



Myth Debunked:

Assumptions Regarding Older Adults and Lack of Technology Use Prevents Engagement, Retention, and Enablement

Overview

“Older adults won’t use tech” is a common misconception perceived across the healthcare ecosystem, which resulted in significant under-deployment of digital health technologies for older adults.

The COVID-19 pandemic has accelerated tech adoption, leading to a significant shift in the older adult population relying on technology for vital communication, information, and entertainment needs. Medicare Advantage (MA) plans, and other healthcare entities (e.g., life / long-term care insurers, Medicaid, and healthcare providers) lagged behind this trend and, as a result, are seeing low engagement and retention rates across older US adults¹.

For instance, the best-reported enrollment for digital health products is only 2% for MA, with only 2-4% of that group retained over a 20-day period. As a result, there is a self-fulfilling belief that older adults are “tech-disabled.” Nymbl Science is the first company to successfully deliver a digital mobility program demonstrating significant behavioral changes and high engagement rates within a broad older adult population.

Through Nymbl’s digital mobility program, the company has delivered a 30x better engagement outcome compared to that of the national average for fall prevention programs. In this white paper, Nymbl shares our first-hand experience proving that older adults are, in fact, tech-enabled. Nymbl will also present our evidence-based approach that led to our high retention and engagement outcomes.

¹ Brach JS, Juarez G, Perera S, Cameron K, Vincenzo JL, Tripken J. Dissemination and Implementation of Evidence-Based Falls Prevention Programs: Reach and Effectiveness. *J Gerontol A Biol Sci Med Sci*. 2022 Jan 7;77(1):164-171. doi: 10.1093/gerona/ghab197. PMID: 34244780; PMCID: PMC8751789.

Older Adults ARE Tech-Enabled

In 2021, AARP² reported that 85% of older adults over the age of 50 own smartphones and are continuing to expand their repertoire of tech device ownership. Health/wellness is currently ranked to be the third highest motivation for tech use for those over the age of 70³.

This recent acceleration of smartphone use by older adults proves their interest in integrating digital health technologies into their daily routine to improve their well-being and help them “age in place.” Nymbl recognized this shift and delivered our digital mobile health program using our patented methodology to drive older adults from resistance to intention and finally to action via the Health Actions Process Approach.

This approach is highly effective in driving novel health behavior changes in a large, broad population because it is tailored to the unique traits of older adults. On average, in a population of 10,000 older adults, Nymbl sees engagement by more than 3,000 who consume Nymbl’s content. 1,500 of them initiate a novel health behavior, and 1,000 will enroll in balance training. Given the average enrollment in digital health of 2%, our partners were excited to expand Nymbl to their older adult populations.

As a demonstration of how deeply the program has become ingrained into older adults’ daily lives, when Nymbl recently released a new version of the app, 79% of our users updated their app within 72 hours. This was a strong indicator of tech enablement and engagement of older adults on our platform. These high engagement rates also led to other health benefits. Our users have also reported better engagements with their healthcare providers, greater patient satisfaction, and improved quality of life. Our MA plan partners have benefited as well, having experienced significantly improved self-reported retention and satisfaction within their member population.

If Nymbl is finding this level of success, why is this not experienced everywhere?

² Kakulla, B. 2022 Tech Trends and the 50-Plus. AARP, 2021. Link: www.aarp.org/content/dam/aarp/research/surveys_statistics/technology/2021/2022-technology-trends-older-americans.doi.10.26419-2Fres.00493.001.pdf

³ Tech Usage Among Older Adults Skyrockets During Pandemic. AARP Press Room. 2021. Link: <https://press.aarp.org/2021-4-21-Tech-Usage-Among-Older-Adults-Skyrockets-During-Pandemic>

Most Digital Health Technologies Do Not Address Older Adult Needs

42% of older adults feel that today's technology products have been designed without them in mind. Older adults find most technology apps to be too complex to understand or difficult to integrate into their daily routines. This leads insurers to incorrectly infer that older adults struggle to engage with technology or use it habitually. Several reasons explain why these digital health programs fail to drive engagement in this population.

The first has to do with poor data collection during plan enrollment and the resulting in limited communication channels available for future efforts. Customers are not incentivized properly to provide their personal information due to skepticism about how companies might use their data. As a result, insurers are finding it difficult to gather important personal and health information that would help match them with digital health programs. Despite email being the most cost-effective way to enable communication, MA plans struggle to capitalize due to low capture of email and cell number contact with rates of 25-44% in their membership files. Nymbbl overcame this by implementing a multi-channel communication strategy that provides the necessary educational materials to the older adult population to create trust and build intention. When comparing Nymbbl's user engagement to that of a regional MA plan, Nymbbl found 60% greater engagement of older adults with our emails. Nymbbl even acquired 11-13% more e-mail addresses than our partners.

The second reason for low engagement with digital health programs results from the use of fear-/risk-based language as a means to drive motivation⁴ often "scaring" individuals that if they do not take a certain action, a negative outcome would occur. Nymbbl has found that fear decreases movement in older adults as a means to avoid risks of injury or pain⁵, resulting in reduced mobility. To improve engagement, Nymbbl uses encouraging language instead, effectively motivating older adults to engage in our digital mobility program for the long term. This language also empowers older adults to take control of their mobility by embarking on physical actions and changing their beliefs to view their mobility as a capability rather than a disability.

⁴ Sawchuk TC, Mayer EK. Fear-Avoidance Model. Manual Physical Therapy of the Spine (Second Edition), 2016.

⁵ Brach JS, Juarez G, Perera S, Cameron K, Vincenzo JL, Tripken J. Dissemination and Implementation of Evidence-Based Falls Prevention Programs: Reach and Effectiveness. J Gerontol A Biol Sci Med Sci. 2022 Jan 7;77(1):164-171.

Nymbly uses language to direct its messaging to solve the pain points of older adults rather than those of physicians, insurers, and/or family members. Our messaging empowers older adults to take action instead of using “fear-based” language (i.e., What if I fail?) to motivate older adults to take action. Nymbly found this to effectively impact behavioral change as it encourages self-efficacy. By reframing their “disability” into a “capability,” older adults are more likely to respond to a certain call to action.

The third reason blamed for low engagement is the lack of broadband internet access. In January 2021, OATS released a report in partnership with the Humana Foundation that stated 22 million (42%) American seniors do not have in-home internet access^{6,7,8} especially those in remote or rural locations. This can significantly impact how older adults engage with technology, as well as limit their access to critical digital health interventions. This lack of accessibility to affordable broadband internet can serve as a primary bottleneck restricting older adults’ technology usage. As a result, insurers and MA plans should keep these barriers in mind and help to ease these challenges when developing digital health technologies for older adults.

Nymbly overcomes this barrier by working with all forms of internet access (if you can search Google, you can participate in Nymbly) and avoids the need for high-speed connectivity altogether. Finally, many digital technologies cannot function across different operating systems or screen sizes, implementing additional adoption and engagement barriers for older adults. For instance, many digital health apps are formatted to larger screen sizes, making it challenging for older adults to engage in the functionalities on smaller smartphone screens. Some also require additional log-ins and authentication features which adds additional complexities. As a result, the use of non-mainstream operating systems limits options for popular apps that are designed for iOS and Android devices with up-to-date software. For these reasons, most digital health programs frequently experience low 30-day retention rates of only 3.53% on average of the older adult population⁹. These low rates were also observed even with the top 10% of health and wellness apps on the iOS store only engaging 7.3% of the older adult population and less than 10% engaging with apps at least once per week for four weeks. It is easy for healthcare insurers, and MA plans to believe older adults may not be interested in participating in digital health programs without taking these bottlenecks into consideration.

⁶ Plunkett LB. It's Time to Address Broadband Connectivity Issues for Older Adults. NCOA. 2021. Link: <https://www.ncoa.org/article/its-time-to-address-broadband-connectivity-issues-for-older-adults>

⁷ Lee HY, Choi EY, Kim Y, Neese J, Luo Y. Rural and Non-Rural Digital Divide Persists in Older Adults: Internet Access, Usage, and Perception. *Innov Aging*. 2020 Dec 16;4(Suppl 1):412–3. doi: 10.1093/geroni/igaa057.1329.

⁸ Svaldi A. Far more Coloradans lack broadband than what federal government is acknowledging, study claims. *The Denver Post*. 2021. Link: <https://www.denverpost.com/2021/06/07/colorado-broadband-internet-fcc/>

⁹ Attention Retention! 2021 app retention benchmarks.” *infograms/app-retention-report-2021*, AppsPlyer, 2021, <https://www.appsplyer.com/infograms/app-retention-report-2021/>. Accessed 1st September 2022.

Nymbl's Health Action Progress Approach for the Unique Needs of Older Adults

Nymbl's user-centric, CBT-based strategy was found to be highly efficacious, leading to significantly greater retention and engagement rates compared to other digital health programs. As a result, Nymbl was successful in driving up engagement rates by addressing key issues such as the anxiety of aging, coping self-efficacy, and the need for an in-home solution. These were critical motivators required for older adults to engage in a digital mobility program. In a recent population deployment study of 1000 older adult participants, Nymbl was able to enroll 100 participants, begin balance training with 70 participants, and found that 30 participants stayed with the program by day 5.

As a result, Nymbl's 30-day retention is reported to be 40% which is a 10-20x advantage compared to other wellness app industry benchmarks. By building apps according to our growing novel science of older adult behavioral change, Nymbl has a track record of developing digital health tools that effectively encourage older adults to increase effective health actions.

The first stage of our approach builds intention through activation. This is accomplished by examining the pain points, surfacing subjects' preconceptions, and other barriers they are experiencing. As a result, Nymbl improved our engagement rates by 3-5x that of our partner's performance in the digital health realm, primarily by building intention through our multichannel communications. Nymbl has implemented a communication strategy that provides the necessary educational materials to our older adult population while creating trust, which builds intention and ultimately, engagement. Nymbl's approach has resulted in 5X greater enrollment compared to our partners and was able to report 10X engagement compared to that of the top 10% of health and wellness apps amongst the older adult population.

Conclusion

Nymbbl engages older adults early on in their mobility training by offering greater value to them which, in return, has improved our MA plan partner's member experience and retention rates. As a result, Nymbbl had a 10% enrollment rate within 90 days and a 30x better engagement outcome compared to that of the national average.

Notably, our users have also reported improvements in their mobility within 30 days, which is significantly quicker than the traditional 6-8 months required for programs with a strength-based focus. These results derive from designing our digital program to fit the needs of the older adult population. Empowering them to take ownership of their healthcare journey, address their pain points rather than those of their care team, use encouraging language to motivate change, and empowerment to start communication to develop trust and value, which in return can drive health actions.

Another critical factor to Nymbbl's high engagement rates is that our program can be implemented at home. Many fall prevention programs require older adults to leave their homes, yet 90% of older adults prefer to conduct balance training on their own time at home.

Nymbbl's users are not burdened with additional barriers associated with attending fall prevention programs in person which can be overwhelming to many. MA plans are encouraged to adopt a similar strategy as they work to develop and increase their retention and engagement in new digital technologies for older adults.





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