Satisfying the Triple Aim with the Dual Mandate

How automation is improving the employee and patient experience and making healthcare better.

Stronger engagement

Superior outcomes

Efficiencies in costs

For years, hospital and health system executives have focused on the Triple Aim of stronger engagement, superior outcomes and efficiencies in costs.

To that end, healthcare providers have made significant technology investments. Enterprise-wide applications such as electronic health records (EHRs), patient financial and patient experience tools, enterprise analytics, population health infrastructure and virtual care have all been considered Triple Aim solutions by system leaders.

Despite all the benefits these solutions provide, leaders are still grappling with the same challenges. But there is one challenge the healthcare system hasn't fully addressed: the increasing administrative burdens facing providers and staff.

Healthcare delivery involves repetitive, manual workflows that account for over $1 trillion in administrative costs per year and compromise the patient experience. As healthcare requirements continue to expand, support staff and even clinical staff are required to focus more effort on notation, documentation and regulation.

This paper will show how addressing the dual mandate— improving the experience of both healthcare consumers and healthcare workers—through automation can help leaders finally make serious progress toward the Triple Aim.

Market forces driving the healthcare industry towards automation

The healthcare IT market was estimated by most observers to be worth between $200 billion and $250 billion in 2021.[i] The billions invested in IT have generated significant improvements. Digitizing health records has led to an explosion of patient data.

These data have given rise to financial and clinical analytics that have enabled widespread value-based care programs and large-scale population health management efforts. Patient finance and revenue cycle management solutions have arisen that capitalize on the confluence of clinical and financial data. Artificial intelligence (AI) is showing great promise in transforming the way we deliver and pay for care.

Yet, healthcare's systemic challenges persist. Costs continue to rise, quality continues to be average, patients continue to be frustrated.

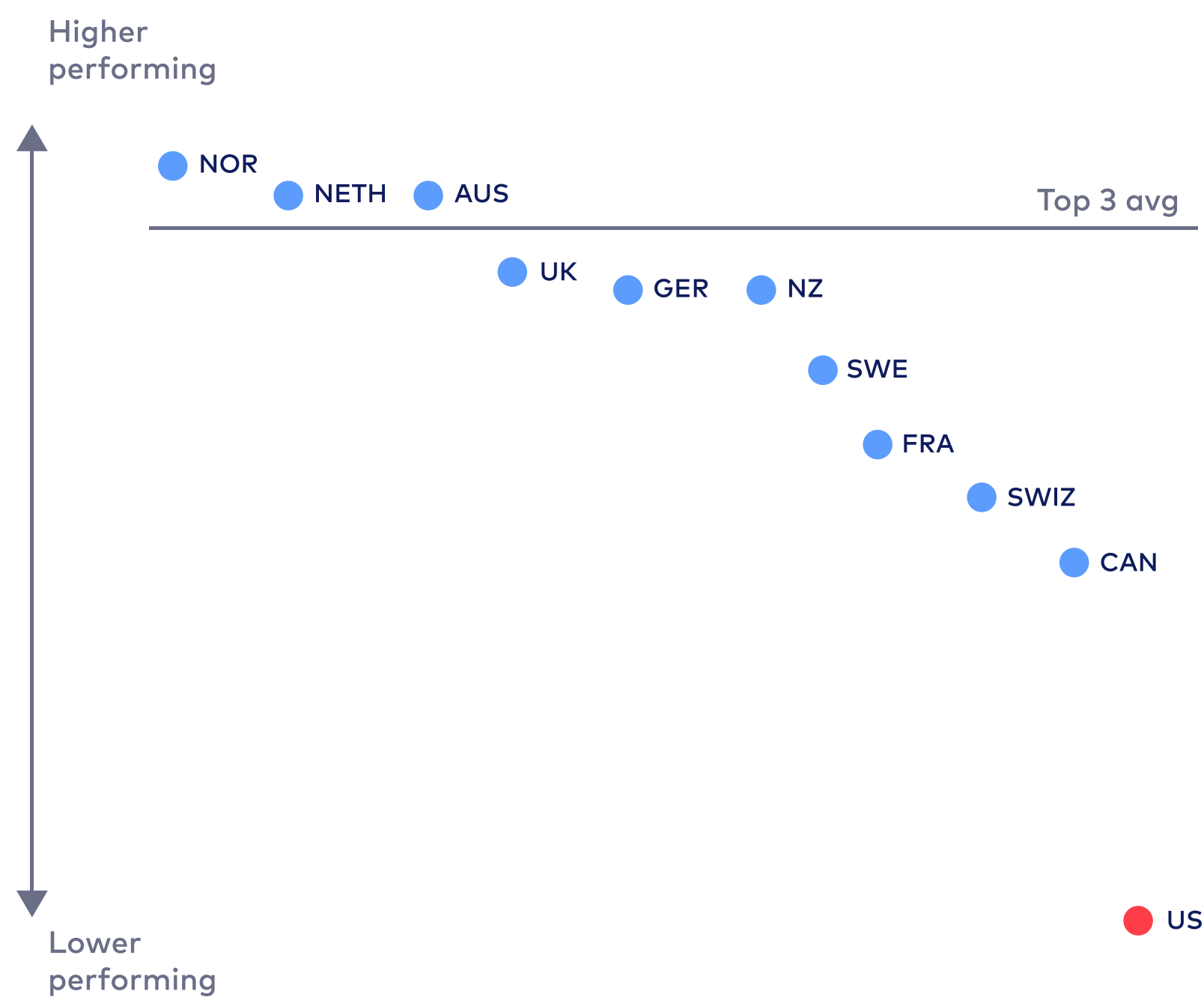**Almost half of US respondents are not satisfied with their care**

43%

n = 16,000
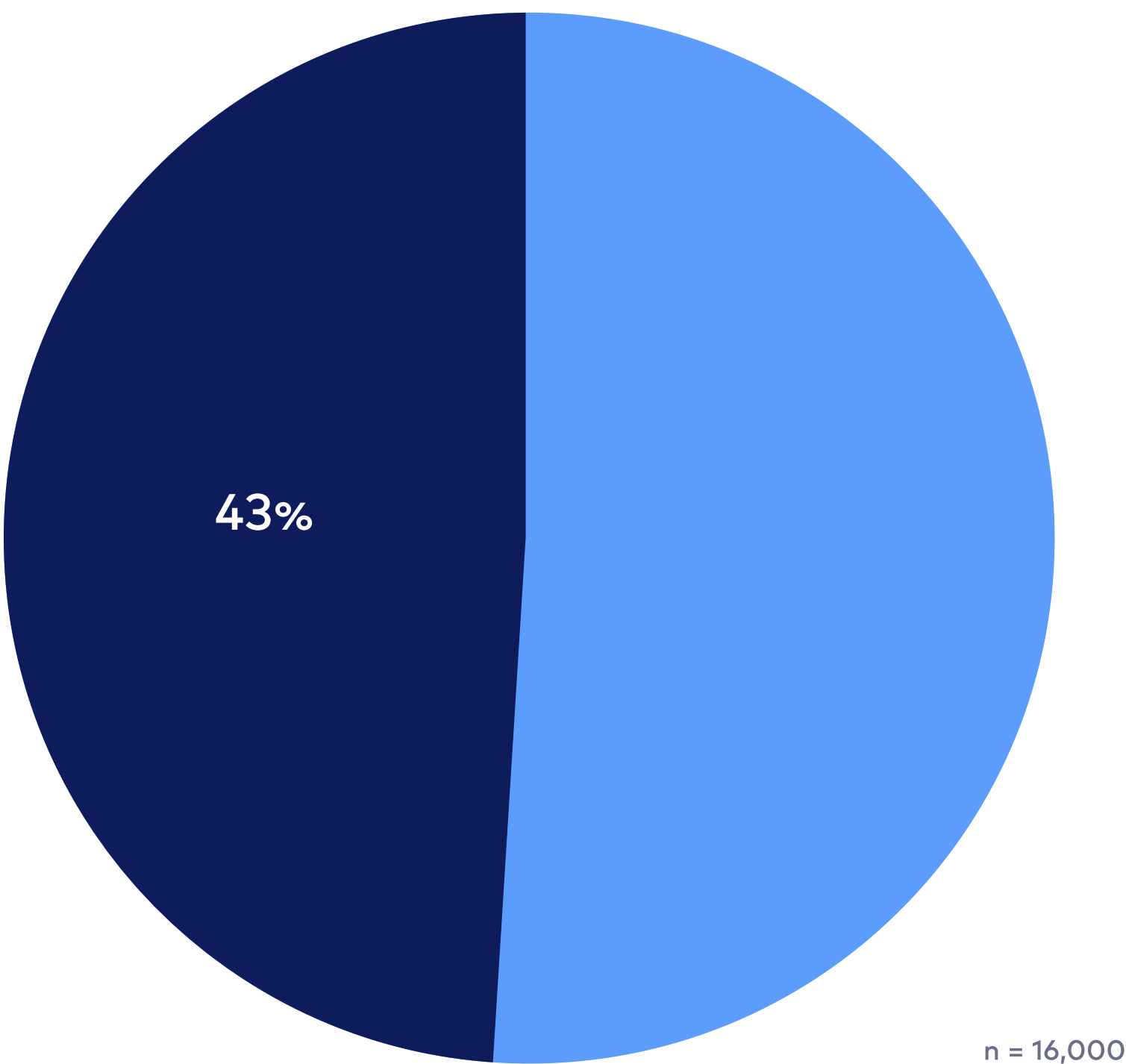
Experience. Most of the time, people aren't patients. But they do spend a lot of time as customers, and they know what a great customer experience feels like in other spaces, including retail, finance and leisure. But in healthcare, more than four in 10 respondents (43%) say they are unhappy with the U.S. healthcare system.[ii] Healthcare is certainly unique among service sectors. Still, such poor metrics in any other consumer-focused enterprise would induce panic among its leaders.

i Healthcare IT market size & share: Forecast report 2021-2027. Global Market Insights Inc. (n.d.). Retrieved February 4, 2022, from https://www.gminsights.com/industry-analysis/healthcare-it-market; Healthcare IT market size and share: Industry growth by, 2030. Allied Market Research. (n.d.). Retrieved February 4, 2022, from https://www.alliedmarketresearch.com/healthcare-information-technology-market; Precedence Research. (2021, December 29). Healthcare information systems market size to hit US$ 528.5 bn by 2030. GlobeNewswire News Room. Retrieved February 4, 2022, from https://www.globenewswire.com/news-release/2021/12/29/2358947/0/en/Healthcare-Information-Systems-Market-Size-to-Hit-US-528-5-Bn-by-2030.html; Healthcare IT market size, application, analysis, regional outlook, competitive strategies and forecasts, 2020 -2027. Market O Graphics. Retrieved February 4, 2022, from https://marketographics.com/healthcare-it-market-size-application-analysis-regional-outlook-competitive-strategies-and-forecasts-2020-2027/.

ii Published by Jenny Yang, & 26, N. (2021, November 26). Public satisfaction with National Health Systems by country worldwide 2019. Statista. Retrieved February 4, 2022, from https://www.statista.com/statistics/1109036/satisfaction-health-system-worldwide-by-country/

US healthcare performs lower on the basis of outcomes

Higher performing

NOR

NETH   AUS

Top 3 avg

UK   GER   NZ

SWE

FRA

SWIZ

CAN

US

Lower performing

Outcomes. Patient experience isn't always linked to patient outcomes. But like any complex system, frailty in one area impacts the whole. And outcomes in the U.S. healthcare system are lagging. Comparing 11 industrialized nations based on measures such as life expectancy, infant mortality, maternal mortality and preventable mortality, the United States ranked last.[iii]

iii Commonwealth Fund. (2021, August 4). Mirror, mirror 2021: Reflecting poorly. Commonwealth Fund. Retrieved February 4, 2022, from https://www. commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly

Healthcare administrator growth outpaces physician growth

Admin growth
Physician growth
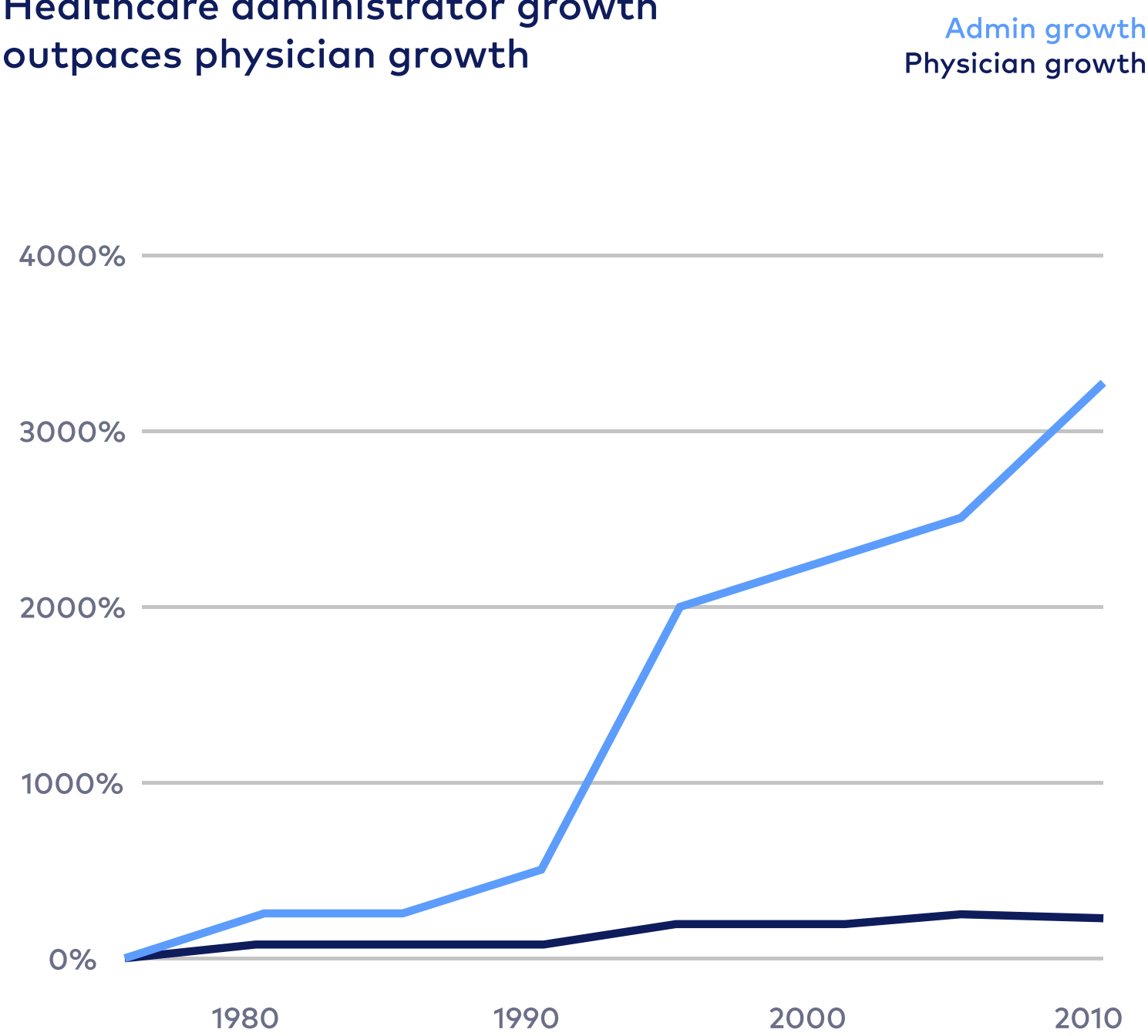
Administrative costs in the United States exceed those in other high-income countries
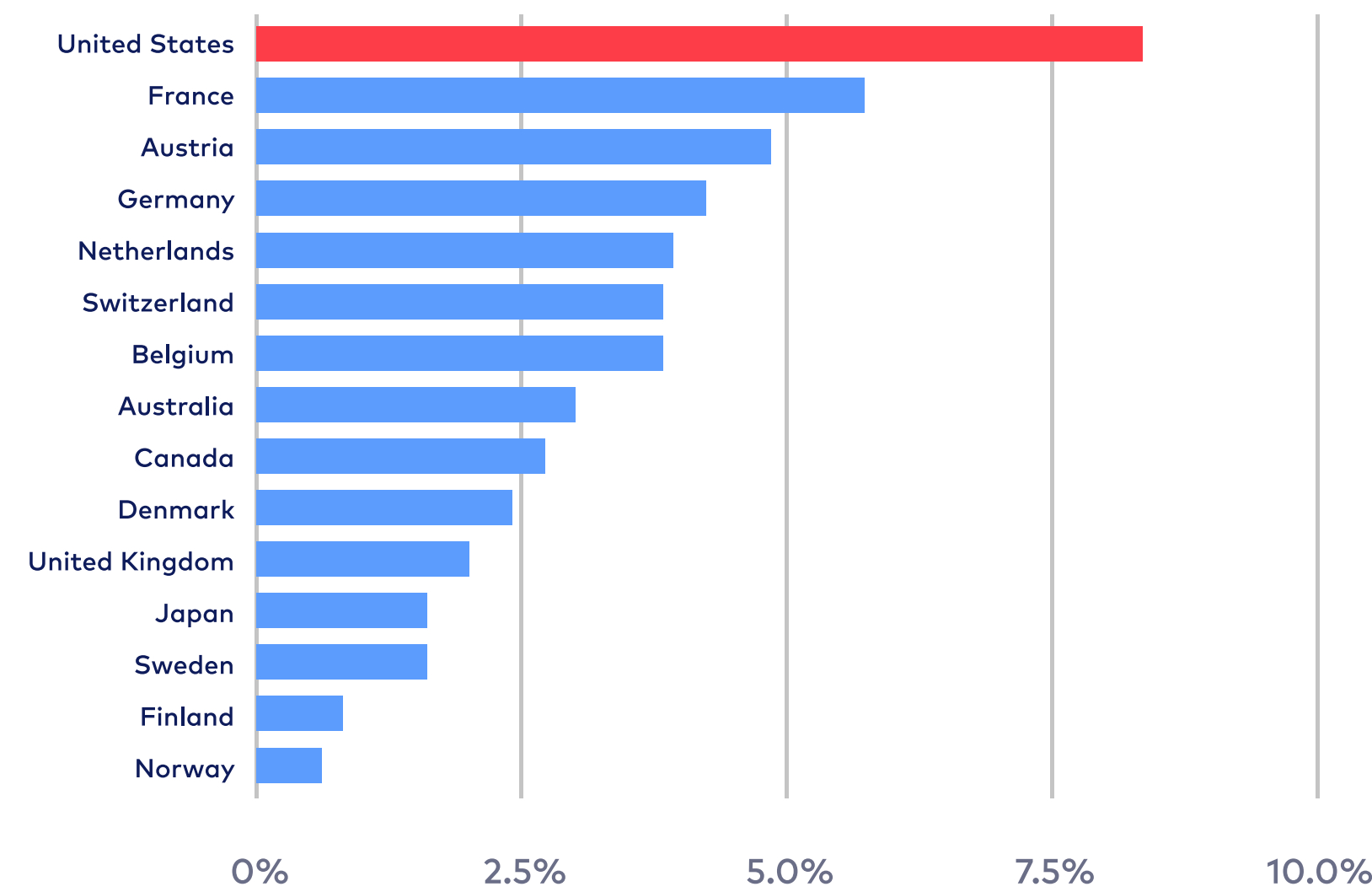

Efficiency. Over more than a decade, healthcare providers have been part of a tremendous rise in electronic health record (EHR) adoption, driven by government incentives and predictions of efficiencies resulting in lower costs. However, during a 10-year period between from 2009 to 2018, while EHR adoption rose exponentially, efficiency was flat, as evidenced by the number of employees per thousand admissions.[iv]

iv American Hospital Association. (n.d.). AHA Trendwatch Hospital and Health System Workforce Strategic Planning. American Hospital Association. Retrieved February 4, 2022, from https://www.aha.org/system/files/media/file/2020/01/aha-trendwatch-hospital-and-health-system-workforce-strategic-planning2_0.pdf; Definitive Healthcare. (n.d.). Does hospital EHR adoption actually improve data sharing? Definitive Healthcare. Retrieved February 4, 2022, from https://www.definitivehc.com/blog/hospital-ehr-adoption
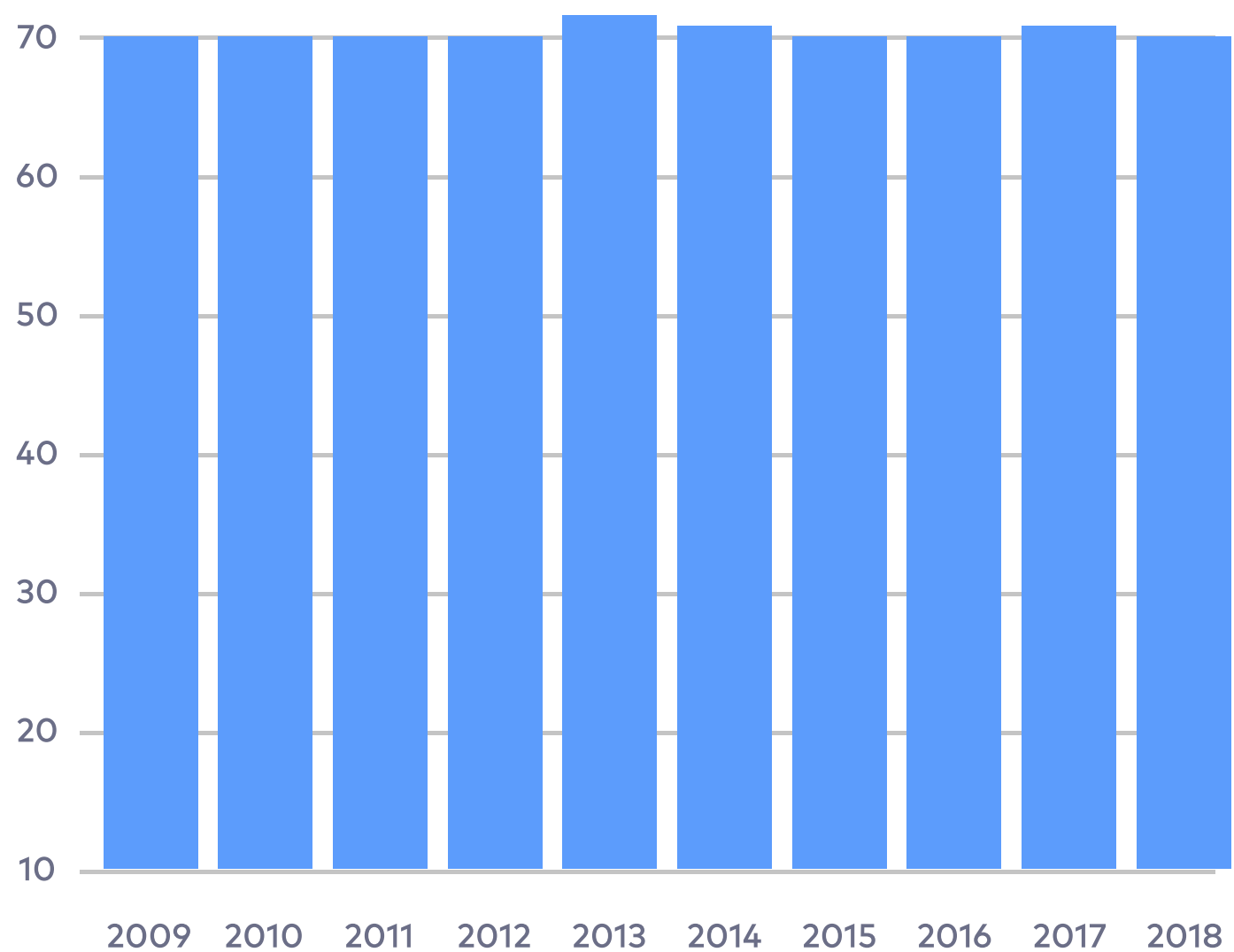
Hospital EHR adoption
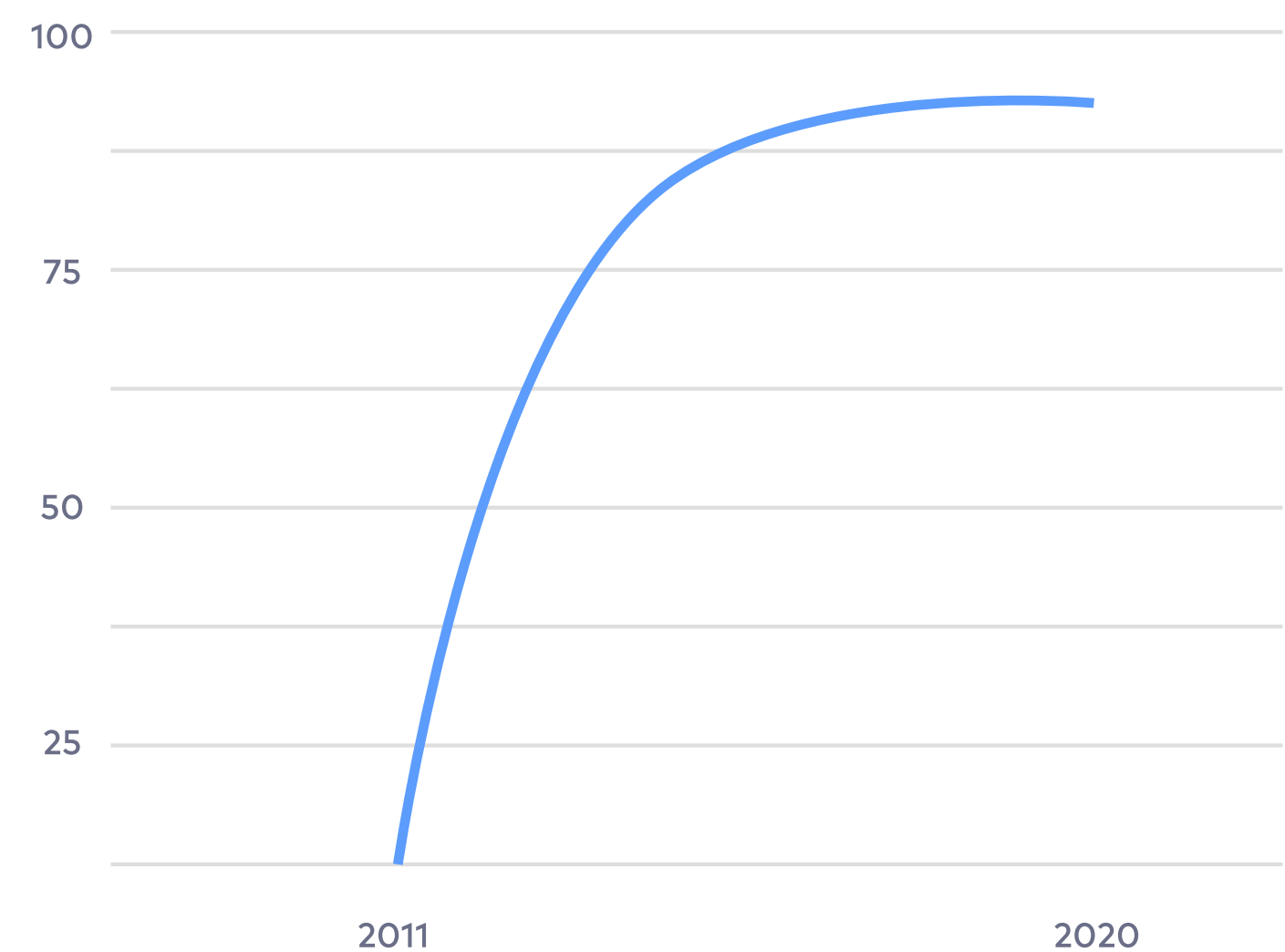
Full-time employees per thousands of adjusted admissions

Complexity. Healthcare providers keep trying to address these problems with more people, more standardized processes and more complex technology. And it has led to more administrative cost and complexity.
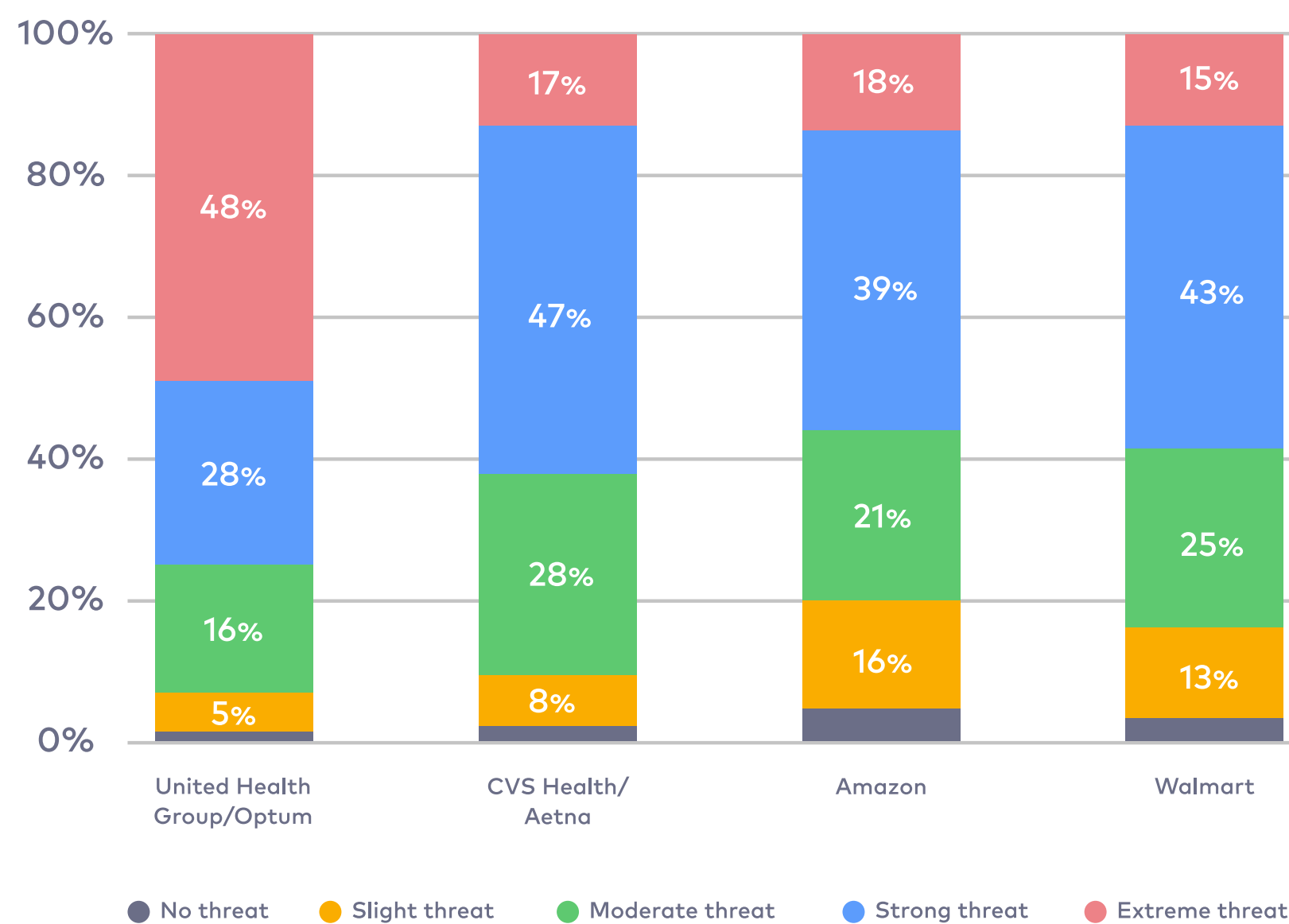
Physician growth in the United States over the last 40 years has been almost static. Even though the country hasn't seen a marked increase in the number of providers in the past four decades, administrative tasks have increased linearly over the same period, far outpacing physician growth.[v] This simply means there are more staff required to take care of every patient in the healthcare system. This is a problem unique to the United States, as shown in the comparison with other countries.[vi] And there are no signs of this growth slowing.

v Number of healthcare administrators explodes since 1970. Athenahealth. Retrieved February 4, 2022, from https://www.athenahealth.com/knowledge-hub/practice-management/expert-forum-rise-and-rise-healthcare-administrator

vi Cusick, J., Hananel, Oduyeru, L., Gordon, P., Shepherd, et al. (2021, November 2). Excess administrative costs burden the U.S. Health Care System. Center for American Progress. Retrieved February 4, 2022, from https://www.americanprogress.org/article/excess-administrative-costs-burden-u-s-health-care-system/

Non-traditional competitors: seeking disruption

	United Health Group/Optum	CVS Health/ Aetna	Amazon	Walmart
Extreme threat	48%	17%	18%	15%
Strong threat	28%	47%	39%	43%
Moderate threat	16%	28%	21%	25%
Slight threat	5%	8%	16%	13%
No threat				

● No threat ● Slight threat ● Moderate threat ● Strong threat ● Extreme threat

Over the next 5 years what degree of competitive threat do companies pose to hospitals and health sytems?

Competition. Markets plagued with inefficiencies, poor customer care and suboptimal quality are typically ripe for disruption. Almost all health system executives consider traditional and non-traditional competitors to be either a strong or an extreme competitive threat.[vii] New competitors to healthcare providers include:

• Payers, who have symbiotic yet typically strained relationships with hospitals and health systems, have been purchasing multi-specialty clinics at an increased clip.

• Corporations such as Walmart, CVS and Walgreens have made significant investments in low-fidelity primary care.

• Tech giants such as Google, Apple, Amazon and Microsoft have made forays into various segments of healthcare provision, including primary care, pharmacy, durable medical equipment and medical devices.

vii Kaufman Hall. (2021, September). State of Consumerism in Healthcare 2021: Regaining Momentum. Kaufman Hall. Retrieved February 3, 2022, from https://www.kaufmanhall.com/sites/default/files/2021-09/kh-2021-state-of-consumerism-survey-report_final-9.15.pdf

Manual workflows hamper the healthcare market

The same administrative complexities that handicap legacy healthcare providers place constraints on the new market entrants. There are hundreds of manual workflows in healthcare, too many to adequately describe:

- *Paper forms*—thousands of them—requiring manual entry into electronic records
- *Data reconciliation* across payers, providers and population health organizations
- *Massive call centers* making hundreds of thousands of outbound calls to engage patients
- *Continual use of faxes* to send referrals and to transmit information
- *Hundreds of work queues* in each of these systems

This complex interplay of manual interactions and the number of administrative staff needed to keep this machine going is overwhelming. As a result, clinicians and patients alike are suffering.

The dual mandate: how we can advance both patient and staff engagement with automation

The term "dual mandate" was coined by healthcare consultant and digital strategist Paddy Padmanabhan, writing for CIO in 2019.[viii]

Padmanabhan argued for a human-centered design approach to healthcare technology. "Combining design effectively with tech, organizations can increase engagement, improve outcomes and reduce costs," Padmanabhan argued. "Design is... not just about simpler UI or experiences, but also about recognizing that healthcare providers need to find ways to create a controlled ecosystem that can drive the desired outcomes."

Automation facilitates the controlled ecosystem that drives better outcomes because it allows both patient and provider to focus less on technology and more on the task at hand: the health and well-being of the person.

> "The digital transformation of healthcare has now imposed a dual mandate on healthcare providers—how to not just improve the experience for consumers, but also for caregivers and other stakeholders in the healthcare experience."
>
> **Paddy Padmanabhan,** healthcare consultant, digital strategist
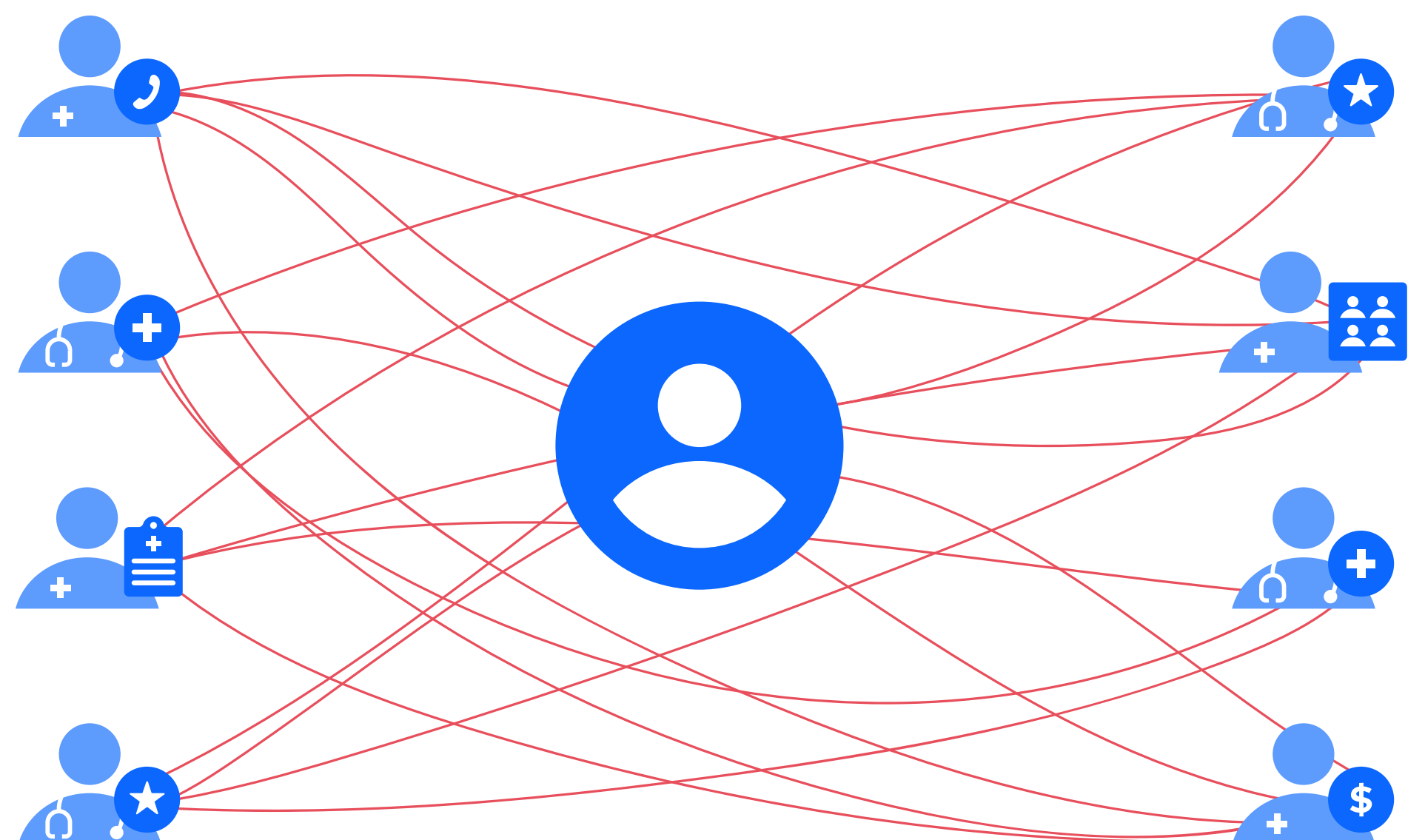
viii Padmanabhan, P. (2019, November 21). How human-centered design is driving Digital Health. CIO. Retrieved February 4, 2022, from https://www.cio.com/article/215769/how-human-centered-design-is-driving-digital-health.html

Strain, burnout and The Great Resignation

As it stands, clinicians and support staff are increasingly dissatisfied with their jobs. And they are part of a growing trend in the United States—termed The Great Resignation—of workers who are quitting. High tech and healthcare are the most impacted industries, with 4.5% of tech workers resigning between March 2020 and March 2021, and 3.6% of healthcare workers resigning during the same time frame.[ix]

Anthony Klotz, a psychologist and management professor at Texas A&M University who popularized the phrase The Great Resignation, said workers are leaving their jobs to find more fulfillment elsewhere.[x] Healthcare workers, especially during the pandemic, have been prone to burnout, and the current healthcare environment is causing a vicious cycle of overworked employees. This is the reality for many support staff across the country:

Before the visit, massive call volumes into the office make it hard to stay engaged with patients. Integrating multiple point solutions to solve scheduling issues is a common problem.

During the visit, staff are often overwhelmed by the mix of in-person requests and phone calls. And all the information on the paper forms completed by the patient needs to be entered manually into the EMR. Simple things like scanning hundreds of insurance cards per day can contribute to staff burnout.

After the visit, care managers and non-clinical staff may be overwhelmed as they are asked to manage a panel of thousands of patients who need follow-up. It's hard for him or her to know who to call and when, much less have the time to do outbound outreaches.

Paperwork, long waits and frustration

Patients can get frustrated, too. When seeking care, scheduling appointments and accessing providers can be difficult.

Before the visit, patients often need to call an appointment line and wait in long phone queues to schedule an appointment. This is still true even though other industries have trained consumers to expect self-service scheduling options.

During the visit, patients are often asked to complete paperwork multiple times, answering questions they may have answered days or weeks ago at the same clinic but with a different provider. Sometimes, intake questions are irrelevant to the reason they are visiting.

After the visit, patients can be unsure about what to do next, and they're often frustrated by the process of scheduling a follow-up visit or an appointment with a specialist.

ix Robinson, B. (2021, December 10). 'The great resignation' migration and what this means for your career. Forbes. Retrieved February 4, 2022, from https://www.forbes.com/sites/bryanrobinson/2021/06/11/the-great-resignation-migration-and-what-this-means-for-your-career/?sh=1bcdc20f69aa

x Kaplan, J. (2021, October 2). The psychologist who coined the phrase 'great resignation' reveals how he saw it coming. Business Insider. Retrieved February 4, 2022, from https://www.businessinsider.com/why-everyone-is-quitting-great-resignation-psychologist-pandemic-rethink-life-2021-10

Engaged patients plus engaged providers equals improvement

According to research by the patient experience consultant Press Ganey, patient engagement and clinician engagement are intertwined. According to its analysis of HCAHPS data from more than 3,400 hospitals, better engagement leads to better patient experience scores and better profits.

When health systems improve employee engagement by more than one percent or more and provoke greater than one percent improvement in the amount of communication between nurses and patients, hospitals showed a five-point increase in patient experience scores and one percent increase in net profit margin. In fact, when analyzing only facilities designated as acute care hospitals, the financial benefits are even greater. Improving engagement and clinician/patient communication by more than one percent results in a two percent net profit margin increase.[xi]

Automation: The solution to manual workflows

One answer to the problem of manual workflows is automation. In fact, as evidenced by the data above, it may be the only viable answer.

The rise in administrative staff as compared to clinical staff shows that healthcare's answer has been to attack the problem with people. Various technologies—EHRs being the most prominent and most expensive—have vied to become the solution to reduce manual workflows. The data shows that these technologies have fallen short on the promise of productivity.

But automation technology–specifically the unification of robotic process automation (RPA) and AI–promises to make enterprise systems like EHRs smarter.

RPA, put simply, is the training of software-based digital assistants to perform tasks within software applications. Those digital assistants can be utilized in applications as ubiquitous as spreadsheets or as custom and complex as an EHR. Digital assistants can be trained to click on buttons, fill out forms, upload documents, write notes, etc., all through virtual computer interactions.

AI enables digital assistants to mimic human intelligence. For instance, optical character recognition (OCR) enables digital assistants to "look" at a picture of an insurance card and determine the patient's payer and member ID.

Automation technology uses RPA and AI to address repetitive manual workflows, performing tasks as staff would perform them without having to bring in new point solutions for every new problem. Automation technology can also minimize the need for in-house development and change management, since digital assistants can simply be trained on existing workflows and

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xi Buhlman, N., & Lee, T. (2021, August 27). When patient experience and employee engagement both improve, hospitals' ratings and profits climb. Harvard Business Review. Retrieved February 4, 2022, from https://hbr.org/2019/05/when-patient-experience-and-employee-engagement-both-improve-hospitals-ratings-and-profits-climb

have them perform those workflows as adjuncts to their human counterparts. Combining RPA and AI unlocks the ability to automate the thousands of manual workflows that exist in the country's health systems. Automation will help system leaders get the efficiency gains they need and enable them to focus on high quality care, improving patient experience. In other words, automation technology helps systems meet the Triple Aim.

Automation technology has grown to the point where it can serve an entire healthcare enterprise:

> *Before the visit,* When patients are seeking care, health systems can use automation to accelerate and improve registration. Patients can schedule their own appointments with intelligent triage that gets them booked with the right provider.
>
> *During the visit,* When the patient presents, the automation enhances check-in and writes the information from patient forms seamlessly into the EHR.
>
> *After the visit,* When the patient is between visits, the same automation platform can conduct care gap outreach and gather patient reported outcomes.

Under automation, digital assistants service back-office functions, checking if authorizations are needed and then automatically submitting and following up on status. Managing authorizations ensures patients receive needed care in a timely fashion while staff can focus on higher-level tasks.

Driving engagement through automation at Fort Healthcare

Fort HealthCare, a single-hospital health system based in Fort Atkinson, Wis., recognized the burden manual work was placing on staff engagement, as well as the patient experience. The system, headquartered in a small community between Milwaukee and Madison, was competing for both patients and employees due to its proximity to larger cities and health systems.

In a time of mergers and consolidation, Fort HealthCare leaders knew their position as the top employer and leading provider in the community wasn't guaranteed. As such, a key part of the system's core values—and a key requirement for maintaining its independence—was the dual mandate of patient and staff engagement and retention.

"We don't have one more minute"

The system also needed to prioritize quality care and quality reporting to optimize reimbursement. These priorities collided when quality leaders proposed adding a new patient screening to the intake process for the system's 15 physician clinics. "It will only take one more minute," they said.

Other system leaders resisted. Intake already took 10 minutes, cutting into the time patients could spend with their physicians. Plus, the intake process needed to be repeated for every patient visit. However, Fort HealthCare administrators were determined to find a way to prioritize quality without compromising patient satisfaction or adding administrative burden.

They needed more than a solution to solve their quality screening issue. They needed a solution that would help them meet the dual mandate.

Addressing strategic challenges

As Fort HealthCare leaders searched for a solution, they developed a list of requirements.

Improve employee retention by minimizing staff burden and ensuring clinicians operated at the top of their license. Their local labor market was tight. Covid-19 was raging, and the system was already feeling the impact of The Great Resignation.

Improve patient experience by engaging people where they are. For Fort HealthCare leaders, this meant digitizing the entire patient experience, enabling engagement at home before and after the visit.

Integrate technology by utilizing discrete data. As a data-driven organization, Fort HealthCare needed a solution that would generate immediately usable data. That meant no data packaged in documents such as PDFs. Output had to be standardized to be immediately available for use in its Cerner EMR, its claims and billing systems, etc.

Driving outcomes and speed to value

After a 12-month vetting process, Fort Healthcare leaders decided to employ the automation technology stack provided by Notable. They were impressed by Notable's track record of quick implementations, its approach to partnership and its way of doing business that complemented the health system's mission and vision.

Fort HealthCare needed fast implementation after working through a pandemic and facing a tight labor market. Notable moved quickly. After a project kickoff in October 2021, the system went live with prior authorizations for certain procedures a month later and with registration and pre-visit planning two months later.

System leaders were impressed with Notable's approach to partnership. While other vendors had out-of-the-box product offerings or focused on automating non-primary processes, Notable provided a customized approach and started with automating the system's most difficult workflows. Using this customized strategy, Notable complemented Fort HealthCare's mission and vision, helping the system better serve the unique challenges of its community.

Saving staff time and delighting patients

Using Notable's digital assistants, Fort Healthcare has seen tremendous results in a short time:

91% successful authorization submissions for select conditions, and 15 minutes of staff time saved per successful submission

74% patient completion of pre-visit planning and registration, and 24 minutes of staff time saved per patient visit

91% patient satisfaction with the new intake workflows

Prompt progress made on additional automation priorities, including prior authorizations for additional conditions and cancel/reschedule workflow

Fort HealthCare went from operating without any automation to the above results in fewer than four months. The organization is on its way to automating aspects of all patient touchpoints, from patient access to payment collection. As they do so with an eye toward improving staff experience and patient engagement, administrators believe they will not only improve their patient satisfaction scores, but they will also improve quality of care and cost efficiency.

Automation addresses the root cause of dissatisfaction

Manual workflows are standing in the way of real transformation in healthcare and are the root cause of poor patient and staff experience.

By engaging patients on their journey through the healthcare system, anticipating their challenges and solving their problems proactively, community and regional health systems can meet patients wherever and whenever they are, in their homes or in healthcare facilities.

But automation on its own can't enhance patient and staff engagement. It's important to find an automation partner that can prioritize both the patient's journey as well as staff satisfaction.

Notable: The leading provider of automation for healthcare

Notable uniquely combines clinical AI, intuitive engagement, comprehensive integration, and self-service configuration to automate any healthcare workflow. By automating manual workflows across the care continuum, Notable provides health system leaders a proven path to achieve their strategic initiatives - driving growth, outcomes, and operational efficiency. Notable has a track record of delivering higher ROI, faster, than any other healthcare technology vendor.

Notable's clinical AI can determine when and how to perform automated workflows by analyzing data from the EHR or any other source. RPA, complemented by other integration methodologies where appropriate, enables digital assistants to perform any workflow within the EHR just like a human would.

Notable is the only platform that unifies automation with intuitive engagement, extending the scope of workflow automation by enabling collection of data from patients and providers.

The entire experience is configurable via an interactive user interface, enabling governed development of automations that are designed to meet the exact needs of your organization's workflows.

Meet the dual mandate of patient and employee engagement with Notable

With automation, Notable enables health systems to:

- *Simplify patient access and intake with self-service scheduling* by leveraging AI-powered triage to enable digital scheduling with primary care or speciality care providers at the appropriate site of care.

- *Automate every workflow and work queue* by using digital assistants to perform all tasks within the EHR, CRM and other systems of record on behalf of staff.

- *Reduce check-in time by 25%* for patients while saving medical assistants (MAs) 30 minutes per day.

This optimizes staffing by automating manual workflows to free up time best spent focusing on the highest value patient interaction and tasks. It offers a world-class patient experience through intuitive engagement that allows every patient to be served through the ideal mix of digital and in-person channels.

How is Notable different?

- *Notable produces consumer-grade patient experience;* not forgetting about delivering the best of technology to patients. Notable has a patient satisfaction rating of 97%, a patient engagement rate of 85% and a 64% reduction in no-shows.

- *Notable enables work queue elimination.* Notable enables work queue elimination. Notable removes hundreds of thousands of calls from call centers and front desks on an annual basis and increases self-pay collection by 300%.

- *Notable provides unparalleled provider adoption*, due to real operational outcomes like reducing documentation time by 45%.

To learn more about how Notable's platform can help your organization meet the dual mandate, request a personalized demo with a member of our team.