Insights Series

The New
Normal

Unlocking the
Digital Front Door

How healthcare can be made more accessible

**A thought leadership paper on 'Transforming the system of care'
and 'Achieving operational excellence'**

SIEMENS ⁀⁘
Healthineers ⁘

Preface

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Innovating
personalized care

Achieving
operational excellence

Transforming
the system of care
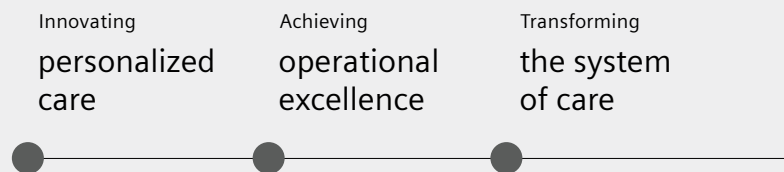
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Executive Summary

This paper discusses an emerging aspect of healthcare delivery worldwide which we are calling 'digital front doors'. What we are referring to is an increasingly popular point of access to care for patients, one which relies less on traditional human gatekeepers such as general practitioners, ER doctors and nurses, and relies instead on virtual solutions in the form of online tools, apps or actual interactive virtual consultations.

The ability of health systems to engage virtually with patients, assess their needs and direct them towards treatment and care is not new, but it has been slow to gain traction. Change, after all, is hard, and between an attachment to brick and mortar facilities and concerns about regulations, reimbursement and privacy, the reasons for not embracing digital front doors have been compelling and numerous enough to slow their adoption.

COVID-19 appears to have changed that. The pandemic has led to such profound fears about infection that many patients – even ones with serious health concerns – are staying away from emergency departments and other healthcare locations. Many of them, faced with healthcare front doors that are no longer welcoming, have begun looking elsewhere – to virtual care, or digital front doors.

What patients have found in virtual care is a healthcare model that allows them to consult with providers regardless of where they or the providers are located, and provides them with online tools that allow them to monitor and manage their own care.

What providers have found is a model that is both flexible and scalable, and allows them to direct their patients towards the care they need, engage with them from any distance, monitor their progress and manage their care.

There is vast potential in digital front doors. It is estimated that 20% of ED visits and 24% of office and outpatient visits could be shifted to virtual care delivery.[1] The question will be how quickly providers are able to adapt and begin offering these services. In the context of virtual care, service areas as they once existed are not particularly relevant, so the market for patients is wide open. If providers are able to adapt their existing digital infrastructure, adjust workflows, manage data, and obtain buy-in from both their workforce and patients, a very bright future lies ahead. It is simply a question of unlocking the door.

Introduction

For as long as there have been doctors and nurses, the basic healthcare interaction has been a very human one. When a person feels sick or suffers an injury, she or he visits a healthcare provider. This traditional human gatekeeper has served healthcare well for generations, but in today's world the limitations of this system are becoming more and more apparent. Patients are increasingly approaching healthcare as "consumers" and demanding the same fast, convenient, easy and affordable service they have come to expect in other areas of their lives. In an era characterized by on-demand services, rapid delivery and instant communication, they seem less and less interested in properly using a system that does not satisfy that desire.

The most common traditional gatekeeper – the primary care physician – is falling out of favor as a first option for finding and navigating care. A visit to a physician is time-consuming and cumbersome, and it often takes days or weeks just to get an appointment. A survey showed that only 36% of people under 45 now make their family doctor their first point of call for common medical issues. Patients are seeking alternative front doors.[2]

This new 'door' can take many forms: a website, an online portal, a mobile phone app, or a technological interface through wearables such as smart watches. Regardless of its form, this digital doorway serves as the first entry point for those seeking care or medical information, and can also provide an ongoing, bi-directional interaction at every touchpoint along the patient pathway.

The essential element is that this digital front door serves as an alternative to a conventional doorway leading into a bricks-and-mortar facility, offering patients access to the care or advice they seek while eliminating the hurdles associated with traditional doors.

This paper explores the emergence of digital front doors, analyzes their potential, and identifies key points to bear in mind during the technological transition.

The catalyst

Digital front doors have received increasing attention during the COVID-19 pandemic, and their adoption has been accelerating. COVID-19 didn't just illuminate the limitations of the human gatekeeper at healthcare's front door; it made that model, at least for a time, impossible or simply too risky.

A clear illustration of this phenomenon can be seen in hospital emergency departments (EDs). Before the COVID-19 pandemic, it was estimated that more than a third of all ED visits were not urgent,[3] and even 25% of patients admitted that they could have also gone elsewhere to receive care.[4] Yet they chose the ED simply because it was easier. During the pandemic, however, fear of infection kept people away. In the U.S., ED visits declined 42% during the early months of COVID-19, from an average of 2.1 million per week in April 2019 to 1.2 million per week a year later.[5] In the UK, emergency room visits declined by 57% from April of 2019 to the same month a year later.[6] And data from Nanjing, China, indicates that ED visits in February 2020, as the pandemic was first beginning to spread, decreased by more than two thirds from a month earlier and by close to 62% compared to February 2019.[7]

While many pre-COVID-19 visits to emergency departments were unnecessary, resulting in both cost and capacity issues, the sharp decline in ED visits during the pandemic also had undesirable consequences. Patients with serious medical conditions were not seeking timely care, and many medical issues went undiagnosed, resulting in increased health risks to patients and, ultimately, higher costs to providers who would eventually have to treat conditions that had progressed and done more damage.

Virtual health provided a solution: an access point that carried no threat of infection and met the widespread need for timely and convenient care.

The number of patients making use of virtual care options increased significantly during the pandemic. In the U.S., the share of telehealth claims increased from 0.15% in April 2019 to 13% in April 2020.[8] This rapid shift to a new healthcare front door was accompanied by strong patient satisfaction. According to an Accenture survey, 60% of patients who used virtual care tools during the pandemic say that based on that experience, they want to use the technology more for communicating with healthcare providers and managing their conditions in the future.[9] And 90% of patients who tried new devices or apps to manage their conditions liked it.[9]

Global drop of ED visits from 2019 to 2020

China (Nanjing)[7]	‹ -62%
UK[6]	‹ -57%
U.S.[5]	‹ -42%

The challenge

Nearly half the planet – 49% of the world's population[10] – owns a smartphone and uses it to shop online, book flights, do their banking, stay in touch with one another, scan social media, send emails, and occasionally even make a phone call.

For healthcare to catch up with this development was only a matter of time. In 2018, well before the pandemic, 42% of respondents to one survey said they had used technologies such as websites, smartphone apps, personal medical devices or fitness monitors to measure fitness and health improvement goals at least once over the previous 12 months.[11] In the U.S., 11% of patients used telehealth solutions in 2019.[1] During COVID-19, that number jumped to 46%.[1] Moreover, 76% are now interested in using virtual health solutions such as telehealth.[1]
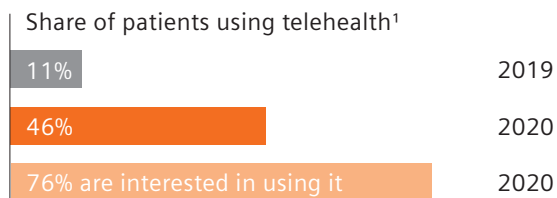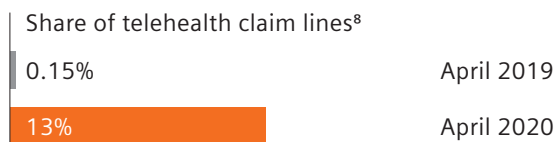
This interest in, and acceptance of, virtual care is beginning to influence patients' selection of healthcare providers. Increasingly, patients expect digital capabilities and are more likely to choose a healthcare provider who offers prescription refills electronically, reminders via email or text message, email communication, online appointment bookings, as well as telemonitoring or tele-consultation. Younger patients in particular are less satisfied with the traditional ways of accessing healthcare and are more willing to try non-traditional services such as virtual health. 84% of Baby Boomers have a primary care physician, whereas amongst member of Generation Z – those born after 1996 – this figure drops to 55%.[12] Moreover, 41% of Generation Z report, That they prefer a virtual or digital experience with their healthcare professional while for Baby Boomers this number drops to 9%.[13]

The question, of course, is who will be providing access to this emerging healthcare model? Because "service areas", as we have traditionally thought of them, are no longer nearly as important. Through virtual health technologies, healthcare providers are now able to reach patients almost anywhere. The reverse is equally true: other providers, located almost anywhere, are now able to reach and compete for patients.

Further disruption to traditional business and operational models is threatened by new entrants into the healthcare provider sector. Companies like Amazon, Google, Ping An, Walmart and others are preparing to cut into what have historically been the patient volume and revenue streams of more traditional providers. Digital front doors can lead to new and uncharted territory.

The usage of telehealth has increased dramatically in the U.S.

Share of telehealth claim lines[8]

0.15%	April 2019
13%	April 2020

Share of patients using telehealth[1]

11%	2019
46%	2020
76% are interested in using it	2020

Younger people are less likely to have a primary care physician

Share of patients who have primary care physician[12]

84% Baby Boomers
(born 1946 to 1964)

55% Generation Z
(born after 1996)
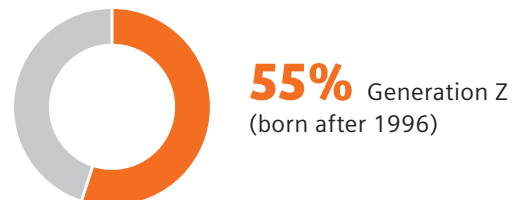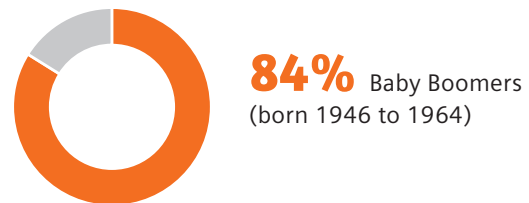
Where Digital Front Doors can lead

The possibilities for digital front doors are immense. It is estimated that 20% of ED visits and 24% of potential office and outpatient visits could be shifted to virtual care delivery.[1] Fifty percent of executives predict that at least a quarter of all outpatient care, preventive care, long-term care, and well-being services will move to virtual delivery by 2040.[14]

Digital front doors allow providers to engage with patients at every major touchpoint of their healthcare journey. A strong digital front door strategy does not rely on a single solution but leverages different virtual health solutions to create an entire digital ecosystem for patients, with a new suite of services enabling a lifelong journey. By switching offline services to online, healthcare providers can transform care delivery. New digital services will improve access to care, optimize clinical operations, and better manage population health, while at the same time increasing workforce productivity.

Digital front doors enhance four different areas of provider-patient interaction.

1 Directing patients

As noted earlier, patients do not always make the best decisions about where to seek care. Perhaps the best example of this is the decision to visit an emergency department when a low-acuity clinic or primary physician would be a more appropriate option. The fact is that patients often need to be directed to the proper provider or other source of care. Digital front doors can serve as navigation signposts along the patient journey, triaging and directing patients to the appropriate level or type of care while at the same time feeding the system with information.

Best practice example

Health Village, a digital toolbox and care platform developed by the Helsinki University Hospital (HUS), Finland, serves health professionals, patients, and the general public. The "Village" refers to the look of the website, wherein cartoon houses (which make up the village) direct people upon entering to the information source of their choosing. The Health Village model directs patients by informing them about their care options, whether they need to visit a provider, and how they should go about managing their care.[15] Moreover, the scalable platform offers more than 100 patient care paths. In 2019 there were more than half a million monthly visitors to Healthvillage.fi.[16]

2 Engaging with patients virtually
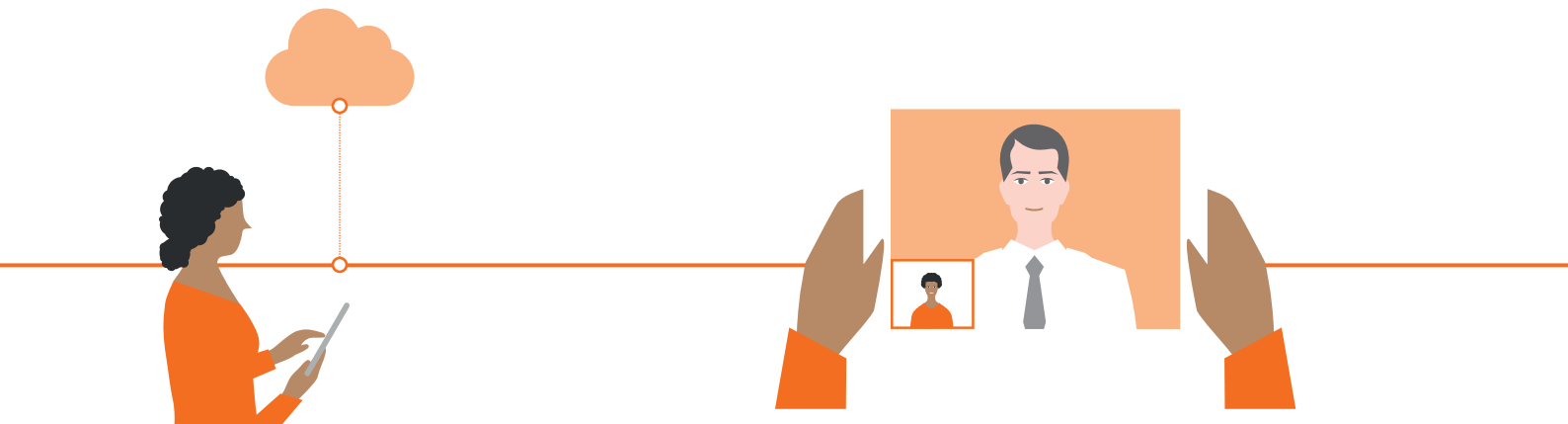
During a virtual visit, physicians can consult with patients and treat them directly with advice or a prescription, or direct them to the appropriate offline healthcare provider. Alternately, chat-bots or other automated tools can collect patient symptoms and data automatically, with AI-powered systems performing intelligent analysis and making recommendations on next steps. Either way, patients are properly directed, which results in better outcomes while also relieving stress on the system caused by unnecessary ED visits.

A good digital front door strategy allows care teams to engage with patients virtually. This represents a paradigm shift in the way we think about care and how it is delivered. Patients are potentially able to reach out to care teams any time, from anywhere, and physicians can respond with the click of a keyboard. The simple fact is that healthcare providers no longer have to be physically close to their patients. As long as they provide telehealth services, their patients only need to possess a smartphone, tablet or laptop in order to be in contact with providers when the need arises.

Share of visits that could be shifted to virtual care delivery[1]

20% ED visits

24% office and outpatient visits
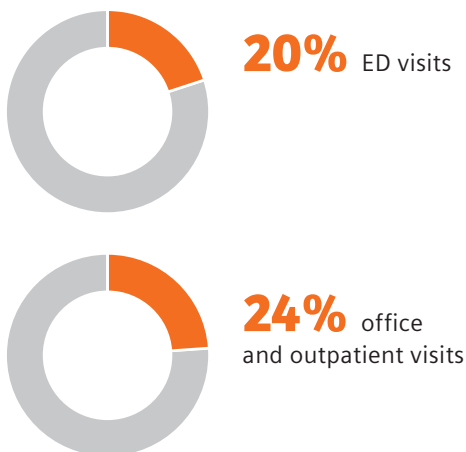
Best practice example

The Andes Salud Clinics in Chile is expanding the potential of tele-visits, making a wide variety of specialists available remotely to their patients. Communication between patient and provider is possible through mobile devices. Patients are able to log in for consultations either with general practitioners or with specialists, depending on their need. In this way, patients for whom it is either difficult or simply inconvenient to attend a doctor's office in person are able to receive the care that they need. In the most challenging times of the pandemic, their four clinics were able to conduct 30% of their appointments remotely.

3 Monitoring patients remotely

Tele-visits allow patients to easily make appointments and make better use of their waiting time before those appointments. They ensure social distancing – a major issue during COVID-19. These virtual visits also have the potential to deliver care of the quality that patients demand. More than 60% of patients and 59% of clinicians report no difference in overall quality between virtual and office visits.[17] Another value tele-visits bring to the table for healthcare providers is enabling them to expand access to specialty care in underserved regions where there is a lack of specialists. Finally, these digital front doors represent significant potential cost savings for patients, in the form of reduced travel time and therefore fewer travel expenses. For chronically ill patients who consult with their physicians regularly, these savings can be significant.

3   Monitoring patients remotely

Digital front doors allow providers to keep a remote eye on patients' signs and symptoms, identifying when they are at risk and providing them with individualized care management programs. Chronically ill patients can be monitored by healthcare providers regularly and remotely, allowing for early recognition if things start to go wrong and suitable intervention to avoid an emergency.

It begins with engagement. Patients must be willing to do their part, helping to generate the data that providers require. If patients agree to use wearables and other measuring and monitoring devices, providers will have the data they need to provide better care. In addition, the generated data can then be aggregated in an electronic health record. With electronic health records, patients can access their health data and information. This allows them to upload that information and decide upon authorization rights. It also promotes their active participation in their care process, and allows physicians to access data that has previously been locked away in silos of information systems throughout the healthcare infrastructure.

Best practice example

The Heart and Diabetes Center North Rhine-Westphalia in Germany has developed a telehealth solution for monitoring patients with cardiovascular diseases. Patients carry certified medical devices that transmit vital data to the Heart and Diabetes Center around the clock via a smartphone app and a secure data connection. Specialist staff at the Center collect and study the data and discuss it with the patients in planned, regular telephone calls, coaching and training them on how best to manage their diseases and ensure guideline-compliant treatment. In addition, a network of general practitioners and specialists outside the Center can access the data.

This form of continuous monitoring allows for faster reaction times, guideline-oriented care and a higher adherence to therapy, which ultimately result in an improved quality of life for the patients. It is expected that this will reduce repeated hospitalizations by as much as 20%.[18]

4 Managing population health

And patients are increasingly willing to share their data. Research indicates that 60% of patients are willing to share all their data with their physicians to help them to provide better care. For patients with chronic disease, it is 66%.[11] Other studies show, that this figure can climb to more than 80% regarding data on things like sleep and mood.[19]

4   Managing population health

Digital front doors offer more than just better care for individual patients, and better, more flexible work experiences for providers. They also offer an opportunity for health systems to better manage overall population health, identifying and responding to trends, and establishing new care delivery models. Even more important, healthcare providers will be able to analyze and operationalize data received digitally from large patient populations. Based on that data, healthcare providers can identify vulnerable cohorts and pave the way for proactive, targeted and even virtual engagement, as well as the administration of anticipatory care to avoid disease development and progression.

Best practice example

In Austria, the rollout for the nationwide Electronic Health Record (ELGA) started in 2015. Today work is already underway on the implementation of valuable extensions, such as the eVaccination pass or care networks as part of ELGA. As a modern and secure infrastructure, ELGA is available to all citizens and all those who receive care in the Austrian healthcare system. It facilitates access to health data for patients and authorized ELGA health service providers – attending physicians, hospitals, nursing homes or pharmacies. An important goal of ELGA is the support of medical, nursing and therapeutic treatment and care through a better flow of information, especially when several healthcare institutions or professional groups work together along a treatment chain. ELGA is working with different models of opt-out, leading to a general coverage of 97% of the insured population as enrolled ELGA users.[20]

The path forward –
Unlocking the Digital Front Door

How can health providers and health systems unlock the digital front door? What is the key? One of the attractions of virtual care is that it conveys a sense of effortlessness – a vision that patients and providers only need to pick up a smart device. Unfortunately, it is not quite that simple.

During the move towards digital front doors, particular attention must be paid to five key areas.

Enable patients

Any successful healthcare endeavor depends on patients. Digital front doors are no different. Patient buy-in is essential. In the case of older patients, many of whom suffer from chronic diseases, real-time monitoring and easier access to physicians can have a positive impact on unplanned readmissions, quality of life and mortality. However, as older people are not always comfortable with new technology, a stronger engagement and education effort may be required. In the case of younger patients who are familiar and comfortable with new technologies, this education process will be easier. However, because of the nature of digital care, patients will almost certainly have different options and different providers to choose from. It is quite possible, in fact, that more comparison websites and portals will emerge, helping patients navigate what is in effect a provider marketplace. Thus, providers will have to turn their attention to digital marketing efforts such as brand management, search-engine optimized marketing, social media engagement, and platforms for patient reviews, in an effort to convince young, digitally aware patients to choose their digital front doors.

Empower workforce

If the first priority in any healthcare undertaking is patients, the second must be workforce. In the case of digital front doors, existing workforces need to be trained to work with the new technology, and should be integrated into the change processes that will be necessary through their workplaces.

Existing staff need to be made aware of how new digital options will make their workplace more flexible. This will create incentives and motivation which are crucial during this change process. In addition, new staff may be required. As a larger part of the infrastructure is going to become digital, a larger proportion of digital experts will be required.

Upgrade infrastructure

In order to be usable, digital front doors will need to be integrated into existing infrastructure. That will require investments into new hardware (e.g., smart devices, tablets, etc.), and software. Improved wireless capabilities (e.g., a move to 5G), may also help to provide the needed connectivity. Data storage will pose a challenge for many, with a shift to cloud-based data storage offering a potential solution.

The costs for infrastructure and technology upgrades such as these, as well as related training, could prove to be a barrier for many organizations. Opportunities for flexible funding alternatives or partnership models might help to ease these pressures. Vendors with the relevant experience could be valuable partners during such transitions.

Optimize workflows

Optimizing workflows is an ongoing challenge in all healthcare environments. This will be particularly true with digital front doors, which have the potential to re-orient substantial parts of a provider's work and revenue streams. Depending on the archetype and size of the healthcare provider, workflows will differ and the integration of digital front doors will involve a number of moving parts. Infrastructure, data, workforce and patients will all have to be incorporated.

However, digital front doors will benefit from the arrival of new solutions that allow for simulation of workflows. This will result in a dependable prediction of the operational and financial impact before integration occurs, allowing for preparations to be made.

Protect data

Issues of security and confidentiality are of increasing concern to all consumers, and medical data is particularly sensitive. These issues must be addressed in an effective and comprehensive way, not only at the level of individual providers but also at a broader regulatory or legislative level. A properly integrated healthcare system will depend on the ability of providers of all types to share information, and patients must have confidence that their digital data is being treated securely. Internal data security governance capabilities are essential, as well as a thorough understanding of data flows in order to proactively anticipate potential security vulnerabilities.

Conclusion

The concept of digital access points to healthcare – digital front doors – is not new. It was not invented, or created, as a response to COVID-19. The pandemic did, however, provide a strong incentive for both patients and providers to take a long, hard look at alternative models of care that had been under-utilized previously. Face-to-face contact, in health-care as in other encounters, does have its advantages. But as this option became unavailable or too risky, digital alternatives quickly emerged to help fill this need.

In most cases, patients quickly realized that this alternative access platform was not only safer, but more convenient and just as effective. The increased use of digital front doors also generates collateral benefits, including reduced pressure on hospital emergency departments, and an ability to more efficiently allocate healthcare resources.

The single greatest benefit, however, is improved patient outcomes – the ultimate goal of all health services and medical care. Questions can be answered more quickly and easily, providing faster care when it is needed. Care can become not just reactive but proactive, for example wearable devices can "nudge" patients, advising them of unhealthy habits or encouraging healthy activities. On a broader level, outcomes are enhanced through the collection and analysis of large pools of data, enabling healthcare decision-makers to better identify those at risk of certain illnesses or conditions, and better understand the efficacy of therapies and treatments, often in real time.

We believe that digital front doors can provide a safe, convenient, and effective access platform to healthcare services for patients and for providers. Their adoption was already well underway before the pandemic struck. This trend has now gained further momentum and will likely accelerate further in the years ahead.

- Enable patients
- Empower workforce
- Upgrade infrastructure
- Optimize workflows
- Protect data

Unlocking the Digital Front Door

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↗ Suggested follow-up on

siemens-healthineers.com/insights/transforming-care-delivery

- Insights Series, Issue 17:
  Protecting those who protect others : Steps to ensure caregivers' physical and mental health
- Insights Series, Issue 15:
  Achieving healthcare happiness – The Finland model
- Insights Series, Issue 13: Sight to the world:
  How Aravind improves access to care for millions
- Insights Series, Issue 10:
  Remote work for healthcare professionals: From a stop-gap measure to a lasting transformation

ℹ Information

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✉ Contact

If you have further questions or would like to reach out to us, please do not hesitate to contact our expert directly:

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For regulatory reasons, the solutions described in this paper may not be commercially available in all countries and their future availability cannot be guaranteed.

References

1. Bestsennyy O, Gilbert G, Harris A, Rost J. Telehealth: A quarter-trillion-dollar post-COVID-19 reality? McKinsey & Company. 2020.

2. SolvHealth. 2018 Consumer healthcare report: "Rise of the practical patient". 2018.

3. Uscher-Pines L, Pines J, Kellermann A, Gillen E, Mehrotra A. Deciding to Visit the Emergency Departement for Non-Urgent Conditions: A Systematic Review of the Literature. American Journal of Managed Care. 2013;19(1):47–59.

4. Cordina J, Kumar R, Martin CP, Jones EP. Healthcare consumerism 2018: An update on the journey. McKinsey & Company. 2018.

5. Hartnett KP, Kite-Powell A, DeVies J, Coletta MA, Boehmer TK, Adjemian J, et al. Impact of the COVID-19 Pandemic on Emergency Department Visits. Morbidity and Mortality Weekly Report. 2020;69(23):699–704.

6. Vaughane L. Where are the patients? The factors affecting the use of emergency care during Covid-19. The Nuffield Trust. 2020.

7. Sun H, Liu K, Li M, Tang S, Monte AA, Wang J, et al. The influence of coronavirus disease 2019 on emergency department visits in Nanjing, China: A multicentre cross-sectional study. American Journal of Emergency Medicine. 2020;38(10):2101-2109.

8. FAIRHealth. Monthly Telehealth Regional Tracker, April 2020 [Internet]. 2020 [cited 2020 Oct 1]. Available from: **fairhealth.org/states-by-the-numbers/telehealth**

9. Accenture. Accenture Patient Survey May 2020: "How COVID-19 will permanently alter patient behavior." 2020.

10. bankmycell. How many smartphones are in the world? [Internet]. 2020 [cited 2021 Jan 15]. Available from: **bankmycell.com/blog/how-many-phones-are-in-the-world**

11. Betts D, Korenda L. Inside the patient journey: Three key touch points for consumer engagement strategies. Deloitte Insights. 2018.

12. Accenture. Accenture 2019 Digital Health Consumer Survey: "Today's consumers reveal the future of healthcare". 2019.

13. Accenture. How can leaders make recent digital health gains last? Re-Examining the Accenture 2020 Digital Health Consumer Survey. 2020.

14. Deloitte. The future of virtual health: Executives see industrywide investments on the horizon. Deloitte Insights. 2020.

15. Health Village. This is Health Village [Internet]. 2021 [cited 2021 Feb 24]. Available from: **terveyskyla.fi/en/about-health-village/this-is-health-village**

16. Tieto. Introducing Health Village, the new service to support multiple patient groups and healthcare professionals [Internet]. June 2019 [cited 2021 Feb 24]. Available from: **tieto.com/en/newsroom/all-news-and-releases/trade-releases/2019/06/introducing-health-village-the-new-service-to-support-multiple-patient-groups-and-healthcare-professionals/**

17. Donelan K, Barreto EA, Sossong S, Michael C, Estrada JJ, Cohen AB, et al. Patient and clinician experiences with telehealth for patient follow-up care. American Journal of Managed Care. 2019;25(1):40–4.

18. Grube K. Mit dieser Technik sollen Herzpatienten besser versorgt werden. 2019 Aug 3 [cited 2020 Oct 1]; Available from: **nw.de/gesundheit/22524913_Mit-dieser-Technik-sollen-Herzpatienten-besser-versorgt-werden.html**

19. Nicholas J, Shilton K, Schueller SM, Gray EL, Kwasny MJ, Mohr DC. The role of data type and recipient in individuals' perspectives on sharing passively collected smartphone data for mental health: Cross-sectional questionnaire study. Journal of Medical Internet Research. 2019;7(4):1–10.

20. Radda C, Rümmele M. „Wir sind mit ELGA europaweit Vorreiter" [Internet]. mnews. 2019 [cited 2020 Oct 1]. Available from: **medianet.at/news/health-economy/wir-sind-mit-elga-europaweit-vorreiter-26796.html**

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Ralf Meinhardt leads Siemens Healthineers' thought leadership activities related to Transforming Care Delivery. Previously, Ralf worked in the pharmaceutical industry, as well consulting and scientific research. Ralf holds a Doctor of Economics and Social Sciences degree from the University of Erlangen-Nuremberg. He also holds a Master of Science degree in Management as well as a Bachelor of Arts degree in Business Administration. In addition to his academic work at the University of Erlangen-Nuremberg, he also studied at the Indian Institute of Management, Bangalore (IIMB). His scientific background is in the field of corporate strategy, a subject on which he has authored several publications.

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Herbert Staehr serves as Global Head of Transforming Care Delivery for Siemens Healthineers, driving the company's activities and messaging around delivering high-value care. In this capacity, he develops and executes programs and outreach strategies aimed at healthcare providers around the world, as well as stakeholders in every branch of the healthcare industry. Before joining Siemens Healthineers, Herbert spent several years with one of Germany's leading private hospital groups, as head of the Corporate Development department and serving as Managing Director of an acute care and a post- acute care hospital in Germany. He also spent several years with McKinsey & Company with their healthcare practice, providing strategic advice to a wide range of international clients. Herbert holds a doctorate in Healthcare Economics from the University of Hohenheim.

At Siemens Healthineers, our purpose is to enable
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every day from our innovative technologies and services
in the areas of diagnostic and therapeutic imaging,
laboratory diagnostics and molecular medicine as well
as digital health and enterprise services.

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countries, we will continue to innovate and shape the
future of healthcare.