

Redefining Healthcare Delivery





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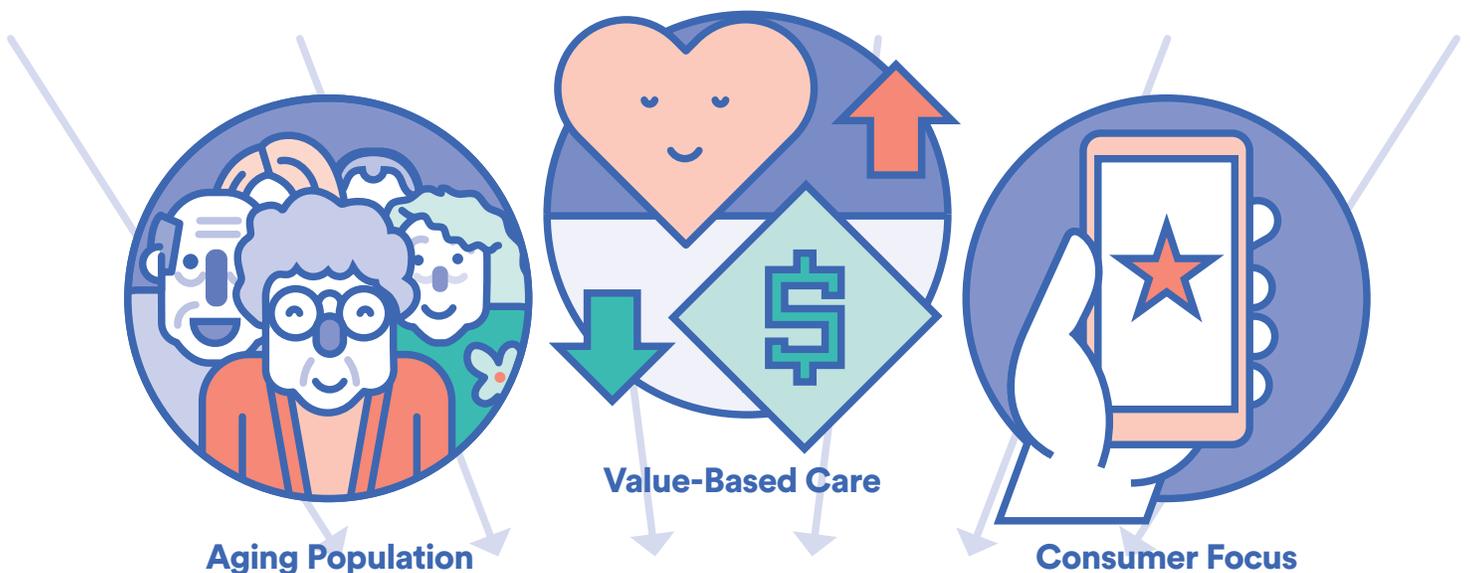
Using Trends to Anticipate the Future State of Healthcare Delivery

Every industry relies on trend data to inform their next steps, stay ahead of the curve, and seize upcoming opportunities. Healthcare is no different. We look to trends in outcomes data, technology, economics, and population health, among many others, to assess our current state and determine where the biggest opportunities are for the future.

At Healthbox, we emphasize the importance of keeping a pulse on current and future trends in healthcare in order to make informed decisions based on the market and stay on the leading edge of innovation. This Healthbox “Future State” report will examine various trends in healthcare and provide perspective on where we envision the industry is headed next.

Over the past two decades, we have observed a substantial shift of care to the outpatient setting due to changes in payment models and advancing technology. These solutions make outpatient care health outcomes similar to or better than the inpatient setting while at the same time reducing cost and improving the consumer experience.¹ As outpatient care continues to grow, we predict this shift will lead to the (re)emergence of home healthcare.

Trends in Healthcare Leading to the (Re)Emergence of Home Healthcare



HOME HEALTHCARE

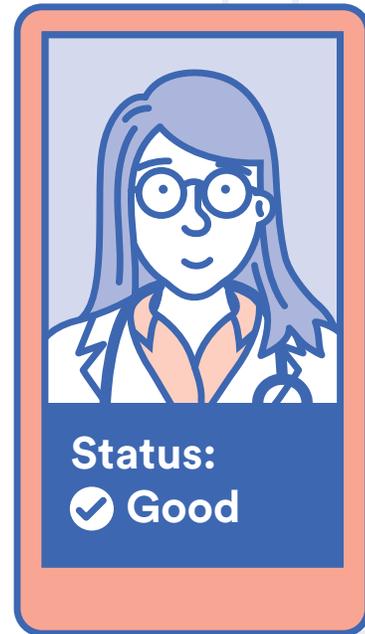
¹ <https://www.bcbs.com/the-health-of-america/reports/how-consumers-are-saving-shift-outpatient-care>

What is Driving the Shift to Outpatient Care?

In the past, the majority of care was provided in the home. In fact, “only the most destitute and friendless ended up in hospitals, which were often little more than almshouses.”² Now, several trends are converging, significantly impacting the way that care will be delivered in the future. These trends point to the reemergence of home health attributable to:

- 1. A rapidly aging population
- 2. The transition to value-based care
- 3. An increased focus on the consumer

This report aims to examine each trend and its contribution to the new era of healthcare.



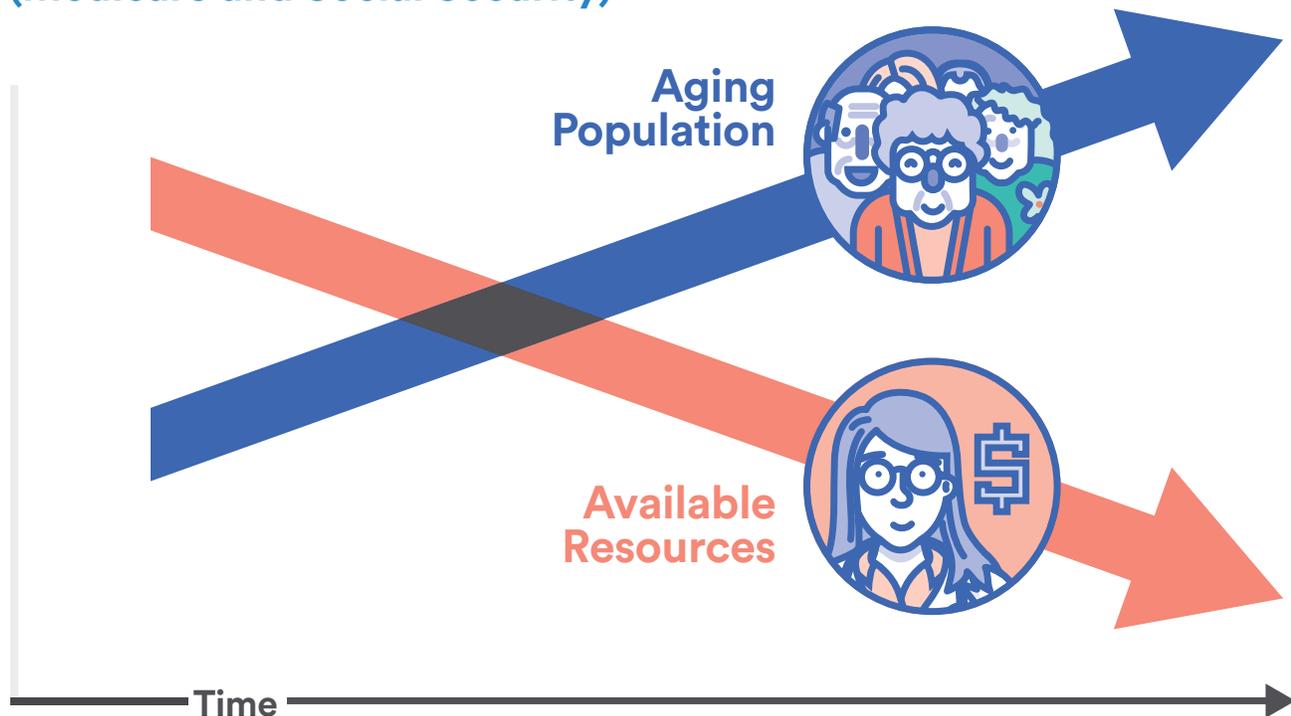
² Source: Tishler PV, Wenc C, Loscalzo J: *The Teaching Hospital, Brigham and Women’s Hospital and the Evolution of Academic Medicine.* New York, McGraw Hill, 2014. Chapter 5: Wenc C: “Patient-Centered Care and the History of the Brigham and Women’s Hospital” p. 266-268.

Trend #1: Rapidly Aging Population

First, and most unavoidably, our population is rapidly aging. By 2060, the number of Americans aged 65 and above is estimated to more than double, reaching approximately one fourth of the population.³

Older adults are now living longer than any generation before them. With an extended lifespan comes increasing rates of chronic illness, disability, and loss of mental function. Due to a rise in fast food, higher levels of stress, and little emphasis on preventive care, the population of baby boomers now reaching retirement age is additionally more likely to be obese or have high blood pressure than previous generations at similar ages. The tendency for baby boomers to live at home rather than in group or nursing facilities puts an added stress on family and further emphasis on care in the home, as transportation to and from a medical care facility becomes increasingly difficult to manage and coordinate.

Effects of an Aging Population on Available Resources (Medicare and Social Security)



Financial issues tied to the growing aging population further contribute to a rise in outpatient and home healthcare. In 2010, Social Security and Medicare each accounted for approximately 3% of the GDP. By 2050, both numbers are projected to double, with Medicare and Social Security together accounting for 12% of the GDP. Relative to the number of soon-to-be retirees, there is a lack of workers to counterbalance the pull from these funds. In fact, this ratio dropped from 14 working-age adults per retiree in the early 2000s to just 4 in 2014.³

Both the financial and disease burden that result from a rapidly aging population has put pressure on the health care system to improve outcomes while reducing costs in the outpatient and home healthcare setting.

³ <https://assets.prb.org/pdf16/aging-us-population-bulletin.pdf>

Trend #2: Value-Based Care

The next big trend in healthcare is the emergence of value-based care. Currently, we are in a mostly fee-for-service (FFS) world. However, the industry is steadily transitioning to a value-based system, with payors reimbursing healthcare expenses based on outcomes rather than quantity of services provided, assessing health systems on measures such as quality, cost, advancing care information, and improvement activities.⁴

At Healthbox, we like to use the following analogy: managing the economics of FFS and value-based care simultaneously is akin to trying to row two canoes at the same time: it's nearly impossible. Eventually, managing both will become too much, and organizations will need to choose whether they are all-in or all-out of the value-based playing field. As the trend toward value-based reimbursement continues, organizations are more incentivized to transition into value-based care than back to an FFS model.

This trend further supports the need to improve quality while reducing costs and improving the patient experience, a task that may be more readily achieved with a focus on outpatient care.

Trend #3: Consumer Focus

The final trend is the healthcare industry's increasing consumer-centric focus, with an emphasis on virtual care. Consumers have more power than ever in choosing where, when, and how to receive their care. As a result of STAR ratings and public reporting requirements, patients are able to rate their physicians and read the reviews others have posted about them prior to their visit.⁵ Patients, as consumers, are also more educated than ever. The internet has opened up a realm of possibilities for patients to research best practices for their own care, explore different options for their insurance, and compare various nearby clinics before choosing the one that fits their needs.

The consumer focus is not limited to the provider and payor realm. As mentioned in [previous Healthbox reports on Internal and External Innovation](#), in 2017 alone, over 325,000 health-oriented applications were available to consumers with \$5.8B invested in digital health funding. Consumers have more access than ever to remote monitoring devices, behavioral health solutions, and telemedicine services that allow them to remain more independent from the health system in its traditional form.

Leveraging Technology

As these trends converge, technology and innovation are beginning to play a larger role than ever in the healthcare field, particularly in collecting, analyzing, and leveraging patient data. The ability to aggregate information from a number of sources including the patient record, wearable devices, smart phone applications, and remote monitoring solutions in the home gives physicians and health systems the ability to gauge the real-time status of their patients. This allows for early intervention, reducing the need for unnecessary inpatient visits and putting a greater emphasis on preventative and patient-empowered home healthcare.

⁴ <https://www.aafp.org/practice-management/payment/medicare-payment/mips.html>

⁵ <https://publicreporting.sts.org>

Home Healthcare in the Real World

We are already seeing the effects of these trends coming together and the positive benefits of the shift in healthcare delivery.

UnitedHealth Group recently conducted a pilot with the Children's Hospital of Minnesota.⁶ The organization equipped 117 teenagers with Type 1 diabetes with Fitbits, disease education, and weekly emails from physicians to help them better control their blood glucose levels. Participants who received this intensive remote therapy (IRT) as part of the study successfully **reduced their HbA1c levels by 0.34, compared to 0.05 in the control group.**⁷ The IRT cohort additionally reported higher quality of life with regards to their diabetes care, despite having to do more work to manage their care for the duration of the study. Patients with diabetes are only one of many who will significantly benefit from home healthcare. UnitedHealth Group is currently working with asthma patients as well, with the goal of expanding remote monitoring solutions to all patients, particularly those with access to technology on a daily basis.⁸

Intermountain Healthcare (IMH) is another great example of an organization making headway into virtual and home care. IMH recently launched a Virtual Hospital, Connect Care Pro.⁹ Connect Care allows patients to access care anywhere through a smartphone, tablet, or computer for a low cost of \$49 per visit with or without insurance, as insurance is accepted, but not required at the hospital. This system of virtual care reduces the burden on emergency departments, decreases the need for patients to physically go into a care center for minor concerns or simple tasks, such as medication refills, and caters to a new generation of patients who are less likely to have a dedicated primary care team. Since the launch of the telehealth platform, Intermountain has seen a **decrease in mortality rates by 33%** in community hospitals, a **7% reduction in length of hospital stays**, and more high acuity patients being able to stay in their communities rather than travel out to a large health system to receive care for chronic or emergent illness.¹⁰

Case Study

Let's examine a patient with heart failure, whose symptoms are getting worse.

Healthcare: Present Day

The patient goes into the emergency department. He is sucked into the healthcare loop and may never come out. Unfortunately, this is his only option, not because of the severity of illness, but because of the lack of options to care for his disease outside of the acute care setting.

Healthcare: Transition to Home Healthcare

In the future, with more emphasis on the home and community as the center of care, this same patient will be equipped with a high-touch virtual care plan and a disease management program that will empower him to be in charge of his own care on his own schedule at a much lower cost. If he needs to enter the inpatient setting, he will likely be eligible for early discharge to the home, which, thanks to telemedicine and remote monitoring technologies, can afford him hospital-level care.

⁶ <https://onlinelibrary.wiley.com/doi/full/10.1111/pedi.12654>

⁷ <https://newsroom.uhc.com/news-releases/manage-type-1-diabetes.html>

⁸ <https://youtu.be/L3el5CGchHQ>

⁹ <https://intermountainhealthcare.org/services/urgent-care/connect-care/>

¹⁰ <https://intermountainhealthcare.org/services/urgent-care/connect-care/>

Conclusion: Next Steps for Healthcare

With organizations like UnitedHealth and Intermountain leading by example, we expect to see more and more organizations refocus their spending towards wellness in the community and hospital care in the home in the near future. Adult inpatient discharges are expected to decline by 2% over the next 10 years, with a 15% growth in outpatient volumes across the U.S. There is a significant amount of optimism amongst healthcare executives on the future direction of home health and the risk sharing and reduced cost models of care that will result from this shift. John A. Capasso, Executive Vice President of Continuing Care, Trinity Health, asserts that patient empowerment will lead to a substantial growth in home healthcare services.

“More and more home health patients are being provided with better communications tools, more access to information, virtual visits, and closer immediate connections to caregivers and providers... Newly empowered patients...will see home health as a truly invaluable partner.”

While the shift towards home and community health holds promising opportunities for patient outcomes, we must remain strategic and thoughtful about how we move from one model of care to another. The inpatient care setting will not be eliminated but reduced, and it is our responsibility during this transition period to maintain quality patient care management from beginning to end as well as strong communication between the patient and the health system. At Healthbox, we see the majority of this transformation being driven by the payors, both government and private. CMS is currently leading the charge in incentivizing health care organizations to move towards outpatient care, but as more payors explore the potential savings of outpatient care, home health, and remote monitoring, we will see an increase in payors exerting their market power to push the industry in this direction.

In order for health care organizations to stay on the leading edge of the field, we must stop trying to row both canoes simultaneously and instead embrace the long-lost model of home healthcare. By continuing to carefully collect and analyze patient health outcomes and cost data, we can anticipate which healthcare trends will take over next and become better equipped to stay ahead of the curve.



About Healthbox

Healthbox is a healthcare innovation services firm that leading organizations trust with decisions on when and how to build, buy, or partner. Founded in 2010, we were the first to combine investing experience and consulting services in a way that is strategic, objective, and actionable for providers, payors, and others across the industry. Our unique perspective and expertise drives innovation from inside organizations and out to produce lasting impact with our partners. We are proud to work with healthcare leaders who share our passion for building, harnessing, and advancing solutions to empower the reinvention of healthcare.

¹¹ <https://www.sg2.com/health-care-intelligence-blog/2017/05/sg2-2017-impact-change-forecast-finding-growth/>

¹² <https://homehealthcarenews.com/2018/01/home-health-crystal-ball-executives-predict-the-future-of-2018/>