

WHITE PAPER

Unlocking the Digital Front Door With a Patient Engagement Platform

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- Developing a Digital Front Door strategy has now become essential, propelled by the recent global pandemic and pressing consumer demand.
- A patient portal is one component of developing an effective Digital Front Door strategy, along with a cohesive experience across all other digital touchpoints.
- Healthcare organizations should provide a cohesive experience by consolidating third-party patient self-service tools into one branded solution that seamlessly integrates with their EHR.
- A Digital Front Door solution should prioritize interoperability, design, and a mobile-ready user experience with key features that patients want.



Patients should be able to easily access information and self-service tools to better manage their care at every step of their healthcare journey—from finding a provider to booking appointments and filling out forms to accessing lab results and securely messaging their clinician. The "Digital Front Door" is a disruptive virtual strategy that encompasses all the ways that patients can interact with their healthcare providers through digital channels.

The goal of a Digital Front Door is to provide patients with a single entry point to access a suite of self-service tools, health information, and virtual care. Patients have come to expect the same flexibility and autonomy they experience with consumer-facing apps found in industries like retail, banking, and ridesharing, but have had to settle for less than optimum healthcare digital solutions--a disjointed set of apps, websites, and portals, each with their own function, and usually with their own login.

The Digital Front Door defines the movement of the consumerization of healthcare.

Since the Health Information Technology for Economic and Clinical Health Act (HITECH) was passed in 2009, many physicians and health systems have adopted patient portals to fulfill digital patient engagement requirements outlined by Meaningful Use (now known as the Promoting Interoperability Program). Although these portals tick the boxes for practical features and serve as a quasi-Digital Front Door solution, patients haven't been engaging.

The Digital Front Door is not just an app, but instead a connected ecosystem of digital platforms that create a cohesive experience across touchpoints.





Patient portals provide a solid foundation for a Digital Front Door strategy, but an effective Digital Front Door strategy goes far beyond a patient portal. The Digital Front Door is not just an app, but instead the strategic connecting of digital platforms (i.e., website, portal, app, etc.) together to create a cohesive experience across touchpoints. Simply put, the Digital Front Door defines the movement of the consumerization of healthcare.

Common Elements of a Digital Front Door



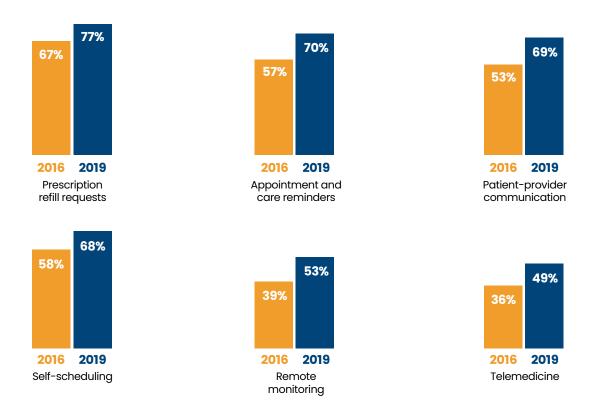


The Time to Improve the Digital Patient Experience is Now

In 2021 the GAO reported that less than 30% of patients who enrolled in a patient portal used them regularly to access health information.¹ In 2018, the ONC published a data brief that showed only slight improvement over the subsequent four years, reporting that only 60% of patients were offered online access to their health records, and among patients that were offered access, a mere 40% actually viewed their health records online in the past year. Interestingly, there had been no change in the percentage of patients accessing their patient portals between 2019-2020.²

However, the results from Accenture's 2019 Digital Health Consumer Survey tell us that patients increasingly expect providers to offer digital solutions. From 2016 to 2019, the percentage of patients who said they were more likely to choose a provider that offers useful electronic capabilities significantly increased. The results show that not all patients prioritize the same electronic capabilities, but there is a clear trend in the demand for patient-led digital services across the board.³

Consumers increasingly will choose medical providers who offer digital capabilities



Source: Accenture 2019 Digital Health Consumer Survey



The COVID-19 pandemic has catapulted the need for an improved digital experience for both patients and providers, and there's no going back.

Before the COVID-19 pandemic, patients weren't readily approaching the Digital Front Door. When the need for social distancing and limited in-person contact became a necessity, patients started to cancel routine in-office health visits and require video visits, preferring clinics offering the convenience of a Digital Front Door.

By April 2020, ambulatory care visits had plummeted nearly 60%. In mid-May, ambulatory care visits had mostly recovered but remained approximately one-third below pre-pandemic norms.⁴ The cumulative number of lost appointments and charges due to the COVID-19 pandemic has been crippling. However, in March, telehealth visits increased by 50%, and 83% of patients reported that they expected to be able to continue to use telemedicine options after the pandemic resolved.^{5,6} These patient expectations have been supported by government action. The Department of Health and Human Services (HHS) allocated 15 million dollars to telehealth providers during the COVID-19 pandemic, and the Centers for Medicare and Medicaid Services expanded telehealth benefits permanently.^{7,8} More recently, Congress passed the Consolidated Appropriations Act, 2023, which extended many telehealth flexibilities under the Medicare program that people relied on during the COVID-19 pandemic through the end of 2024.⁹

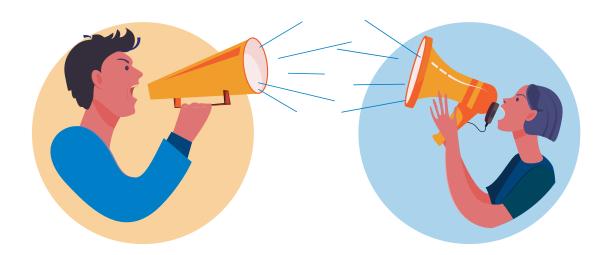
Currently, a direct link between improved patient outcomes as a result of patient portal use and app adoption is tenuous. However, studies suggest that increased adoption of the Digital Front Door, in conjunction with relevant clinical changes, can generate significant improvements in patient outcomes. The results of a large-scale longitudinal analysis of the effects of physician-patient engagement via a patient portal on health outcomes in patients diagnosed with congestive heart failure were reported in MIS Quarterly in June 2020. Researchers analyzed data from more than 24,000 patients for the previous 12 years. They noted that 3,266 patients used the patient portal at least once during this time period. The results show that patients who effectively used the patient portal were 2-4% less likely to be hospitalized and 3.2% less likely to visit the emergency room. Patient portal adopters also experienced lower readmission rates (-2%) and less time admitted when rehospitalization occurred (-11%). The portal features most used by patients included two-way messaging, viewing lab results, and requesting medication refills.¹⁰

Healthcare organizations should continue to push for changes in care "status quo" so that future benefits will be achieved, while seeing the current benefits of patient retention by offering digital solutions. A robust patient engagement platform can lead the way in driving digital patient adoption and engagement and can provide a much-needed solution to innovating the Digital Front Door. Below we outline what the main challenges are to developing a Digital Front Door strategy and how to overcome them.



Consolidate a Collection of Piecemealed Tools into a Single, Coherent System

Many healthcare organizations piecemeal multiple third-party tools to cover all of their patient engagement needs. Combining fragmented solutions to create a suite of patient engagement features results in a slew of complications. Patient communication preference is often not respected across platforms, development and maintenance are costly, license and utilization fees are high, and data flow exposes healthcare organizations to increased security risk.



A disjointed digital patient experience is also frustrating. Patients don't want to create multiple usernames and passwords to make an appointment, have a video visit with their provider, pay a bill, or check lab results. They expect a cohesive experience that feels similar to other consumer-facing digital platforms. "Little effort is made to help patients navigate the complex maze of online self-service tools and patient portals, especially to solve the core problem, which is to move to a single, mobile-ready patient engagement platform, the 'Digital Front Door,'" says John Deutsch, CEO of BridgeInteract.

Create One Access Point

There should only be one point of entry that grants patients access to all points of care. A modern patient engagement platform should replace the need for several third-party solutions, which are costly and inefficient to maintain, don't respect patient communication preferences, and require patients to access numerous platforms for different functions (e.g., make an appointment, pay a bill, etc.)





A cohesive experience that takes place on one branded platform, increases comfort and confidence, bolsters satisfaction, and holds patients' satisfaction longer, which leads to heightened engagement and therefore, improved outcomes.

The point of entry doesn't necessarily need to begin on an app, although this is definitely a prime login location. Consolidating the patient digital experience means that patients should be able to login on the healthcare system's website, and, from there, be able to seamlessly maneuver the entire platform.

Prioritize Seamless Integrations



Many healthcare organizations operate more than one Electronic Health Record (EHR), Practice Management (PM) and/or Revenue Cycle Management (RCM) solution yet can't synthesize these source systems in an easy and meaningful way. One could say that this is the strongest argument advocating the use of a Digital Front Door.

A patient engagement platform should be able to seamlessly connect these disparate environments and provide patients with a single, user-friendly interface that allows access to important self-service tools like self-scheduling, patient-provider messaging, and bill pay.

Increase Interoperability

Enabling successful data exchange so that providers have access to a patient's full medical record is imperative, not only to achieving regulatory requirements but also to providing better care to patients.



A patient engagement platform should be able to work with the most common healthcare industry standards like Health Level Seven (HL7), Continuity of Care Document (CCD), and Fast Health Information Resource (FHIR) through a fully documented healthcare API. Data should be shareable with different clinical and financial systems and the platform should support bidirectional interface capabilities.



Meet New Cures Act Requirements

The Final Provisions for the 21st Century Cures Act (which is applicable to most physicians) includes two new requirements:



- Patients must be able to access their medical records on a smartphone at no cost (and have the ability to share those records as they choose).
- Health systems must be able to exchange information about patients' past medical treatments or conditions.

While the final provisions are somewhat subject to interpretation, there is a clear takeaway here as it pertains to the Digital Front Door. Patients must be provided access to their health information both via a portal and via an API. However, given that the practicality of a patient actually accessing an API instead of a smartphone-based portal is questionable, greater emphasis should be placed on providing a feature-rich and smartphone-ready portal.

Retain Patients With Frictionless User Experience and Design



"A systematic review of dozens of research articles revealed that patients' number one complaint about patient portals is that they're difficult to navigate and, therefore, not user-friendly."

— Journal of Medical Internet Research

In the past, health systems have typically turned to their EHR providers for their patient portal solutions. Unfortunately, EHR vendors aren't well-known for their design-first approach. Their accompanying patient portals offer a simple list of features but fail to engage patients and truly understand user needs and behavior.



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"When it came to EHR vendors developing a mobile app, which is even more UI/UX driven than a web application, most vendors were at a loss and were still struggling with offering what is considered basic functionality and mobile responsiveness with their patient portals."

— John Deutsch, CEO of BridgeInteract.

A systematic review of dozens of research articles reveals that patients' number one complaint about patient portals is that they're difficult to navigate and, therefore, not user-friendly.¹¹ In a world where consumers use an app for almost everything, it's understandable that patients are turned off by the complicated, clunky, and dated interfaces of most patient portals. In a recent survey, KLAS reported that the technology that patients anticipate the most is a consolidated patient portal experience.¹²

Technologies That Patients Would Like to See Technologies That Are Most Impactful for Patients Today (100-percent scale) (n=186) Focused on in the Future (100-percent scale) (n=148) Patient portal Consolidated patient portal Telehealth Provider communication Provider communication Appointment reminders Self-scheduling Self-scheduling Comprehensive mobile apps Self-registration/check-in Patient self-management Self-registration/check-in Education Online bill pay Prescription refill requests Prescription refill requests 6% Online bill pay Care team collaboration tools Telehealth Price transparency 5% Care team collaboration Provider search/matching 0% 25% 25% 50% 75%

Source: KLAS, Patient Perspectives on Patient Engagement Technology, 2020

The rapid consolidation of clinics and hospitals into a single business, which has taken place in the past two decades, has resulted in the creation of massive Integrated Delivery Networks (IDNs), large healthcare conglomerates, which are rarely all on a single Electronic Health Record (EHR), Practice Management (PM) and/or Revenue Cycle Management (RCM) platform.

For these IDNs that have not moved to a single EHR/PM/RCM platform, patients are typically provided multiple patient portals and patient engagement solutions, essentially multiplying the severity of the problem by the number of EHR, PM, and RCM solutions that are in use.



It's not enough to simply offer a list of features. Design must be prioritized since user experience plays a critical role in the acceptance and usage of any digital patient solution. A study conducted by Forrester in 2016 can help us understand how user experience affects the adoption of digital patient solutions.

The study shows that a strong user experience design can increase website conversion rates as much as fourfold. Data should be leveraged to personalize the experience of digital healthcare solutions and to understand the emotional and cognitive behaviors of patients during each step of the engagement process. Healthcare software developers have rarely prioritized design [for patients], as the software was almost always developed for healthcare providers. When it came time



for EHR software vendors to develop applications for the patient, they failed, and in comparison to other markets, the importance of design is still not there," explains Jared Mauskopf, CEO of Medical Web Experts.

Furthermore, research shows a direct relationship between design and business performance with regard to cost savings, revenue gains, and brand and market position improvements. McKinsey & Company reported in 2018 that companies that have the strongest scores on their design index (called the McKinsey Design Index, or MDI) see the highest numbers for revenue growth and shareholder returns compared to companies with weaker scores on the MDI.14

Leverage Data to Enhance UX

As anyone in the consumer industry knows, data is king, and personalization is essential to consumer engagement. The relationship between healthcare providers and patients is no different. Currently, the digital patient experience is monotonous. Research conducted by the Center for Connected Medicine (CCM) reveals that less than one in three health system professionals believe they're offering a best-in-breed digital patient experience.15

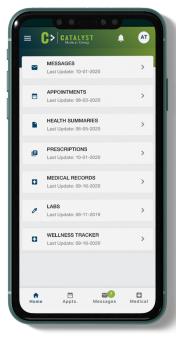




Patient portals are untapped troves of user behavior data that can be leveraged to adapt and improve the patient experience. The volume of data in the healthcare industry is projected to grow more than any other sector through 2025.16 This means that there's increasing potential to leverage this data to personalize the digital patient experience.

Data can be used to engage patients by sending appointment reminders, medication refill reminders, and even by providing personalized educational materials (e.g., articles, videos, dietary and exercise recommendations, etc.) to patients unique to their disease state. Healthcare systems can also use data to understand patient payment behaviors and increase the likelihood of receiving payments that fall under the patient's responsibility. For example, if a patient has an unpaid bill, offering a payment plan on their login screen may increase the likelihood that they start paying the bill.

Optimize Mobile & Client Branding



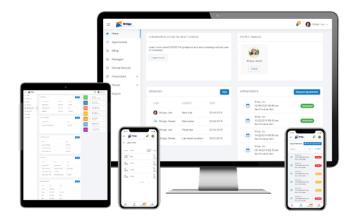
BridgeInteract's native & client-branded mobile app in use by Catalyst Medical Group

This might seem like a given. Consumers are accustomed to a very polished mobile experience. Overwhelmingly, people use mobile devices, like smartphones and tablets, to access information online. If mobile optimization isn't part of a patient portal solution, the adoption of the solution is severely impacted. A client-branded iOS and/or Android app is essential in today's mobile-first consumer culture. This means that not only should the app be branded to the healthcare organization, but the app should also be published to Google and Apple's app stores by the healthcare organization.



Identify and Implement Key Features

It's important that the Digital Front Door offers patients the key features that they look for when going online to manage their care. These often include:



- Lab Results
- Appointment Scheduling
- Patient Education
- ❷ Bill Pay
- Rx Refills
- Patient Forms
- ✓ Video Visits / Telehealth
- ✓ Live Chat
- Patient Intake / Check-In

- Provider / Location Search
- Mapping & Wayfinding
- Referral Requests

- Remote Monitoring

- Care Plans
- ✓ Virtual Waiting Room

Incorporate Telehealth Options

The demand for telehealth options skyrocketed during the COVID-19 outbreak, and this trend is here to stay. In order for health systems to regain their patient population and retain patients, telemedicine should be high on the list of necessities for any Digital Front Door strategy.





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"The explosion in growth of telehealth-only healthcare providers, such as MDLive® and Teladoc®, presents a massive threat to the brick-and-mortar primary care providers. These telehealth providers have contracted directly with leading insurance companies and are already severing existing patient-provider relationships,"

— John Deutsch, CEO of BridgeInteract.

In order to promote virtual health visits, it's important to leverage an app that patients are already accustomed to using but that is also HIPAA-compliant, like Zoom for Healthcare®.17 Driving patients to an entirely new app experience for virtual health visits further distances the healthcare organization from the consolidated, Digital Front Door experience that the modern patient demands.

Integrate Chatbots for Patient Convenience

Recent advances in artificial intelligence (AI) have driven the use of chatbots as an important channel for customer interaction among various industry sectors, and healthcare is no different, especially as the COVID-19 pandemic accelerated the adoption of chatbots to screen potential cases. Chatbots provide a conversational interface through which patients can ask questions, book appointments, and check their symptoms.

A scholarly analysis of the use of chatbots for automated telehealth consultations found that chatbots are fast and effective at providing patients with information based on their reported symptoms and can connect patients to a human provider when the automated interaction is insufficient. In addition, because of their perceived impartial and non-judgmental nature, patients feel more at ease detailing intimate symptoms, such as those of STDs.18 Furthermore, chatbots have proven effective at remotely motivating patients to undertake positive lifestyle changes, stimulating preventative care and early interventions.19 A recent survey by the Center for Connected Medicine (CCM) and KLAS Research found that almost 70% of healthcare executives believe that AI will be critical to improving patient access going forward, and any Digital Front Door solution that does not incorporate chatbots as a featured channel for patient interaction risks falling behind the curve. 20



Conclusion

Merely offering patients access to a patient portal is no longer worthy of praise, nor does it guarantee a successful Digital Front Door strategy. Patients are yearning for a digital health solution that's tailored to their needs and meets them where they're at—a seamless experience that's similar to the ease and comfort of the mobile apps they use every day. Health systems need to adopt a best-in-breed digital patient solution that not only engages patients but strengthens patient retention and increases revenue.



Health systems that have struggled to engage patients with their patient portal, and that have limited patient engagement solution options with their EHR vendor, should consider a third-party solution that optimizes their existing source system(s), extracting important data for the patient into one place. Identifying the qualities of a best-in-breed patient engagement platform allows healthcare systems to unlock the Digital Front Door and invite patients to fully engage with their health journey.

Bridge offers an industry-leading, mobile-friendly suite of tools that gets healthcare systems through the front door and into patients' daily digital experiences. To learn how BridgeInteract can work with your health system to develop a custom patient engagement platform that not only engages patients but increases revenue while improving patient health outcomes, **contact us online** or call 1.800.467.2321.

Sources:

- 1. US Government Accountability Office. (2017) HHS Should Assess the Effectiveness of Its Efforts to Enhance Patient Access to and Use of Electronic Health Information. Available at: https://www.gao.gov/products/GAO-17-305 (Accessed September 15, 2023).
- 2. Patel, V., Richwine, C., and Johnson, C. (2021) Individuals' Access and Use of Patient Portals and Smartphone Health Apps, 2020. The Office of the National Coordinator for Health Information Technology. ONC Data Brief No. 57. Available at: https://www.healthit.gov/sites/default/files/page/2021-09/HINTS_2020_Consumer_Data_Brief.pdf (Accessed September 15, 2023).
- 3. Accenture. (2019) Digital Health Consumer Survey—US Results. Available at: https://www.accenture.com/_acnmedia/pdf-94/-accenture-2019-digital-health-consumer-survey.pdf (Accessed September 15, 2023).



- 4. Mehrotra, A., Chernew, M., Linetsky, D., Hatch, H., and Cutler, D. (2020) The number of visits to ambulatory practices declined nearly 60 percent by early April. The Commonwealth Fund. Available at: https://www.commonwealthfund.org/publications/2020/oct/impact-covid-19-pandemic-outpatient-care-visits-return-prepandemic-levels (Accessed September 15, 2023).
- 5. Combs, B. (2020) Telehealth visits are booming as doctors and patients embrace distancing amid the coronavirus crisis. CNBC. Available at: https://www.cnbc.com/2020/04/03/telehealth-visits-could-top-1-billion-in-2020-amid-the-coronavirus-crisis.html (Accessed September 15, 2023).
- 6. Kitchen, E. (2020) Telemedicine today: Patient adoption and preferences during COVID-19 and beyond. Doctor.com. Available at: https://www.doctor.com/blog/telemedicine-today-patient-adoption (Accessed September 15, 2023).
- 7. The Department of Health and Human Services. (2020) HHS Awards \$15 Million to Support Telehealth Providers During the COVID-19 Pandemic. Available at: https://www.hhs.gov/about/news/2020/05/13/hhs-awards-15-million-to-support-telehealth-providers-during-covid19-pandemic.html (Accessed September 15, 2023).
- 8. Centers for Medicare & Medicaid Services. (2020) Trump Administration Finalizes Permanent Expansion of Medicare Telehealth Services and Improved Payment for Time Doctors Spend with Patients. Available at: https://www.cms.gov/newsroom/press-releases/trump-administration-finalizes-permanent-expansion-medicare-telehealth-services-and-improved-payment (Accessed September 15, 2023).
- 9. Centers for Medicare & Medicaid Services. (2023) CMS Waivers, Flexibilities, and the Transition Forward from the COVID-19 Public Health Emergency. Available at: https://www.cms.gov/newsroom/fact-sheets/cms-waivers-flexibilities-and-transition-forward-covid-19-public-health-emergency (Accessed September 15, 2023).
- 10. Bao, C., Bardhan, I.R., Singh, H., Meyer, B.A., and Kirksey, K. (2020) Patient-Provider Engagement and its Impact On Health Outcomes: A Longitudinal Study of Patient Portal Use. MIS Quarterly 44 (2): 699-723. Available at: https://misq.umn.edu/patient-provider-engagement-and-its-impact-on-health-outcomes-a-longitudinal-study-of-patient-portal-use.html. (Accessed September 15, 2023).
- 11. Kruse, C.S., Argueta, D.A., Lopez, L., and Nair, A. (2015) Patient and provider attitudes toward the use of patient portals for the management of chronic disease: a systematic review. J Med Internet Res. 17 (2). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4376181/ (Accessed September 15, 2023).
- 12. Adam Cherrington and Dan Czech. (2020) Patient Perspectives on Patient Engagement Technology. KLAS. Available at: https://klasresearch.com/report/patient-perspectives-on-patient-engagement-technology-2020/1670 (Accessed September 15, 2023).
- 13. Paunovic, G. (2017) The Bottom Line: Why Good UX Design Means Better Business. Forbes. Available at: https://www.forbes.com/sites/forbesagencycoun-
- cil/2017/03/23/the-bottom-line-why-good-ux-design-means-better-business/?sh=32bdd44d2396 (Accessed September 15, 2023).
- 14. Sheppard, B., Sarrazin, H., and Dore, F. (2018) The Business Value of Design. McKinsey & Company. Available at: https://www.mckinsey.com/business-functions/mckinsey-design/our-insights/the-business-value-of-design (Accessed September 15, 2023).
- 15. Center for Connected Medicine. (2020) Survey: Apps, other digital tools a critical or high priority for half of health systems. Available at: https://connectedmed.com/resources/health-system-apps-digi-
- tal-tools-patients-not-providing-best-consumer-experience-survey/ (Accessed September 15, 2023).
- 16. International Data Corporation with Seagate. (2018) The Digitization of the World. From Edge to Core. Available at: https://www.seagate.com/files/www-content/our-story/trends/files/dataage-idc-report-07-2020.pdf (Accessed September 15, 2023).
- 17. HHS. (2020) Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency. Available at: https://www.hhs.gov/hipaa/for-professionals/special-top-
- ics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html (Accessed September 15, 2023).
- 18. Parviainen, J., and Rantala, J. (2022) Chatbot breakthrough in the 2020s? An ethical reflection on the trend of automated consultations in health care. Med Health Care Philos. 25 (1): 61-71. Available at: https://pubmed.ncbi.nlm.nih.gov/34480711/ (Accessed September 15, 2023).
- 19. Singh, B., Olds, T., Brinsley, J., et al. (2023) Systematic review and meta-analysis of the effectiveness of chatbots on lifestyle behaviors. npj Digit. Med. 6: 118. Available at: https://doi.org/10.1038/s41746-023-00856-1 (Accessed September 15, 2023).

 20. Center for Connected Medicine. (2023) Report: Patient access is 'Top of Mind' at health systems for second year in a row. https://connectedmed.com/resources/report-patient-access-is-top-of-mind-at-health-systems-for-second-year-in-a-row/ (Accessed September 15, 2023).