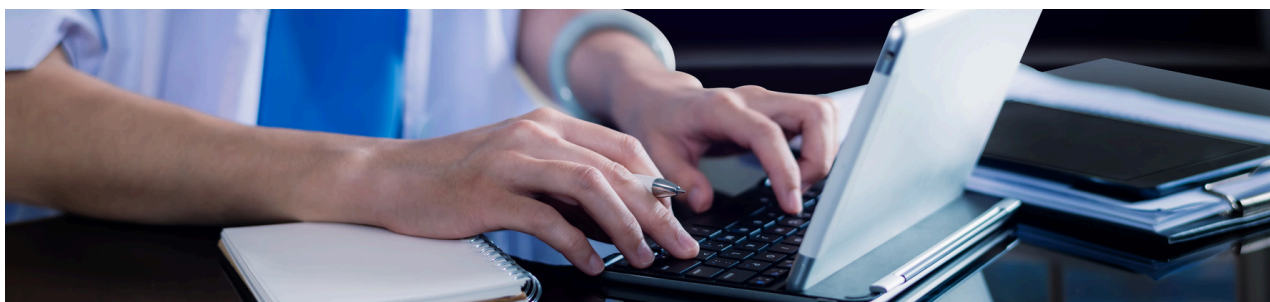
The responsibilities of department heads have evolved as well. In some hospitals, the CIO focuses mainly on technical support, similar to a CTO. In others, the CIO ensures ICT is a critical part of healthcare delivery. The emergence of the CDO role in some institutions shows that digitalization is now central to business operations, driving innovation and transformation.

Leaders in these positions need a diverse skill set, including:

- Knowledge of healthcare regulations
- Expertise in IT systems, data governance, and cybersecurity
- Understanding of interoperability and data analysis
- Familiarity with innovative technologies, change management, budgeting, and stakeholder management

Navigating these complexities while driving digital transformation requires leaders with vision, capable of identifying challenges and opportunities, mobilizing resources, and advancing organizational goals. The digital economy demands innovative leaders who can understand and adapt to disruption and change. Effective digital leaders foster collaboration, drive strategic initiatives, and align these with organizational objectives. Their strategic acumen allows them to make informed decisions that shape the future of their organizations.

The evolving roles of CDO, CIO, and CTO in healthcare IT highlight the need for leaders who can drive innovation, manage regulatory complexities, and leverage technology to improve patient care and organizational effectiveness. These leaders are crucial for the future of healthcare delivery.



ELEVATING DIGITAL OVERSIGHT IN HEALTHCARE GOVERNANCE: BRIDGING THE GAP BETWEEN CIOs, EXECUTIVE BOARDS, AND SUPERVISORY BOARDS

In healthcare governance, Chief Information Officers (CIOs) emphasize the critical need for enhanced digital oversight and for executive and supervisory boards to prioritize technology in their strategic agendas. Discussions highlighted the relationship between CIOs, Executive Boards (RvB), and Supervisory Boards (RvT). Some CIOs noted a lack of ICT expertise within their boards, while others saw progress. The consensus is clear: both RvB and RvT must improve their ICT understanding, with efforts underway to engage and educate board members.

Future board appointments are expected to prioritize candidates with digitalization and ICT skills, possibly including CIOs in Executive Boards, a trend already seen in banking. This aligns with research indicating rapid digital transformation in healthcare, necessitating governance adjustments. Although more supervisory boards are appointing portfolio holders for digitalization and ICT, these issues are not yet central to board agendas despite their importance. Factors like the Integral Healthcare Agreement and workforce shortages underscore the urgency.

Key recommendations for supervisory board members include systematically integrating digitalization and ICT into board meetings, ensuring necessary expertise is available to evaluate and guide initiatives, and recognizing the importance of digitalization and ICT in healthcare innovations.

As healthcare undergoes digital transformation, governance bodies must provide effective oversight and guidance. By prioritizing digitalization and ICT expertise, executive and supervisory boards can better navigate healthcare complexities, enhancing patient care and organizational effectiveness.



HARMONIZING MEDTECH AND ICT: ENHANCING HEALTHCARE INTEGRATION



The integration of Medical Technology (MedTech) and Information and Communication Technology (ICT) is becoming crucial in healthcare, driven by Chief Information Officers (CIOs). Hospitals are adopting varied approaches: some integrate MedTech within their ICT departments, while others foster close collaboration between the two. MedTech, traditionally linked to medical equipment, now includes ICT and data analytics, prompting discussions on its repositioning within ICT frameworks — similar to the past integration of telephony services into ICT.

This convergence offers numerous benefits. Combining MedTech with ICT streamlines operations, optimizes resources, and encourages cross-disciplinary innovation. It ensures seamless data integration and interoperability, essential for comprehensive patient care, and allows centralized governance for cohesive strategy implementation aligned with organizational goals. CIOs are pivotal in this integration, leveraging their expertise to navigate the complexities of MedTech-ICT convergence. They drive strategic realignment, ensure regulatory compliance, and spearhead digital transformation in healthcare.

This shift also requires a cultural change within organizations. Collaboration between MedTech and ICT teams is essential, supported by cross-functional training and knowledge-sharing initiatives to foster innovation. Looking forward, integrating MedTech within ICT heralds a new era of efficiency and effectiveness in healthcare technology management. This convergence allows healthcare institutions to leverage technology fully, enhancing patient outcomes and driving sustainable growth.

Harmonizing MedTech and ICT is a strategic imperative as healthcare undergoes digital transformation. Unified within a cohesive structure, these domains unlock synergies, drive innovation, and deliver superior patient care, highlighting the crucial role of CIOs in shaping the future of healthcare technology.

CONCLUSION

In conclusion, hospital Chief Information Officers (CIOs) face significant challenges in navigating the rapid adoption of Medical Technology (MedTech) and ensuring its seamless integration within their organizations. Fragmentation from this rapid adoption often leads to sustainability issues, compounded by delayed IT involvement and the proliferation of uncoordinated digital solutions adopted by clinicians. Moreover, the lack of digital skills among hospital leadership exacerbates these challenges.

To address these pain points, it is imperative for MedTech companies to involve IT early in the development process and demonstrate value-added solutions that alleviate administrative burdens and optimize clinician workflows. Additionally, hospital IT must be integrated into broader organizational strategies from the outset, moving beyond a mere support function to become a critical component of hospital operations. Digital skills among hospital leadership are essential, with board members playing a pivotal role in overseeing cybersecurity and guiding digital transformation efforts.

Collaboration and the sharing of best practices are key to overcoming these challenges. Leveraging proven solutions from other hospitals can mitigate costs and risks, while cross-domain collaboration enhances patient outcomes and care delivery. Furthermore, evolving roles within healthcare IT, including Chief Digital Officers (CDOs), CIOs, and Chief Technology Officers (CTOs), underscore the importance of strategic alignment between IT and innovation departments.

By embracing collaboration, fostering digital skills among leadership, and ensuring strategic IT involvement, hospital CIOs can steer their institutions toward a more efficient and innovative future in healthcare. These steps are essential for addressing current challenges, optimizing resource allocation, and ultimately improving patient care delivery across the healthcare sector.





About CIONET

CIONET is the leading community of more than 10,000 digital leaders in 20+ countries across Europe, Asia, and the Americas. Through this global presence CIONET orchestrates peer-to-peer interactions focused on the most important business and technology issues of the day. CIONET members join over a thousand international and regional live and virtual events annually, ranging from roundtables, programs for peer-to-peer exchange of expertise, community networking events, to large international gatherings. Its members testify that CIONET is an impartial and value adding platform that helps them use the wisdom of the (IT) crowd, to acquire expertise, advance their professional development, analyse and solve IT issues, and accelerate beneficial outcomes within their organisation.

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