DIGITAL TRANSFORMATION IN HEALTHCARE
CUSTOMISING CARE, UNLOCKING THE FUTURE
Ultimately, digital transformation should add value to the quality of patient care and make healthcare organisations more financially sustainable and future ready.

**How do we define digital transformation?**

Digital transformation is the art of using information technology to transform an organisation. For healthcare organisations, that means using technologies like telehealth, predictive analytics, and artificial intelligence (AI) to transform their approach to patient care, business strategy and organisational processes.

The COVID-19 pandemic made digital transformation in healthcare even more critically important than it already was. BDO’s [2021 Healthcare Digital Transformation Survey](#) revealed that 60% of healthcare organisations added digital projects due to COVID-19, while 42% accelerated their existing digital transformation plans. Those numbers indicate the central importance of digital initiatives, but there is a risk that digital transformation can be perceived as an end rather than a means to achieving key goals.

For healthcare managers and directors, the real question is: How can digital transformation help you realise your organisation’s goals, in alignment with your business strategy, and add value for your patients? To help answer these questions, healthcare organisations should formulate a clear digital strategy centered around the patient and their healthcare professionals with focus on people, IT, and finance.
KEY TRENDS IN HEALTHCARE

Healthcare organisations are faced with accelerating digital transformation on multiple fronts. These digital trends prompt organisations to make certain choices, which need to be financially sustainable. We identify the following key trends:

• **Growing pressure on the healthcare system:** As the population ages and chronic disease gain ever more importance, there is an increasing demand for complex and expensive care. At the same time, labour market conditions are extremely tight.

• **Consumerisation:** Patients increasingly approach healthcare as a consumer. They want to be in control of their health, treatments, and healthcare data. As customer expectations rise, those expectations need to be managed and met.

• **Changing healthcare market:** Healthcare is being regionalised and globalised to help each patient in a more cost-efficient way. As new commercial players and private equity enter the market, it impacts those market dynamics.

• **Seizing opportunities with technology and data:** With ample healthcare and management data available, the main challenge is to translate that data into information and insights. Data forms the basis for value-based healthcare, decision support algorithms and artificial intelligence (AI).

• **Providing smart, high-quality patient care:** The exchange of medical information between healthcare providers, and between doctors and patients, becomes increasingly important to delivering efficient, high-quality care. New technologies — such as personalised medicine, remote monitoring, the Internet of Medical Things (IoMT) and home automation (domotics) — can add significant value to a patient’s treatment.

• **Focus on compliance and accountability:** Healthcare organisations are faced with cybersecurity threats, regulatory enforcement, and potential fines. The consequences and reputational harm can be substantial when things go wrong, so it’s important to operate transparently and ensure compliance with all applicable laws and regulations.

All these digital trends affect your healthcare organisation and the care you provide. Sooner or later, they will force you to make strategic decisions regarding digital transformation. That’s why it’s so important to devise a clear digital strategy aligned with organisational goals. That strategy can inform decision-making and help your organisation become, and remain, financially sustainable and future ready.

**BDO INSIGHT**

Accelerated technology adoption is just the beginning. The future of healthcare is data-driven, digitally enabled and supported by automation. In the future, it’s likely that every step of the patient journey will be supported by digital tools, and remote care will be the norm. Artificial intelligence (AI) and machine learning (ML) will enable more compassionate care, while automation will save providers time and money in revenue and billing cycles. Robust data analysis will support business strategy to ensure the organisation remains healthy and on track to achieve key goals.
The focus of your digital strategy should be adding value for your patients, healthcare professionals and support staff. To realise a successful digital strategy, employees from the entire organisation should be involved in defining the strategy, not just leaders and board members only. To help facilitate this process, we often use design thinking workshops and a digital strategy canvas to guide the conversation. In these workshops, we focus on four themes:

1. **The patient and their treatment**: How do you improve quality of care and reduce the burden on your healthcare professionals? And how can you obtain insights from all the healthcare data available within your organisation?

2. **Business operations**: How do you facilitate business operations with data and technology? And how can you obtain insights from management information?

3. **IT & security**: How do your IT systems match with the needs of end users? And how can you guarantee secure IT?

4. **Legal and regulatory compliance**: How do you achieve transparent compliance with all applicable laws and regulations? And how can you develop agility for responding to changes?

For each theme, we identify the starting point (i.e., digital maturity level of the organisation) and work together to plan for the organisation’s ideal state for the coming years. The result is a brief document with a clear vision on digitalisation and areas that should be addressed. These topics will be used to design a digital transformation roadmap with a clear business case that is financially sustainable. After approval by the board, the document and roadmap should be widely shared within the organisation to create broad awareness of the digital strategy and expected changes.

The roadmap lays a foundation for digital transformation by outlining the milestones, priorities, and organisational goals to be realised in the months and years ahead. This foundation helps ensure alignment and enablement across the organisation to manage change and implement the strategy effectively.
ENSURING A FINANCIALLY SUSTAINABLE DIGITAL TRANSFORMATION

While data analytics has become the new digital frontier in healthcare, many healthcare organisations are only on step one of their data analytics journey: collecting massive amounts of data. To turn that data into actionable insights, they’ll need to invest in analytics. Organisations should prioritize gathering insights from data related to the financial and operational health of their business, in addition to clinician performance and patient experience. Embedding data-driven decision making into the foundation of your organisation is crucial to fostering resilience, increasing transparency, and maximizing opportunities for growth.
The Challenge:
The Royal Flying Doctor Service (RFDS) provides medical emergency and primary healthcare services to Australia’s remote and very remote areas and has established flight paths that reach across the continent. To improve the quality of healthcare service delivery to rural and remote communities, RFDS wished to achieve an end-to-end view of client medical records, interoperability with other service providers, and consolidation of patient clinical information. To do this required the development of and investment in ICT infrastructure to enable the RFDS to improve outcomes, increase patient care, empower clinicians, and curb the rising cost of RFDS health related services. The RFDS engaged BDO to develop a three-year digital strategy and transformation roadmap.

Our Solution:
BDO met with key stakeholders across the entire RFDS organisation to develop a stakeholder engagement plan. This included workshops, interviews with key personnel, a review of the current state enterprise and application portfolio, and a review of current ICT initiatives. Through our engagement plan, BDO was able to set the ICT digital roadmap’s strategic context by:

- Confirming the RFDS strategic intent and capabilities
- Defining the alignment between the RFDS and the Queensland and Australian Governments’ health strategies
- Ensuring alignment with the Queensland Government’s digital and ICT framework and policies
- Confirming and documenting RFDS objectives and guiding principles
- Developing RFDS ICT guiding principles
- Identifying digital transformation enablers

Once the strategic context was set, BDO collated critical information on all current project initiatives across RFDS. Workshops were held with department heads and clinicians to confirm high-level future state solutions, along with projected costs. All current ICT initiatives and future state solutions were tested for alignment with all criteria and principles and then prioritized based on a criticality assessment. In a final series of workshops, BDO reconfirmed key business priorities, and each initiative was given a time horizon across a digital roadmap.

The Result.
The roadmap was finalized and submitted to the RFDS Board, along with several recommendations regarding ICT including:

- Developing a cyber-security strategy
- Appointing a digital technology leader
- Strengthening the project steering committee
- Adopting the Queensland Government Information Security Classification Framework
Deploying telehealth to protect vulnerable patients during COVID-19

The Challenge:
A nonprofit healthcare organisation based in south Florida was struggling with staying safely connected and adapting to the needs of its most at-risk patients during the pandemic. The organisation is a multi-site federally qualified health center that provides primary, behavioral and substance abuse care by combining prevention, disease control, consumer education, research, and evidence-based clinical services. The provider independently applied for and successfully secured funding under the Federal Communications Commission (FCC) COVID-19 U.S. Telehealth Programme. The programme provides limited duration reimbursement funding for specific virtual health hardware, software, and service charges in support of promoting access to care, particularly for at-risk and rural populations. To maximise the programme’s potential, the provider needed to rapidly identify, award, and activate a virtual health solution.

Our Solution:
BDO partnered with the provider to facilitate the selection and deployment of a virtual health solution that coupled telehealth and remote patient monitoring for an underserved population while simultaneously determining how to enhance the functionality of its current electronic medical records (EMR) platform. BDO led the process to evaluate multiple telehealth providers and conducted a rigorous comparative analysis of vendor qualifications, including a review of platform capabilities, user experience ratings and connected device performance quality. Upon selection of a vendor, BDO co-facilitated a rapid deployment that resulted in active patient engagement within 8 weeks with expansion capacity to 500 simultaneous patients.

In addition, BDO provided initial logistical and programme management support services as the provider expanded its internal team. BDO collaborated with client leadership to develop the metrics to evaluate the impact of integrating telehealth into their care model. After determining which metrics to use, BDO developed a monthly dashboard and trained the client on maintaining it themselves.

The Result.
After deploying the new virtual health solution, the provider was able to deliver 2,400 telehealth services a month. They also reduced hospital and emergency room visits by 15% and reduced in-office visits by 85% throughout the pandemic. By optimising workflows, establishing reporting dashboards and creating a solution to overcome the challenges of a dual-EMR platform, BDO was able to help the provider innovate their patient care delivery.
Outcome-focused care

The Challenge:
In 2018, the Government of the Netherlands initiated a national programme called Outcome-focused Care with the aim to improve treatment effectiveness, shared decision-making, and the quality of treatment outcomes in healthcare. Its mission is to provide patients with the opportunity to align their choice of medical treatment with their desired outcome. For instance, patients that suffer from the same condition may have completely different desired outcomes. Hence, for patients it is crucial to gain insight in the expected outcomes of a certain treatment. The programme Outcome-focused Care wished to provide patients and healthcare professionals with the required tools to obtain the necessary insight in treatment outcomes.

Our Solution:
In 2021, BDO began working with the Outcome-focused Care programme to help determine how to develop the technological aspects required to gain better access to relevant and up-to-date outcome information. BDO explored the key features and restrictions for creating outcome-focused care and performed a field study among already existing initiatives.

The Result.
These lessons learned, challenges and opportunities helped the Outcome-focused Care programme to identify key research themes for bridging the gap between the as-is and to-be situation. In the next step, BDO will help the programme with quality assurance, exploration of key research themes and organizing proof-of-concept studies.
Define a clear digital strategy: Set goals for what your organisation wants to accomplish and align the digital strategy with business strategy. Define which technologies will improve your organisation’s financial and operational outcomes. Once your strategy is developed, get buy-in from key stakeholders and have a plan for enablement and adoption of new technology and processes.

Focus on added value for patients and healthcare professionals: The goal of digital transformation should be to improve patient care and clinician workflows. Technology like telehealth can improve access to care for patients, but it must also be deployed in a way that doesn’t increase workloads for clinicians.

Enable your IT to support the necessary digital tools: Digital solutions need a modern IT foundation to be effective. Maintaining outdated legacy systems can hamper your digital investments. Ensure your systems and digital team can support the tech stack for data analytics, telehealth programmes and more. You also need robust security and data governance processes to protect systems and enterprise information, including sensitive patient data.

Ensure digital transformation is financially sustainable: Making too many digital transformation investments too quickly can overtax internal resources and may cause digital initiatives to fail. Gain a clear view of expected return on investment and total cost of ownership for each project. With a targeted, strategic approach, you can focus investments on priority areas for the organisation.
THE BOTTOM LINE

The moves healthcare organisations make are creating the future of care. That’s a daunting responsibility—and it requires breaking down organisational and industry silos to create the best experience and outcomes for the patient. With the right support in digital transformation, your organisation can rethink care delivery and the patient experience for your community.

Contact us today to help develop and implement your transformative digital strategy.
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