

WHITEPAPER

# Healthcare DX in Singapore: How to optimize the end-to-end patient experience

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# Healthcare DX in Singapore: Optimizing end-to-end CX for patient-centric care

The digital transformation (DX) strategies of Singapore healthcare firms have focused on introducing incremental improvements to patient customer experience (CX). However, the top-down and bottom-up forces at work in the Singapore healthcare sector today mandate transformation of the end-to-end customer journey and overall patient CX as an immediate priority over incremental improvements.

The Healthier SG initiative announced by the Singapore government in early 2022 envisions the complete

transformation of the national healthcare system with **patient centricity**<sup>1</sup> at its core. A differentiated patient CX is an essential building block of a patient-centric healthcare system. Moreover, the increasing consumerization of healthcare demands Singapore healthcare organizations build platforms that keep superior and intuitive patient CX at the center of care delivery.

## Singapore healthcare firms need to cater to ease of access and rising consumerization

Singapore healthcare is witnessing the rapid consumerization of care delivery. Patients are free to choose from multiple providers based on CX. As the power equation in care delivery shifts in favor of patients or consumers, social circumstances support the use of technology to optimize the patient CX more today than ever before. For instance, according to a **study**<sup>2</sup>, 57 percent of Singapore workers are willing to share their personal information for personalized and highest quality healthcare, while 98 percent are willing to try out one or more digital healthcare innovations. The **study**<sup>3</sup> finds that the most well-received digital healthcare innovations are finding access to the right doctor or

care provider when needed, and convenient access to personal medical records.

Consumers are used to ease of access from the convenience of their homes while dealing with banks and retail companies, and they expect similar experiences while interacting with healthcare providers. Empathetic, patient-centric care is without exception the pivot of modern healthcare delivery in this age when the consumer is king. This means healthcare organizations must create a positive CX from the initiation of contact with the patient to final follow up through complete DX of the patient journey.

<sup>1</sup> Prime Minister's Office Singapore, PM Lee Hsien Loong at the SGH Lecture and Formal Dinner 2022, April 24, 2022, <https://www.pmo.gov.sg/Newsroom/PM-Lee-at-SGH-Lecture-and-Formal-Dinner>

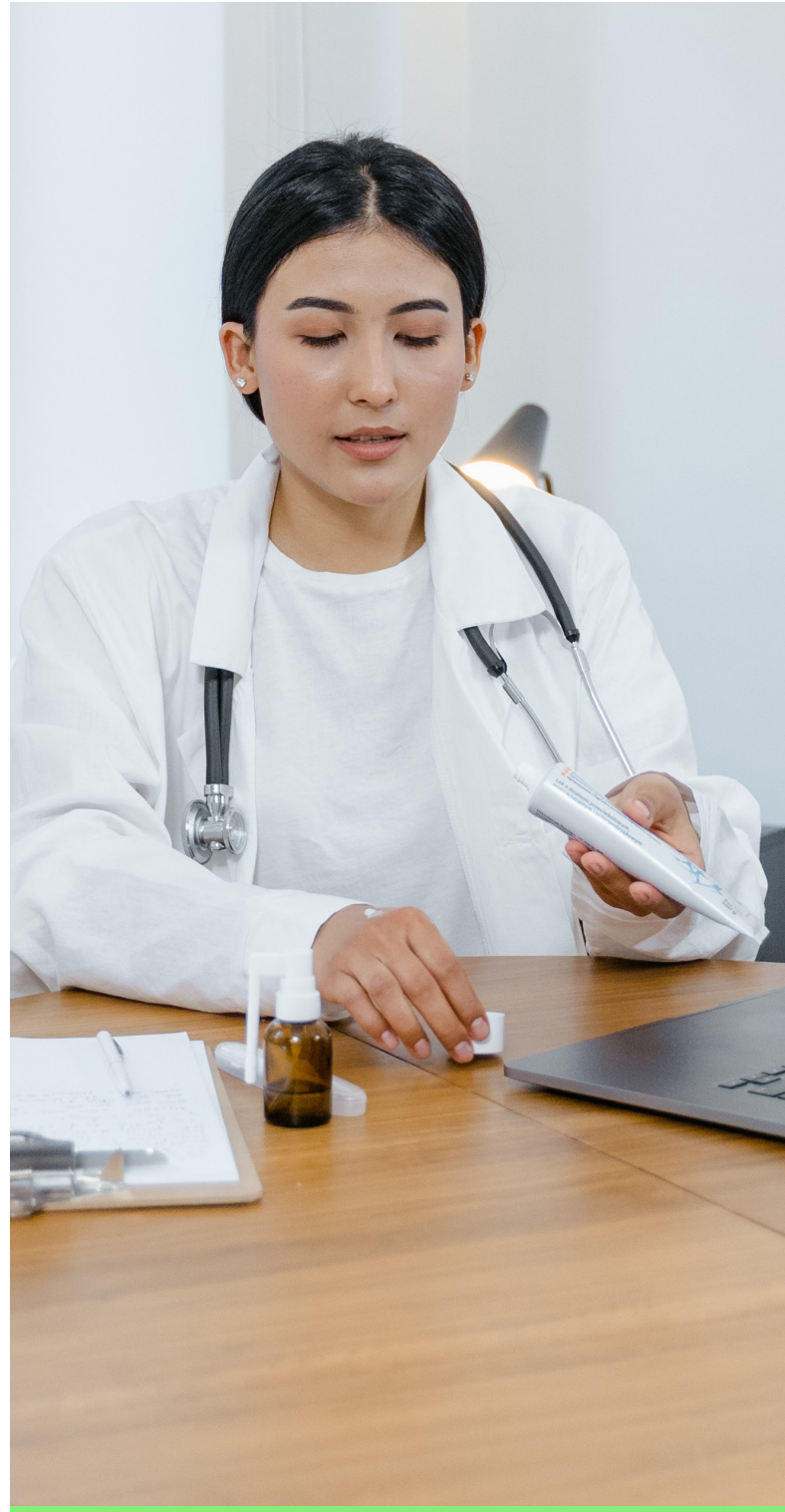
<sup>2</sup> Oliver Wyman, Health On Demand Singapore Report, July 2022, Pages 23 to 26, <https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2020/jul/health-on-demand-in-asia.pdf>

<sup>3</sup> Oliver Wyman, Health On Demand Singapore Report, July 2022, Page 17 <https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2020/jul/health-on-demand-in-asia.pdf>

## Unique personalized experiences, the true differentiator in Singapore healthcare

Patients consider technical competency as a given in the Singapore healthcare industry. Technology is a true differentiator only if it can help deliver a unique, personalized CX throughout the customer relationship. There are hurdles for Singapore healthcare firms to overcome to create that differentiated CX. First of all, healthcare financial investments are still focused on one-off projects to improve patient CX not the entire customer journey across all patient touchpoints. Second, patients in Singapore now expect solutions customized to their unique personal requirements instead of one-size-fits-all solutions that are typically enabled by the healthcare platforms in use now.

To transform the customer journey across multiple touchpoints, healthcare organizations need systems to harmonize the experience across touchpoints by interlinking technologies, people, processes, tools, and data from disparate sources. Capabilities to analyze data to arrive at accurate customer personas, and to identify and prevent issues that break CX are crucial to optimizing patient experiences. It is also important to integrate data across different systems for a unified view of the customer through digital interlinking and orchestration of workflows throughout departments, functions, systems, and processes using modern cloud-based platforms.





# Five challenges to healthcare patient CX optimization in Singapore

Healthcare organizations in Singapore can set their patient CX optimization priorities by asking five key questions:

1. What are the biggest patient CX pain points and bottlenecks?
2. Which are the areas where patient CX optimization can have the biggest impact?
3. How can you connect the departments and functions to quickly arrive at the root cause of issues that break patient CX?
4. How do you interlink systems and processes to streamline and automate manual and routine tasks to improve patient CX?
5. How can you identify and prevent issues that can break patient CX by constantly monitoring healthcare processes and systems?

Before you answer these questions satisfactorily, the traditional systems in use at most Singapore healthcare providers present five key challenges.

## Siloed data obstructs a unified view of the customer

Different functions and departments at healthcare organizations still use disparate systems that work in isolation and produce data in mutually unintelligible formats. For a unified view of the customer and to develop accurate customer personas, you need a platform that can orchestrate and integrate workflows, and analyze data from multiple disparate systems to arrive at a true picture of the target audience, as well as the correct definitions of the pain points in their customer journey. To optimize patient CX, it is essential to leverage platforms that can use data to accurately identify the characteristics, needs, and preferences of patients.

## Broken workflows hamper the workforce's service delivery

Healthcare organizations in Singapore using disparate technologies to perform interconnected tasks results in broken workflows and heavy administrative workloads for clinicians. The technology sprawl increases the manual administrative tasks and reduces the time that caregivers need to spend on their most important task: personal interactions with patients to solve their immediate needs.

Increasing the quality time that caregivers and healthcare professionals spend dealing with patients is crucial to delivering personalized experiences and optimal patient CX. Clinicians need integrated data and access to all information throughout all applications to enable the most effective care for patients. Healthcare organizations require cloud-based platforms that can seamlessly integrate and orchestrate workflows across disparate systems, applications, and technologies to fully optimize patient CX.

## Traditional systems prevent prediction and prevention of downtime

Maintaining uptime is critical to the success of business and clinical operations in healthcare, and ensuring customer trust. Even when IT teams are empowered with new digital tools and remain vigilant, identifying the root cause of issues that lead to system degradation and remedying them remains a challenge at healthcare organizations.

The key challenge is that traditional systems limit visibility into the root cause of the issues. Outages and downtime severely hamper customer confidence and satisfaction in the services of healthcare organizations. To eliminate silos and to maintain customer trust, healthcare organizations need a single cloud-based platform that can act as a centralized source for all systems data.

## Inconsistent service across teams and functions mars wholesome CX

To ensure memorable experiences for patients under their care, healthcare organizations should optimize the patient CX at each touch point across their journey from front end to the back end and provide a wholesome experience. For example, a patient might be happy with the interactions with the physician but dissatisfied with billing services or the time taken to address questions during post-treatment care outside the healthcare facility.

Retention and brand loyalty depend upon ensuring a memorable experience across the whole customer journey. Disparate systems that do not communicate with each other only ensure vastly different CX at different touchpoints. Healthcare organizations need a cloud-based platform to unify systems used by different teams across the healthcare value chain by digitally orchestrating workflows.

## Patient journey mapping: the first step to optimize CX

To optimize patient CX, it is essential to map the customer journey. Mapping the customer journey means healthcare organizations must understand the customers' needs, processes, and perceptions through the entirety of their interactions with the organization from initial contact to procedure, to billing and follow up actions. By mapping the customer journey, organizations can shorten and personalize the journey to deliver a positive patient CX.

Proactive services that ensure customer delight are built upon accurate customer journey mapping. By developing realistic ideas about the target audience,

## Leveraging full potential of data while ensuring security a challenge

Even as they use orchestrated data reserves from mobile, electronic health records (EHR), wearables, chatbots, and billing systems, it is essential for healthcare organizations to maintain customer trust with complete data privacy and security. Knowing that their personal data is absolutely safe with healthcare organizations is key to maintaining a healthy, trusted relationships with consumers.

Healthcare organizations need modern cloud-based platforms that can identify and pre-empt cybersecurity issues before they happen, and allocate tasks to the right persons at the right time when the need occurs. To drive end-to-end DX across the customer journey while leveraging the full potential of data, Singapore healthcare organizations require modern cloud-based platforms that keep data security and privacy at the forefront of their DX strategies.

organizations can concisely represent the user experience across functions and departments to harmonize the patient CX. A modern cloud-based platform that digitally integrates data and workflows across systems, people, functions, and departments is essential to streamline the customer journey and ensure end-to-end DX.

# How ServiceNow helps drive end-to-end DX to optimize patient CX

ServiceNow provides a powerful, modern cloud-based platform to transform the healthcare consumer journey from end to end. The Now Platform® unifies the different systems used by departments and functions across the healthcare value chain from front office to electronic health records (EHR) to billing and compliance. The cloud-based platform provides a single view of the patient to clinicians and non-medical staff alike while providing deep visibility to everyone on what is happening with each patient. The platform provides the right data that people in all functions need, to respond to unique personal requirements of each patient at the right moment to take patient CX management to the next level.

The ServiceNow platform helps ensure that healthcare professionals can devote more personal time to patients to ensure more memorable experiences with the organization, and better care by automating most of the routine manual tasks, thereby enhancing patient CX. Furthermore, the modern, cloud-based ServiceNow platform helps healthcare organizations scale services up and down during critical moments with patient self-service portals and virtual agents to provide ease of access, and quick, seamless information-sharing with staff and patients. The highlight of the cloud-based Now Platform is that it helps deliver a wholesome and memorable patient CX and sustainable change through end-to-end DX of the patient journey.

Here is how ServiceNow helps deliver unique experiences across the healthcare value chain

## Adopt a consumer-centric approach to care delivery

ServiceNow helps healthcare organizations create a consumer-centric approach to care delivery that reminds users of the kind of consumer experiences delivered by today's banks and online retail companies. With the cloud-based ServiceNow platform, healthcare

organizations can accurately map the customer journey and understand pain points at each touchpoint in a granular manner. By intimately understanding the customer needs using an integrated, "one-source-of-truth" approach to data and systems and delivering a unified view of the customer, the modern cloud-based healthcare platform helps clinicians and non-clinicians raise consumer centricity to the next level to truly optimize patient CX.

## Anticipate patient needs and help them take charge of healthcare

ServiceNow helps healthcare organizations build the patient-centric systems and processes that the Singapore healthcare authorities are targeting by streamlining workflows and delivering the exact data needed to help patients and their caregivers proactively take charge of their care. For example timely reminders and virtual assistant-delivered answers enable patients to prevent healthcare complications before they occur or reduce the need to meet a physician.

The cloud-based ServiceNow platform helps drive proactive, patient-centric healthcare management to transform CX by making interactions simpler, easier, quicker, and error-free. Patients can control how they receive a service to enhance engagement and thereby improve satisfaction levels. For example, with a unified view of the patient and integrated data, a healthcare organization can push information about the patient's diet, nutrition, and lifestyle to help them take charge of their own healthcare management.

## Ensure consistency in management of patient CX

Medical professionals or clerical staff in a healthcare facility might not be typically aware of the brand values

and the nuances of patient CX. By integrating data and digitally streamlining workflows, the cloud-based ServiceNow platform helps staff across all competencies to standardize the delivery of care. Staff throughout the organization can deeply understand what colleagues in other functions are doing with regard to care management. This helps raise the level of service delivery to the next level and enables consistent CX across departments, even after the patient has exited the healthcare facility.

### **Prevent outages and cyber threats to boost customer trust**

The ServiceNow platform helps make operations management proactive by constantly monitoring customer products and services, integrating all systems and processes, and providing all systems data on a unified dashboard. Once the platform detects potential issues, staff can quickly initiate the related workflows to ensure that the right tasks are assigned to the right people to fix the issue or prevent it altogether. Telling customers about a problem, and letting them know that it has been addressed – or is being addressed – before they become aware of it goes a long way in bolstering customer trust and satisfaction, and elevating the patient CX.

Similarly, by using a single cloud-based system of action, the ServiceNow platform integrates data and records from all systems and cybersecurity tools in one place to proactively monitor and prevent cyber threats. Using flexible encryption options, healthcare organizations can meet the exact individual and corporate levels of regulatory compliance and authentication to ensure that customers can interact with the various levels of the organization with full confidence in the privacy and security of their personal data, thereby again enabling optimal patient CX.

### **Bring empathy to the fore by humanizing customer engagements**

Digitally integrated workflows and engagement channels – including mobile, self-help portals, chatbots, social media, billing, EHR, and email – help staff at all levels achieve a 360-degree view of each patient to keep their intimate needs at the center of all customer engagements. The modern, cloud-based ServiceNow platform helps personalize the care given, and to build it around the values of close attention and individual respect, bringing empathy and fulfillment of each personal need to the fore. This goes a long way in deeply humanizing the engagements with patients and ensuring a wholesome patient CX.

# Case study: Australian hospital reduces nurse response times by 70% to transform patient CX

A healthcare team in Sydney, Australia identified an opportunity to use **AI, automation, and mobility**<sup>4</sup> to help nurses at a hospital to prioritize, escalate, and respond to patient requests more quickly. After brainstorming with the CEO and nurses, the team came up with a solution: a custom-built app on the cloud-based ServiceNow platform. The solution, OrbitaASSIST, combined smart speakers with digital workflows to help patients communicate care requests verbally rather than using a call button. The team used ServiceNow for task creation and automation. For workflow automation, they used mobile updates on nurses' smartphones.

The feedback from nurses and patients in hospitals that implemented OrbitaASSIST was overwhelmingly positive. Nurses arrive at hospital bedsides fully informed of patient requests, bringing the right equipment and knowledge to deal with the issue to enhance patient CX. In fact, 87 percent of nurses were more confident in their ability to more effectively address patient requests after the system was implemented. The mobility component implemented using ServiceNow helped nurses reduce their average response time to patient requests from 11 minutes to just three minutes.

The low-code conversational design and management of the ServiceNow-driven OrbitaASSIST platform can serve up content to any natural language interface, be it smartphones, web chat, chatbots, or even analog phones. ServiceNow is at the core of digital workflows triggered in OrbitaASSIST. The integration and centralization of workflows in the ServiceNow platform brought the addition of data feeds from other devices and analytics for predictive care within the realm of possibility.

<sup>4</sup> Service Now, Orbita Transforms Nurse and Patient Hospital Experiences with ServiceNow, 2020, <https://www.servicenow.com/content/dam/servicenow-assets/public/en-us/doc-type/resource-center/case-study/cs-orbita.pdf>



# Why ServiceNow?

ServiceNow's modern, cloud-based Now Platform helps Singapore healthcare organizations target patient-centric and empathetic care by digitally integrating, orchestrating and streamlining workflows throughout the healthcare value chain. The digital orchestration of workflows and integration of data with a unified view of the customer helps deliver timely, accurate, and personalized information on each patient to staff at each node of the healthcare value chain and back to the patient which is key to optimizing patient CX. The Now Platform helps healthcare organizations develop deeply refined personas for each customer and universalize their impact across the organization to ensure the consistent delivery of care – from initial contact to discharge and follow up, while ensuring customer trust and loyalty with a data-driven approach that strengthens data privacy and security.

Organizations can target improved customer acquisition, retention, and loyalty along with the best healthcare outcomes with digitally integrated workflows as well as access to granular and accurate data on each

patient exactly when it is required. Consistency in service through end-to-end DX of the customer journey from contact initiation to procedure to billing and follow up using the cloud-based Now Platform ensures that organizations can truly target enhancing customer retention and loyalty as part of their business strategy.

Healthcare organizations can comprehensively transform their care pathways and build digital information bridges using the Now Platform to deliver ease of access, consistent engagement, and a unique, memorable patient CX. Moreover, by increasing the depth and breadth of engagement across the value chain, healthcare organizations can target new revenue streams through upselling and cross-selling opportunities while delivering personalized services and unique value to patients. Ultimately, ServiceNow helps healthcare organizations move in lockstep with the advances brought about by the consumerization and personalization of healthcare with its modern cloud-based platform and data-driven approach to digitally transforming workflows throughout the healthcare value chain.

To find out more about the Now Platform, visit: [www.servicenow.com/now-platform.html](http://www.servicenow.com/now-platform.html)

To find out more about ServiceNow healthcare solutions, go to: [www.servicenow.com/healthcare](http://www.servicenow.com/healthcare)

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