

Amazon Pharmacy: Distraction or Disruption?

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After years of anticipation about Amazon's rumored entry into pharmacy,¹ Amazon Pharmacy launched in November 2020. The question is now: Is this market entry a disruption, a distraction, or something in between?

Amazon's path toward pharmacy began in the mid-1990s as a bookseller. Before Amazon, customers were limited to brick-and-mortar stores with limited inventory and no convenient means of searching for the book they needed.² Amazon grew rapidly through the late 1990s. This infrastructure allowed Amazon to expand into and eventually dominate other retail segments, such as electronics.³ Today, Amazon is a \$1.8 trillion company and is often hailed as an unstoppable giant and a threat to large and small businesses everywhere. Although this is largely a true statement, Amazon is not invincible—it has, in fact, retreated quietly from several industries, including restaurant and grocery order delivery and fashion, and failed to upend others like grocery stores.⁴

To understand the potential impact of Amazon Pharmacy on US brick-and-mortar pharmacies, it is important to first dissect this new venture. Amazon Pharmacy is a combination of several existing business models: (1) retail mail order pharmacy, (2) discount card programs, and (3) membership programs. At its core, Amazon Pharmacy is a mail order pharmacy that offers consumers the ability to fill new and refill prescriptions through its existing Amazon.com platform (including the use of third-party payer contracts). The pharmacy operates under federal and state regulations and follows the same state board of pharmacy regulations as any other pharmacy.⁵

Fundamentally, these elements are not a significant departure from the status quo; however, it is important to note that Amazon Pharmacy's inclusion of a prescription discount benefit alongside its pharmacy services is a first. To fully appreciate what this means, one must first differentiate a discount benefit program from prescription drug discounts. A discount benefit program uses existing pharmacy benefit manager (PBM) network contracted rates with pharmacies (eg, Cigna, Express Scripts). Patients without insurance can use the program to access the same PBM negotiated prices as patients within that prescription insurance network. In this way, by leveraging these previously negotiated discounted rates,

ABSTRACT

After years of anticipation about Amazon's rumored entry into pharmacy, Amazon Pharmacy launched in November 2020. What is yet to be understood is whether this new Amazon offering is a true market disruption capable of upending the pharmacy industry. This commentary describes the epic rise of Amazon from bookseller to retail giant, leading to its entry into the retail pharmacy space. Amazon Pharmacy's business model is described and its potential for industry disruption discussed.

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TAKEAWAY POINTS

Although the much-anticipated entry of Amazon into the pharmacy industry will undoubtedly force large chain and mail order pharmacies to revamp their “patient-centered” and “customer-friendly” approaches, it does little to affect underlying inefficiencies in the prescription drug supply chain. Amazon Pharmacy will likely:

- ▶ not be a crushing blow to brick-and-mortar pharmacies,
- ▶ represent a severe threat to traditional mail order pharmacies due to the brand loyalty and convenience of an Amazon platform, and
- ▶ challenge the status quo pharmacy customer experience.

Amazon’s system essentially duplicates the GoodRx prescription discount card business model. In the case of Amazon Pharmacy, only the Express Scripts PBM network will be used to administer its discount benefit program.

This is in contrast to prescription drug discounts offered by the pharmacy on the list price of the prescription drugs that it sells. Amazon’s choice to not directly discount drug prices means that it was unsuccessful in its attempts to transform the drug distribution channel. Instead, it depends on a discount benefit program model that relies on existing PBMs, which ultimately may escalate overall prescription drug costs.⁶ In other words, the foundation of Amazon Pharmacy is built firmly on the status quo.

A true supply chain disruption would focus on low-cost generic prices and pass discounts directly to patients—but this is not what Amazon has done. Rather, Amazon Pharmacy offers discounts through third-party PBM networks, which will still take a portion of sales and inflate the overall cost of pharmacy services. Disrupting supply chains by streamlining lean processes and eliminating waste to generate lower prices and a more customer-centric experience is what made Amazon a leader in other retail spaces; its inability to do so here may speak volumes.

When taken together, what Amazon has done here more than anything else is repackage existing business models into a presumably more attractive package with Amazon branding. This is not to downplay the impact that Amazon Pharmacy may have on the industry. To Amazon’s credit, it recognizes that a pharmacy encounter can be a confusing and non-user-friendly experience for patients given its odd, and sometimes unhappy, marriage of retail, health care, and strict regulatory duties.⁷ Amazon’s obsession with customer experience may force other pharmacy industry leaders to follow suit with an equal focus on improving the overall experience of its patients.⁸

Although Amazon Pharmacy is an attractive solution to what otherwise may look like a stale industry in need of disruption, there are reasons to believe that Amazon Pharmacy may not be a one-size-fits-all solution for patients. A product or service is more than just what it appears to be or do at first glance. In fact, it is a solution for several “jobs to be done.” This idea, popularized by the late Harvard Business School professor and author Clayton Christensen, postulates that a product serves 3 core dimensions: (1) functional,

(2) social, and (3) emotional.⁹ In other words, when someone purchases a car, for example, they do so not merely to travel from point A to point B. In truth, the car may also represent status (eg, Cadillac, Range Rover) or social desirability (eg, Ford F-150, Tesla, Toyota Prius).

Amazon Pharmacy may have a disproportionate focus on the functional component of the pharmacy while ignoring important social and emotional ones. For instance, community pharmacists are often touted as the most accessible health care professionals.¹⁰ Despite

sometimes negative media portrayals,^{11,12} overall patient perceptions of community pharmacists as trusted and desired sources of information are high.¹³ For other patients, the pharmacy itself is a social destination and the in-person experience is of more value than convenient mail order options.¹⁴⁻¹⁷

This demand for multiple “jobs to be done” is likely a function of the various pharmacy customer segments. CDC data indicate that whereas 46.7% of those aged 20 to 59 years used a prescription drug in the last 30 days, the number rises to 85% of those 60 years and older.¹⁸ Compare this with Amazon’s current customer makeup: Almost 50% are aged between 25 and 44 years, and less than 10% are older than 65 years.¹⁹ In Amazon’s current pharmacy offering, assuming that prescription prices are essentially equal for most patients (ie, co-pays), then the battle for customers here will likely be over social and emotional jobs to be done.

Consumer data may truly point to a potential demand for an Amazon pharmacy but may overlook nuanced patient preferences. For example, a prescription refill service with doorstep delivery may be where voice-of-customer data lead Amazon, but what may be missed is the relatively high frequency with which a patient needs to urgently fill a prescription medication with short notice. Moreover, behind-the-scenes services that customers are unaware of, such as PBM prescription claim adjudication troubleshooting, are routinely resolved quickly and without a patient’s knowledge. Queuing problems using dedicated customer service representatives may not be an effective solution for customers who expect these problems solved in a matter of moments while one “waits.”

Lastly, Amazon Pharmacy ignores recent growth in demand for convenient, pharmacy-based clinical services. The number of health care services available via the community pharmacy has grown exponentially over the past decade, and overall satisfaction is high.²⁰⁻²³ The accessibility of the community pharmacy as a place for acute care has been further emphasized during the COVID-19 pandemic as federal government agencies have continually granted traditional pharmacies expanded scope of practice and partnership to improve infectious disease testing and prevention through vaccination.²⁴⁻²⁶ Such a response is driven at least in part by the ubiquity of these health care access points: In the United States, community pharmacies are health care destinations visited by patients more than anywhere else.²⁷

Herein lies the crux of the argument against Amazon Pharmacy as a force of disruption: Amazon Pharmacy imagines that the service that customers desire is a cheaper drug product delivered more quickly, whereas emerging data suggest that what customers desire is more convenient health care access in their community.²⁸ Rather than shifting the pharmacy industry to an Amazon delivery model, patients want a shift of the health care system to a convenient care model.

So if not a source of disruption, is Amazon Pharmacy simply a distraction? More than likely, Amazon's move into the pharmacy space is somewhere between the two. It will likely not be a crushing blow to brick-and-mortar pharmacies as previously predicted. Nevertheless, it does represent a severe threat to traditional mail order pharmacies due to loyalty to the Amazon brand, the convenience of an Amazon platform, and a substantial proportion of the US population already choosing mail order as its primary pharmacy.²⁹ For both mail order and community pharmacy alike, Amazon will challenge the status quo pharmacy customer experience. The most likely of scenarios is not a contraction of brick-and-mortar pharmacy locations throughout America, but instead a forced period of reimagining a better pharmacy experience for patients. This may in the long run not be a bad thing for the pharmacy industry, which has struggled to adapt to 21st century technology. Overall, Amazon Pharmacy's initial splash will likely be more a function of novelty rather than of a true change in patient preferences.

In conclusion, the much-anticipated entry of Amazon into the pharmacy industry will undoubtedly force large chain and mail order pharmacies to revamp their "patient-centered" and "customer-friendly" approaches. As such, this largely represents not a disruption in pharmacy but a "forced opportunity" to improve the overall pharmacy experience. Until the underlying inefficiencies and waste in the drug supply chain, including drug rebating and increasing administrative costs, are addressed, true innovative pharmacy disruption is only fiction. ■

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REFERENCES

1. Terlep S, Stevens L. Amazon buys online pharmacy PillPack for \$1 billion. *Wall Street Journal*. June 28, 2018. Accessed November 27, 2020. <https://www.wsj.com/articles/amazon-to-buy-online-pharmacy-pillpack-1530191443>

- Hartmans A. 'Amazon' wasn't the original name of Jeff Bezos' company, and 14 other little-known facts about the early days of Amazon. *Business Insider*. Updated July 2, 2021. Accessed July 13, 2021. <https://www.businessinsider.com/jeff-bezos-amazon-history-facts-2017-4>
- Easter M, Dave P. Remember when Amazon only sold books? *Los Angeles Times*. June 18, 2017. Accessed November 26, 2020. <https://www.latimes.com/business/la-fi-amazon-history-20170618-htmstory.html/>
- Green D, Meisenzahl M. Jeff Bezos famously embraces failure, here are the biggest flops Amazon has overcome under his watch. *Business Insider*. Updated June 29, 2021. Accessed July 13, 2021. <https://www.businessinsider.com/amazon-products-services-failed-discontinued-2019-3>
- Paavola A. Amazon's PillPack obtains 9 more state pharmacy licenses. *Becker's Hospital Review*. February 6, 2019. Accessed November 26, 2020. <https://www.beckershospitalreview.com/pharmacy/amazon-s-pillpack-obtains-9-more-state-pharmacy-licenses.html>
- Kuchler H. Pharmacy benefit managers face bipartisan criticism. *Financial Times*. April 9, 2019. Accessed November 26, 2020. <https://www.ft.com/content/a65d6fcc-5ade-11e9-939a-341f5ada9d40>
- Carlisle A, Jacobson KL, Di Francesco L, Parker RM. Practical strategies to improve communication with patients. *P T*. 2011;36(9):576.
- Marvin R. How Amazon makes its money. *PC Magazine*. Updated February 14, 2020. Accessed November 26, 2020. <https://www.pcmag.com/news/how-amazon-makes-its-money>
- Christensen CM, Hall T, Dillon K, Duncan DS. Know your customers' "jobs to be done." *Harvard Business Review*. September 2016. Accessed November 26, 2020. <https://hbr.org/2016/09/know-your-customers-jobs-to-be-done>
- Kellner SE. Exploring accessibility of community pharmacy services. *Innov Pharm*. 2015;6(3). doi:10.24926/iip.v6i3.392
- Yanicak A, Mohorn PL, Monterroyo P, Fargiuele G, Waddington L, Bookstaver PB. Public perception of pharmacists: film and television portrayals from 1970 to 2013. *J Am Pharm Assoc (2003)*. 2015;55(6):578-586. doi:10.1331/JAPHA.2015.15028
- Benjamin GC. Ensuring population health: an important role for pharmacy. *Am J Pharm Educ*. 2016;80(2):19. doi:10.5688/ajpe80219
- Reinhart RJ. Nurses continue to rate highest in honesty, ethics. Gallup. January 6, 2020. Accessed July 13, 2021. <https://news.gallup.com/poll/274673/nurses-continue-rate-highest-honesty-ethics.aspx>
- Grew B, Collins JC, Schneider CR, Carter SR. How does perceived cost and value influence pharmacy patronage? a scoping review. *Int J Pharm Healthc Mark*. 2020;14(4):641-663. doi:10.1108/IJPHM-12-2019-0077
- Patel PM, Vaidya V, Osundina F, Comoe DA. Determining patient preferences of community pharmacy attributes: a systematic review. *J Am Pharm Assoc (2003)*. 2020;60(2):397-404. doi:10.1016/j.japh.2019.10.008
- Linton A, Garber M, Fagan NK, Peterson M. Factors associated with choice of pharmacy setting among DoD health care beneficiaries aged 65 years or older. *J Manag Care Pharm*. 2007;13(8):677-686. doi:10.18553/jmcp.2007.13.8.677
- Holiday-Goodman M, Darley WK, Lively BT, Siganga W, Deshmukh-Estoll HC. Investigation of consumer choice of community, mail order, or internet pharmacies. *J Pharm Technol*. 2007;23(1):16-22. doi:10.1177/875512250702300104
- Martin CB, Hales CM, Gu Q, Ogden CL. Prescription drug use in the United States, 2015-2016. National Center for Health Statistics data brief No. 334. May 2019. Accessed November 26, 2020. <https://www.cdc.gov/nchs/products/databriefs/db334.htm>
- Gonzalez NL. How this demographics report will change your Amazon campaigns. *AdBadger*. March 11, 2020. Accessed November 26, 2020. <https://www.adbadger.com/blog/how-the-demographics-report-will-change-your-amazon-campaigns/>
- NCPA 2016 digest: opportunities for community pharmacy in a changing market. National Community Pharmacists Association. 2016. Accessed November 26, 2020. <http://www.ncpa.co/pdf/digest/2016/2016-ncpa-digest-spon-cardinal.pdf>
- Cardosi L, Hohmeier KC, Fisher C, Wasson M. Patient satisfaction with a comprehensive medication review provided by a community pharmacist. *J Pharm Technol*. 2018;34(2):48-53. doi:10.1177/8755122517752158
- Patterson JA, Holdford DA, Harpe SE. Patient preferences for objective quality metrics during community pharmacy selection: a discrete choice experiment. *Res Social Admin Pharm*. 2019;15(6):641-649. doi:10.1016/j.sapharm.2018.08.002
- Patel PM, Vaidya V, Osundina F, Comoe DA. Determining patient preferences of community pharmacy attributes: a systematic review. *J Am Pharm Assoc (2003)*. 2020;60(2):397-404. doi:10.1016/j.japh.2019.10.008
- The expanding role of pharmacists in a transformed health care system. National Governors Association. January 13, 2015. Accessed November 26, 2020. <https://www.nga.org/center/publications/health/the-expanding-role-of-pharmacists-in-a-transformed-health-care-system/>
- Morrison CM, Glover D, Gilchrist SM, et al. A program guide for public health: partnering with pharmacists in the prevention and control of chronic diseases. CDC. August 2012. Accessed November 26, 2020. <https://www.cdc.gov/grand-rounds/pp/2014/20141021-pdf-pharmacist-role-508.pdf>
- Trump administration partners with CVS and Walgreens to provide COVID-19 vaccine to protect vulnerable Americans in long-term care facilities nationwide. News release. HHS; October 16, 2020. Accessed November 26, 2020. <https://www.hhs.gov/about/news/2020/10/16/trump-administration-partners-cvs-walgreens-provide-covid-19-vaccine-protect-vulnerable-americans-long-term-care-facilities-nationwide.html>
- Berenbrok LA, Gabriel N, Coley KC, Hernandez I. Evaluation of frequency of encounters with primary care physicians vs visits to community pharmacies among Medicare beneficiaries. *JAMA Network Open*. 2020;3(7):e209132. doi:10.1001/jamanetworkopen.2020.9132
- Betts D, Korenda L. Inside the patient journey: three key touch points for consumer engagement strategies. Deloitte. September 25, 2018. Accessed November 26, 2020. <https://www2.deloitte.com/us/en/insights/industry/health-care/patient-engagement-health-care-consumer-survey.html>
- Fein AJ. How GoodRx profits from our broken pharmacy pricing system. *Drug Channels*. August 31, 2020. Accessed November 26, 2020. <https://www.drugchannels.net/2020/08/how-goodrx-profits-from-our-broken.html>

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