

Accelerating Healthcare Transformation through Patient-Centred MedTech Solutions



Summary

Connected devices have the potential to transform care delivery for patients and help healthcare providers to improve outcomes. Putting patients at the centre of a care ecosystem which is more participative and personalised can improve patient engagement, health outcomes and the productivity of healthcare delivery: Designing the digital experience with patients and carers can enable a transformation in the way devices are integrated into care pathways.

Future, connected devices will be a central part of healthcare provision, transmitting real-time data that can deliver a range of benefits from monitoring patient health and making informed real-time treatment recommendations to enabling smarter appointment scheduling, and sharing information with manufacturers for example triggering preventative maintenance.

In this future landscape, the gains are significant and could benefit all participants. Patients will have the opportunity to engage in their treatment more closely, healthcare providers will have options to deliver more personalised and efficient care, and manufacturers will be able to optimise operations whilst extending their solutions to offer value added services.

Underpinning this vision is data. Capturing, integrating, and managing data effectively is key to achieving the future vision and its associated benefits. Making care more personalised and participative will be enabled by data drawn from connected devices to generate insights, which are fed back in, to enhance care. Any efforts should be underpinned by a robust approach to transparency and data governance.

Now is the time to deliver these changes in care—barriers among the population have fallen and governments are streamlining regulation to accelerate the introduction of digital technologies. Healthcare is dealing with a significant shortage of healthcare professionals globally which means the opportunities of automation and self-service care models have become an operational imperative. Successful delivery of this change will be dependent on a user-centered design which enables the workforce to embrace new ways of working and creates capacity rather than requiring “double-running”.

This represents a clear opportunity for the MedTech industry who should begin to take steps to prepare for success. These should include taking a patient-centred view to understand the patient journey and wider clinical pathway; working with patients and carers in an agile way to develop a patient engagement experience; choosing the right platform to accelerate the integration of data to enable insights and support experience; and supporting engagement and collaboration across the ecosystem.

Introduction

Over the last two COVID years, the pace and impact of digital transformation has accelerated well beyond anyone's predictions. This rapid digitisation has enabled new collaboration across care ecosystems, including the opportunity for patients to take a more central role in shaping their own care journeys. The proliferation of smart glucose monitoring is just one example of how patients are embracing new technologies to gain greater insights into their conditions and help achieve a better quality of life.

Collaboration between regulators, research organisations and governments has allowed health data to flow as never before—enabling data-driven insights that have enhanced care delivery. There is an opportunity to maintain this momentum, embracing a digital and data-led landscape that enables health data to be used to systematically predict, personalise, and integrate care activities.

By considering this wider landscape, and putting patients at the centre of their design, smart medical devices and digital health solutions can be the catalyst that further accelerates this transformation of healthcare delivery - streamlining patient care and optimising patient outcomes.

Despite this, a recent survey of MedTech executives by the Association of British HealthTech Industries (ABHI) found that only half of organisations that responded currently have Patient Outreach and Smart Device strategies in place or under development. To ensure that MedTech companies are positioned to evolve with the ever-changing healthcare landscape, it is critical to have a strong vision and strategy to deliver in a nimble manner.

In this paper, IBM and Salesforce have come together with the ABHI to provide some practical steps, based on previous successes, to help MedTech companies seize the opportunity to deliver this transformation for their patients.

A vision of connected patient-centred healthcare

Imagine a future where your healthcare can be monitored on your phone. For a patient with heart failure, an implanted device such as a Smart Left Ventricular Assist Device, (LVAD) could transform your life, keeping your blood circulating. However, maintaining an LVAD to optimise health is complex, and ongoing monitoring of device usage and patient status is critical to success.

A smart LVAD connected to an app or website could let you know when the batteries need changing, monitor blood clotting information, and connect you to a community of others with similar health challenges. The system could alert your clinician to unexpected changes in clotting or other health measures such as fluid retention, and push clinic invitations or enable repeat prescriptions as appropriate. Data on device effectiveness could also be shared with the manufacturer to improve understanding of functionality, or data could be received to allow software updates.

This would augment patient and clinician interactions with data allowing appointments to be more informed and focused on areas of concern – but also allow advice to be offered proactively when deterioration is detected.

Critical to the success of this vision would be an interface which facilitates the patient experience, making it easy to use and providing the right information at the right time. The design of this interface, with patient users in the context of their care pathway will be critical to success.

The potential benefits of connected care are far reaching

Imagine a future where your healthcare we saw how data from a connected device could be used to benefit patients, clinicians, healthcare providers and manufacturers. The image below illustrates the potential benefits to each group, along with the key enabling capabilities and underlying data. As part of a connected care ecosystem, the best solutions enable patients to participate, providing greater control over the management of their conditions; enable healthcare providers to deliver more personalised, proactive care whilst reducing the burden on hospitals and enabling MedTech providers to better demonstrate and extend the value they provide through their devices and patient-centred services.

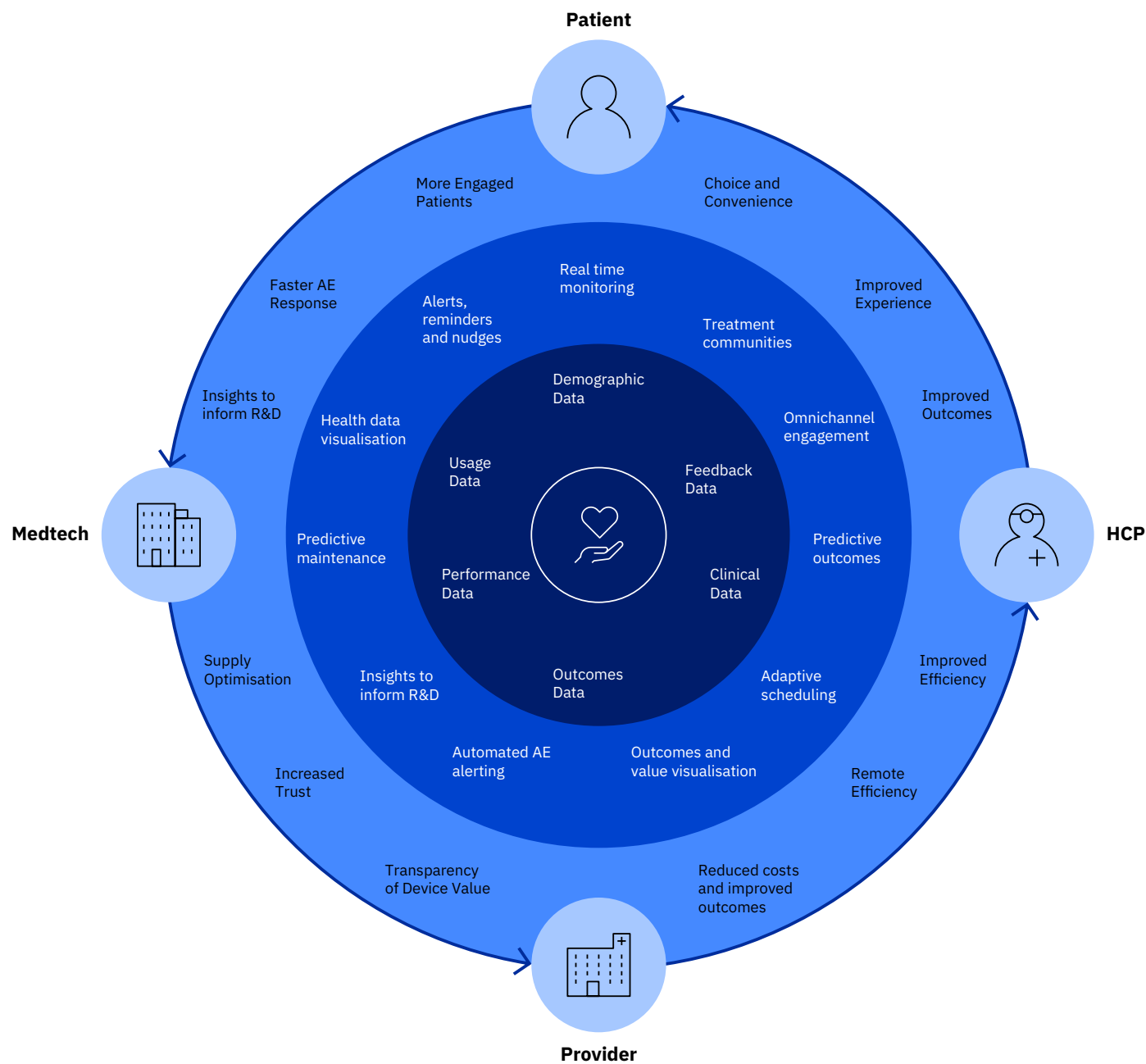


Fig. 1 - Potential benefits of connected devices along with the enabling capabilities and data needed to achieve them

For Patients

- **Insight-driven care puts patients in the driver's seat**
Increased access to data from devices, combined with AI and machine learning can offer predictive insights that have the potential to transform patients' lives. In diabetes care, AI powered solutions are providing patients with dietary, and treatment recommendations based on a combination of real-time glucose monitoring and an individual's historical levels¹. This empowers patients to take control and manage their care from the convenience of home.
- **Reducing barriers to care**
Using technology to reduce the need for in-person consultations can make care more accessible and ultimately result in better outcomes as patients engage earlier and more regularly with their care providers.

For Care Providers

- **Improved healthcare efficiency**
Integrated care trusts are looking to the Pharma and MedTech industries to deliver solutions that enable remote consultations and care. Remote monitoring solutions allow care providers to dynamically schedule clinic appointments around patient need, optimising the use of scarce resources and enabling the shift to virtual wards.
- **Integrated patient care**
Using a human-centred approach to really understand the 'moments of truth', those important decision points in a patient's journey from diagnosis to monitoring is essential in building integrated care pathways that bring together all aspects of a patient's care into a single, integrated care record. Being able to securely share data across care settings, simplifies the complexities and enables clinicians and stakeholders to deliver well-coordinated and integrated care, while enabling patients to receive a personalised experience and real-time access to data to drive informed decisions. Similarly, the ability for care providers to access data from devices and combine it with other data from across the care continuum, has the potential to deliver deeper insights.

For MedTech

- **Value-added offerings**
By keeping the patient at the centre of the approach, MedTech companies can extend the value of their device and outcomes by creating surround-sound-like value-added services, such as remote monitoring of a patient with an implantable device. It creates opportunities to take the 'whole connected health' approach for patients across the patient's journey and continuum of care.
- **Informed operations**
With access to data captured from devices and connected services, MedTech companies can both streamline their operations and open new business model opportunities. From a commercial perspective, having access to real-world evidence on treatment compliance and outcomes can support sales teams in negotiations. Similarly, implementing capabilities to improve patient compliance can lead to increased revenue streams, and provide data to enable more efficient demand forecasting.

Data is key to transforming the patient experience

Data is the critical enabler in this new world of digitally enabled care. To deliver maximum impact, these data need to be gathered from the wider ecosystem surrounding the patient and device and manufacturers should consider how insights can be integrated back into the care system to deliver impact – and ultimately add value.

Critical first steps in any data-enabled activity are a robust approach to data transparency and governance to underpin the confidence of patient, clinical and wider stakeholders in alignment with the recommendations of the Goldacre [Review](#). This should include clear identification of data assets, implementation of security and compliance measures across the information lifecycle and the definition of meaningful relationships between data sets to maximise value.

Opportunities to transform the patient experience can then be identified, working with patients themselves: Creating a patient-centred experience for a medical device is driven by the data drawn from the device itself, plus supporting data from across the integrated care pathways and system in which they sit. Key data would include patient demographics, clinical data including on patient diagnoses, treatments and outcomes, as well as information about device performance. Patient Reported Outcome Measures (PROMs) and other patient reported data are important factors alongside directly captured clinical monitoring data. Opportunities exist around simplifying the capture and sharing of data; and in collating data to provide insights and support decisions.

Example: An at-home vision screening app for patients with macular degeneration is being used by one leading hospital to determine when patients require an in-person consultation. Integrating the app into their patient journey gives patients control over tracking their vision

from home, providing peace of mind. Scheduling appointments only when certain conditions are met has saved hundreds of clinic hours compared to regular 6-monthly checks and enabled clinicians to see at-risk patients as a priority.

In both these examples, data from a device is being used to improve the patient experience and ultimate treatment outcomes. Clearly, a step change can be enabled simply by an improved patient experience around a digital device — far more can be delivered when the device is fully integrated into a system.

In the table below we have identified five areas which we believe are prime candidates for transformation through the introduction of data-enabled medical devices. These include the transformation of patient pathways, improving health outcomes, enhancing treatments, improving device quality, and enabling operational efficiencies.

Opportunity	Use Case	Potential Impact
Patient Pathway Transformation	Real time insights	Providing data in real time reduces the need for manual intervention and enables faster reaction to any mitigating actions or follow-up activities.
	Predictive care	Cognitive capabilities can be used to adjust treatment or recommend next best actions based on observed data, streamlining care and improving patient outcomes.
	Remote care enablement	Solutions that can enable remote monitoring and treatment of patients will open up new opportunities for care providers to deliver more flexible and efficient pathways, improving both patient experience and clinical efficiency.
	Engaged patients	Providing patients with data and insights relating to their health can make them feel more in control and engaged in their own care leading to better outcomes as they can see the impact of their actions.
	Optimise care efficiency	The ability to drive clinic schedules based on patient need rather than arbitrary dates will have a big impact on care providers ability to reduce waiting times for treatment, and ultimately costs.
Improved Health Outcomes	Increased treatment adherence	The implementation of alerts, reminders and other behavioural nudges has been shown to increase adherence with care plans, improve outcomes and reduce the overall cost of care.
	Prevention of acute events	Early identification of risk factors, through monitoring of real-time or reported data, can alert patients and care providers and allow appropriate interventions to be taken to avoid acute events.

Opportunity	Use Case	Potential Impact
New & Enhanced Treatments	Integrated solutions	Integrating monitoring and treatment technologies can make significant difference to the lives of patients.
	Smart insights	Insights obtained from a broad set of data can be shared to support research into a disease area, including informing additional risk factors.
	Support for clinical trials	Devices that can capture and report clinical data are key to the expansion of decentralised clinical trials, reducing the time and cost of bringing new therapies to market.
Device Quality	Predictive maintenance	Monitoring of device usage and performance data can identify potential failures ahead of time allowing for proactive repair or replacement, avoiding gaps in treatment and reducing costs.
	Adverse event alerting	Inclusion of simplified mechanisms for adverse event reporting ensures compliance, and provides insights to help prevent recurrence.
Operational Efficiency	Enable outcomes based contracting	Greater visibility of patient outcomes associated with device usage enables a shift toward outcomes based contracting which can open up new markets or overcome traditional barriers.
	Optimised procurement & supply	Insights into device usage and performance levels can provide a more accurate view of demand to inform just in time procurement and supply.

Table 1 - Opportunities and use cases for using data from connected devices to deliver value across the patient pathway

Post-COVID: Now is the time to embrace digital opportunities

The COVID-19 pandemic has caused a seismic shift in the global Health and Life Sciences landscape. With the world in lockdown, healthcare providers had to adapt very quickly to a world without in-person consultations. Almost overnight they embraced tele-health services and accelerated plans to adopt electronic care records. As countries continue to open up again, their healthcare systems face unprecedented backlogs of patients requiring treatment - whether outpatient appointments, elective surgeries, rehabilitation, or monitoring. Care providers are again looking to technology and analytics to help address the challenge, seeking out solutions to enable remote management of care and reduce the need for in-person treatment.

Remote general practice consultations in the UK have grown 157% between March 2019 and March 2022, now accounting for 35% of consultations.

NHS Weekly MI Dataⁱⁱ

Accessibility: Digital access is no longer a barrier

A long-cited barrier to the expansion of technology in healthcare has been a concern around equitable patient access to supporting devices and infrastructure e.g., smartphones, broadband, etc. Such lack of technology, and the confidence to use it, has been an issue where devices require connection to a smartphone to transfer data or rely on web / mobile apps to provide an augmented experience. However, the pandemic has demonstrated, through the shift to online shopping, and widespread adoption of videoconferencing across demographics, that the technology barrier is now significantly lower than before.

A minority of ABHI survey respondents noted 'lack of patient access to technology and associated technology literacy' as a barrier to smart device adoption

Healthcare providers are embracing the fact that technology access is no longer a major barrier. In the design of new 'smarter' hospitals, technology is being viewed as an integral part of the patient experience with journeys being designed on the assumption that the majority of patients will have access to devices. In a similar vein, the NHS in the UK has set targets for hospitals to establish virtual wards to support people at the place they call home, including in care homes.

Availability: New technology can provide digital capability and analytics in more care settings

In addition, to the increased acceptability of digital, there is increased availability of enabling technologies. There are now a wider range of solutions available to facilitate digital care across more settings. Experience technology has new components designed specifically for healthcare, and the new availability of health data has driven an explosion in technology able to interrogate it, including analytics that can create insights to refine the patient experience and care delivery. Companies large and small have already invested in developing new digital health products for patients.

Appetite: The NHS is increasingly able to use digital technologies

In the past, the NHS has struggled to prove and adopt MedTech. However, increasing digital capabilities combined with the new regional ICS structures and support from central organisations such as the NHS Accelerated Access Collaborative are changing that. This will continue to increase the capacity and capability of local NHS organisations to embrace new technologies, particularly where they improve equity and/or reduce cost.

Regulation: Governments are aiming to streamline regulations

An increasing backlog of patients waiting for treatment has also spurred governments to address another major barrier to the wider adoption of MedTech: Regulation. Governments and healthcare stakeholders will need to work together to simplify a complex healthcare environment with an easy toolkit that enables stakeholders to challenge past assumptions, reduces regulatory burden and incentivises innovation in delivering healthcare.

67% of ABHI survey respondents view streamlined procedures for consent, approval, and funding of new technologies as key for the successful deployment of new capabilities

To accelerate and streamline advice for digital technologies, UK regulatory agencies have come together to launch MAAS, the multi-agency advice service across four agencies: The Medicines and Healthcare products Regulatory Agency (MHRA); the Health Research Authority (HRA); the National Institute for Health and Care Excellence (NICE); and the Care Quality Commission (CQC). In addition, the release of the 2022 Goldacre report and the announcement of £250m funding for health data demonstrate clear intent and support from government for the digital and data in health.

As barriers are removed, incumbent companies must move with urgency to capitalise on the opportunities that lie ahead. The emergence of health-tech start-ups and non-traditional entrants looks set to continue as they seek to exploit the growing demand for digital solutions.

How to prepare for success

In the past, most medical technology has been tactical and focused on point solutions. Now is the time to move on to create integrated holistic approaches which bring data together from multiple sources to enable care and address more of the patient needs.

Success will require careful navigation of clinical stakeholders, data integration and governance, as well as regulation and interoperability with emerging and legacy technical systems.

We have identified four key steps critical to success:

1. **Understand the patient journey and wider clinical pathway**
2. **Work with patients and carers to develop the engagement experience**
3. **Integrate data and enable insights to support experience**
4. **Support engagement and collaboration**

1. Understand the patient journey and wider clinical pathway

Early patient involvement is critical to developing a true patient-centric approach. Speaking with patients, carers, and clinicians in the early stages of a design project can uncover hidden challenges, unmet needs and provide more context with which to define problem statements and validate initial ideas.

Understanding patient's daily activities, priorities, and frustrations, and how they fit into the wider clinical pathway and healthcare system, allows MedTech companies to look beyond the device and toward solutions that empower patients with modern, simplified, and consistent consumer-style experiences. This shifting of power to patients through these consumer-style personalised experiences further enhance the relationship between patients and clinicians, and enables them to take control of their own health, making informed decisions to achieve their desired health outcomes.

However, patient experience cannot be improved in isolation, significant change requires integration into the end-to-end care pathway. In the ABHI survey, consideration of the end-to-end patient journey from both a patient and clinician perspective was viewed, by a majority of respondents, to be the number one need for success.

60% of ABHI survey respondents see the consideration of end-to-end patient care pathway as key to the adoption of new MedTech.

We believe that a co-creation method will be critical for success, bringing patients, carers, and clinicians together to understand the pathway, patient journey and the challenges or blockers that can be encountered. Human-centered design approaches, like IBM Garage™, provide a structure for more user centric insight generation, focussing on the underlying problem and outcomes to drive innovation.

2. Work with patients and carers to develop the engagement experience

Based on the insights generated about the patient journey, the requirements can be defined, and a patient experience developed to provide the functionality they want and value. We recommend taking an agile approach to development with short development cycles producing new functionality that can be tested with users and iterated to produce a high impact outcome.

Creating a single view of and for the patient, bringing information together from disparate sources will allow the greatest impact—it will also allow clinicians broader insight into patient activity.

Integration Platform as a Service (iPaaS) capabilities, already widely used in healthcare such as Mulesoft from Salesforce, are at the heart of creating and hosting services that enable seamless health data connectivity and interoperability in a secure and compliant way. This is a core capability that will allow smart devices to be integrated into complex clinical pathways providing staff with real-time information supporting clinical decisions and increasing clinical safety.

Case Study: The Irish national COVID vaccine management platform used the Salesforce platform to provide a simple, relevant, and easy-to-use interface that supports digital engagement, while being device-agnostic. They are able to easily integrate with legacy platforms and orchestrate complex clinical pathways. In a large number of cases, citizen consumers are only required to interact digitally to get their needs fulfilled.

3. Integrate data and enable insights to support experience

Data is at the heart of healthcare transformation. To be successful, companies must develop a data strategy which enables the best care experience to be wrapped around the device. This should begin with understanding the landscape and context in which their device or solution will be used - exploring what data is needed to be effective, where it can be obtained, and how it can be integrated into the solution. Strong data governance and security will be critical to enable both credibility and interoperability.

Once you have a data strategy in place modern technologies can help you to accelerate your implementation, becoming the bridge that spans legacy challenges, extends the value of existing devices, and facilitates better experiences for patients and clinicians. However, selecting the right technology can be daunting, especially for organisations exploring this for the first time.

Through the pandemic, modern cloud-native platforms, such as Salesforce, have demonstrated their value through rapid implementations to address immediate healthcare challenges that can quickly be scaled to support national efforts. These platforms have invested in establishing common healthcare data models, common care pathway processes, and support for health data exchange standards. Adopting a platform can accelerate the delivery of your patient solution, shifting focus to value-added capabilities rather than a reinvention of core functionality. In addition, choosing a platform with a broad set of capabilities including integration, interoperability, data privacy and reporting can reduce the complexity of the solution, freeing up resources to focus on functionality and solving for complex use cases.

Case Study: Working with Salesforce, a medical device company delivered a mobile application to monitor health metrics for at-home dialysis patients by developing and expanding their partner ecosystem. They built a personalised, connected customer community portal powered by the integration of disparate systems of record and Salesforce Health Cloud. The team accelerated innovation of their healthcare solutions by enabling developers and partners to build new capabilities from existing APIs and reusable assets, delivering 30% reusability of APIs, making it 50% faster to unlock and unify data, and driving 1.5x faster integration of salesforce systems with back-end data sources.

4. Support engagement and collaboration

In a complex and rapidly evolving landscape, successful delivery will require organisations to work closely with others across the care ecosystem. A major focus on stakeholder involvement and engagement throughout design, implementation and operation will be critical to success, including data sharing, and the roll out of any new systems and devices. Bringing stakeholders together from across care systems has been a critical success factor enabling the major medical advances during COVID.

Case Study: In collaboration with academics, and pharma companies, IBM helped equip the RECOVERY trial team to work with the NHS to run the biggest randomized COVID-19 clinical trial in the world, identifying that a treatment, dexamethasone, a commonly available steroid, could reduce mortality by one-third in people with severe respiratory complications owing to COVID-19.

Case Study: A partnership between the University Hospital of Zurich, ETH, docdok health and IBM developed a comprehensive telemonitoring and hybrid virtual coaching solution to improve the health-related quality of life of patients with COPD. A clinical study is underway and due to report findings in mid-2022.

Our **IBM Consulting** teams have extensive experience of clinical change management, working across care systems to enable engagement and support delivery of new programmes. Mutual understanding the pain points and priorities of the various parties can be critical to developing closer working relationships — and online collaboration tools such as slack from **SalesForce**, which enable productivity improvements can be critical to success across such diverse teams.

Action steps

We've identified 4 next steps for you to prepare your business for success:

1. Review Your Strategy

Have a clear vision and define your strategy, identify associated risks, and develop a set of solution offerings that are focused on patient centred design and powered by the right technology. **Engage with us as your strategic partner to evaluate and shape your strategies to future proof and position you as a next-generation MedTech leader.**

2. Explore Untapped Opportunities

Evaluate your existing device portfolio and identify what opportunities you have, to enhance with patient centricity to create market differentiating incremental value to patients, healthcare professionals and providers. In doing this you could also consider opportunities for insurers and private providers looking to differentiate with premium offerings. Once identified, develop the value proposition and associated business case, establish the program, and plan the initial pilot for the optimal value-based care solution.

3. Accelerate Your Thinking

Request a free one-day IBM Garage (Co-creation) workshop to explore the impact of a patient-centred design approach, combined with the power and flexibility of the Salesforce Platform. In this one-day session, we will lead you through the Design Thinking process, bringing together your teams and ours to identify and explore a defined problem area. **At the end of the event, you will have a set of potential solution options plus a prototype of your prioritised solution.**

4. Understand the Environment

The complexity of the NHS can make the deployment of new technologies challenging. However, there are a wide range of **services available to support** industry from **grants, accelerators** through to **mentoring and signposting**. Identifying and accessing the support relevant to your situation can provide a vital boost to development of commercialisation timelines. Particularly, having **access to the latest knowledge on policy and processes** regarding data access, governance and regulation can ensure that your go-to-market strategies are fit for purpose.

How we can help

We believe that success in a fast-moving landscape needs strong collaboration across an ecosystem of partners. In writing this paper we've brought together the experiences of experts from ABHI, IBM Consulting, and Salesforce to provide insights across MedTech, Healthcare, and Technology.

About ABHI

ABHI supports the HealthTech community to provide products and services that help people live healthier lives. As the voice of the industry, we show the value of health technology and overcome barriers to people benefitting from it now and in the future. Members include leading multinationals through to small and medium-sized enterprises. We represent the HealthTech industry to key stakeholders, such as governments, healthcare systems and regulators.

Our Digital Health Group works with national organisations to ensure the UK maximises opportunities for citizen health and economic wealth by investment in data-driven healthcare and creates a strong infrastructure and commercial environment to support the development of the best HealthTech solutions. Current priorities include: Market Access; Data; Regulation; AI & Ethics and Remote Access.

About IBM Consulting

IBM Consulting is IBM's global professional consulting services unit. Our deep industry expertise and market-leading capabilities accelerate business transformation, hybrid cloud and AI technology implementation. We offer strategy, experience, technology and operations services and are a trusted partner to the most innovative and valuable companies in the world. Our 150,000 consultants worldwide work alongside companies to accelerate their businesses through the power of co-creation together with an open ecosystem of technology providers. Our unique IBM Garage method delivers change at scale at the speed of a start-up, enabling clients to integrate technology foundations with agile practices to deliver long-lasting impact. We believe in the power of technology responsibly used to help people, partners and the planet.

About Salesforce

Salesforce provides a connected platform to power the business of MedTech. It supports companies worldwide in the shift to address the full patient journey, helping them to focus on prevention, wellness, diagnostics, and detection. The path to success is to get more connected to bring your business and your stakeholders closer together, moving beyond horizontal & point solutions, data & organisational silos, with a secure and compliant platform. Leading with a human-centred design approach, Salesforce develops scalable technology that can personalise every customer relationship across the healthcare system, drive modern consumer experiences, and help you innovate for the future.

Authors



Andrew Davies
Digital Health Lead
Association of British HealthTech Industries (ABHI)



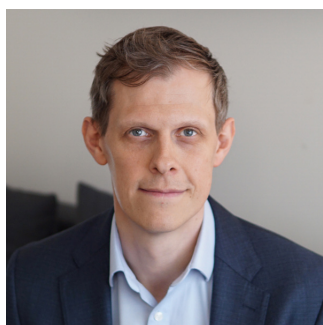
Abhishek De
Customer Transformation
Associate Partner — IBM Consulting



Dr Nicole Mather
Life Sciences Lead
Partner - IBM Consulting



Paul Frodsham
Life Sciences Architect
Associate Partner — IBM Consulting



Stephen Eustice
Healthcare & Life Sciences
Global Business Consulting
Salesforce UKI



Amrita Naimpally
Director, Business Consulting
Salesforce

Cited Sources

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6000484>

<https://www.nice.org.uk/news/article/thousands-of-people-with-diabetes-set-to-benefit-from-real-time-information-after-updated-nice-recommendations>

<https://www.nytimes.com/2022/03/14/well/eat/ai-diet-personalized.html>

² A survey of MedTech industry leaders in February 2022 identified that 56% currently have a patient outreach strategy in place today with a further 11% of respondents planning to develop one in the future due to shifts they see in the marketplace. Currently 43% of respondents have a smart device strategy.

³ NHS published 'Appointments in General Practice - Weekly MI' data shows the proportion of general practice appointments completed in-person versus via telephone, video, or other. Whilst lower than during the peak of the pandemic, the proportion of telephone appointments remains high compared to pre-COVID levels.

© Copyright IBM Corporation 2022

IBM Corporation
New Orchard Road
Armonk, NY 10504

Produced in the
United States of America
May 2022

IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

