

## **2023 ALUCA Turks Life Insurance Scholarship 1<sup>st</sup> Runner-Up Paper**

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### **Q4. Redefining the Role of Life Insurance**

Life insurers can play a broader role, moving beyond merely delivering on the basics of coverage, to providing solutions that will reduce and even prevent risks.

Discuss how life insurers can use advanced digital and enhanced data capabilities to promote lifestyle changes and/or risk identification, tracking and management so as to deliver risk prevention services that resonate with consumers.

## **A New Era of Life Insurance**

There is an undeniable logic for life insurers to involve themselves in preventative and predictive health solutions for their customers in the pursuit of a common goal; to live longer, healthier lives thereby producing a healthier book of business, reducing claims costs and improving sustainability. The advancements in digital and data capabilities in recent years has the potential to drastically change the life insurance landscape. The traditional premise of paying claims doesn't suffice anymore and customers are asking insurers to involve themselves in reducing and even preventing the risks they encounter throughout the course of their lives (1). Life Insurers have found themselves in an identity crisis and are being called upon by consumers to redefine their role with the chance to gain a deeper understanding of customer needs and provide effective risk solutions that provide a 'win win' for the customer and insurer.

According to Bain Insurance Consumer Insights Survey 2022 almost 70% of Australian consumers were open to using risk prevention services from their insurer. The top 5 risk prevention services desired by customers were: Rewards for healthy living, health check-ups or remote diagnostics, support to find doctor, scheduling of appointments, digital access to personal health records and reminder of prevention measures. Almost 70% of Australian consumers surveyed indicated that they were open to sharing personal, health, financial or home security data with their insurance provider and 59% globally wanted life insurers to reward them for healthy living. (1)

## **Prevention is Better than Cure**

The saying '*prevention is better than cure*' has been around since at least the 17th century according to Oxford (2) and is still a fundamental principle of modern health care today. Preventing an illness from occurring is more effective than treating it after it happens and it's more economical for life insurers too (3).

There are three stages of prevention and opportunities exist for life insurers to play an active role at each stage.

Primary prevention - is focused on providing our bodies with the basic foundations of health that we all need. This includes a good diet, adequate sleep and enough movement for optimal wellbeing.

Secondary prevention - involves the early detection of conditions that we may not know we have and helps to reduce severity and impact. This includes preventative screening tests that are recommended based on age, gender and specific risk factors.

Tertiary prevention - involves the management of known conditions to reduce complications or progression of that condition by following the advice of medical professionals (3).

## Australia's Report Card

According to data from Australia's National Health Strategy 2021 – 2030; 47% of Australians have one or more chronic conditions, 67% of adults are overweight or obese, one in five adults experience high or very high levels of psychological distress, one in five experience high blood pressure and up to 60% of Australians have less than adequate health literacy

(4). With 80% of chronic diseases being preventable (5) it makes sense for life insurers to support customers with viable health solutions that improve their overall wellbeing and longevity.



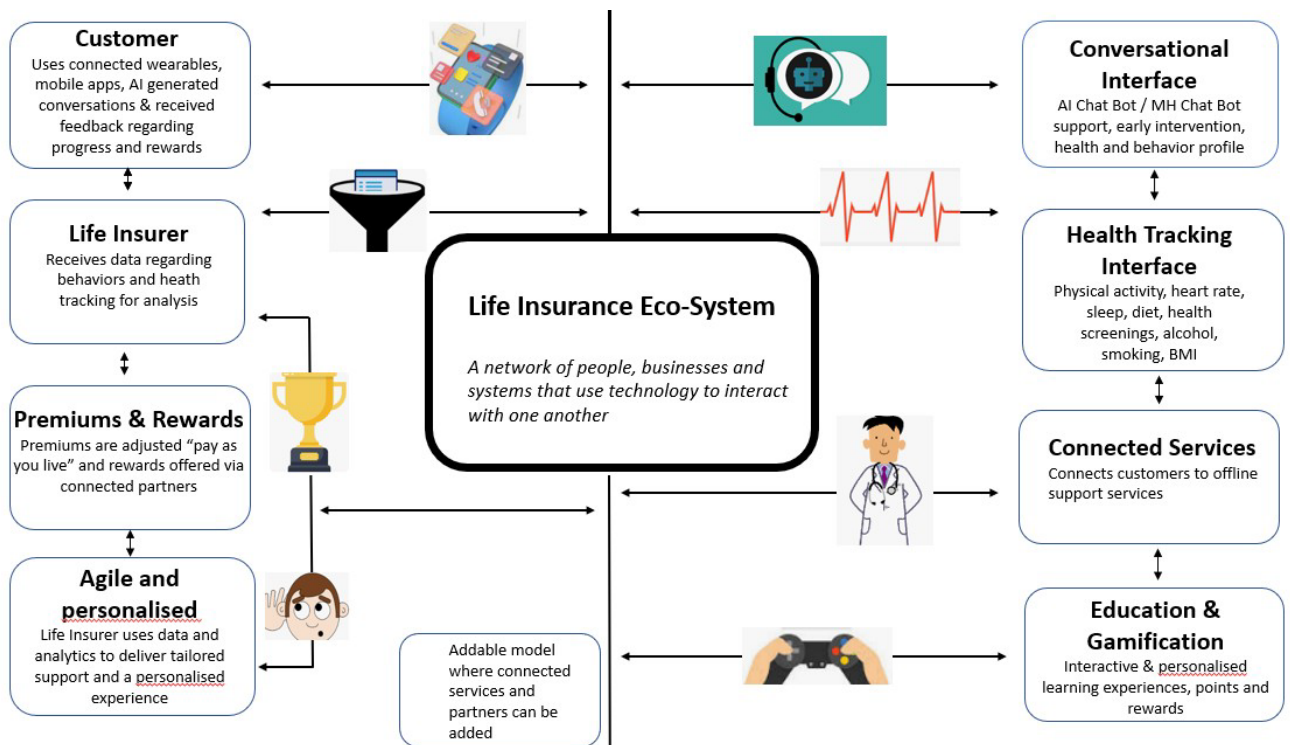
Informed by Australia's Health Tracker, Mitchell Institute. Australia's National Health Prevention Strategy 2021- 2030 (8).

Some Australian life insurers are already offering promising risk prevention solutions to their customers. AIA's Vitality Program incentivises exercise, healthy eating and regular health checks through its rewards program and discounts on premiums. Customers can track their activity and points on a mobile app and earn extra points by linking the app to sleep tracking and mindfulness (6). MLC's Vivo program supports wellness, health and recovery with fitness consultations, nutrition consultations, confidential expert medical opinions, coaching to support mental wellbeing and connecting customers to specialist care (7). TAL's Health Sense offers discounted premiums for customers that maintain an optimal BMI and undergo preventive screening tests (8). Preventative programs built around rewards and premium discounts for engaging in healthier lifestyle habits and undergoing regular health screenings are rightfully gaining momentum. There is the opportunity for life insurers to build upon these solutions with advanced digital and data technologies to develop an even more sophisticated model of preventative and predictive health that is tailored to an individual.

## Creation of an ‘Eco System’

Whilst researching this paper I came across the concept of a ‘digital eco-system’ being used in preventative health for non-communicable diseases (NCD) in school aged children in Vietnam using an education model and digital application. The elements of the ‘Fit for the Future’ program (9) include education via e-learning, collection of user data via artificial intelligence to provide positive messages and timely suggestions to encourage and motivate activity, a balanced diet and adoption of other healthy behaviours. The program specifically leverages smart phones and wearable devices to collect insightful data on overall effectiveness. Behaviour tracking and de-identified data in relation to risk behaviours is fed back to teachers, authorities, students, and parents with the aim of providing tailored knowledge, skills and support to practice NCD prevention. I was inspired to explore how such an ‘eco-system’ might be adapted to apply to life insurance.

Achieving a ‘life insurance eco- system’ would involve a network of people, businesses and systems that use technology to interact with one another. A system built around prevention, prediction, timely support, reward and connected services that leverages artificial intelligence (AI) and human interaction is the proposed model. In order to build a solution that truly resonates with consumers it must be convenient, insightful, educational, motivational, rewarding and adaptable based on consumer inputs in order to be engaging and accommodate changing needs. The proposed model below seeks to achieve these goals.



Let's consider each aspect of the proposed model with the overall concept being that the life insurer provides the customer with tools designed to support and improve their health and customers are subsequently rewarded for engaging in healthier habits and sharing data with their insurer. The eco system would remain flexible and adaptable with the ability to integrate supportive services as they evolve.

## **Mobile Health Screenings & Education**

The proposed 'eco system' leverages mobile applications that would have the capability to screen for risk factors in relation to some of the most common chronic conditions including stroke, heart disease, mental illness and diabetes. Combined with AI driven predictive analytics allowing for more accurate identification of customers with higher risk factors will allow targeted disease prevention and tailored intervention. Specific education modules would also be made available via mobile applications and opportunities to connect customers to services aimed at reducing or managing risk factors where identified. By identifying risk factors and early signs of diseases that may not show symptoms or complications yet, mobile preventive health screening plays a crucial role in the 'eco system' by maintaining overall well-being.

## **Wearables**

Smart watches form part of the 'eco-system' from both a preventative and predictive health perspective by allowing customers to take charge of their health and wellbeing right from their wrists. From a preventative aspect, smart watches can be used to encourage active lifestyles via activity trackers, send reminders when customers have been sedentary, providing short workouts, dietary advice, calorie intake and apps for mental wellbeing (10).

A recent analysis of research supported that wearables were effective in increasing physical activity and supporting modest weight loss with gains durable for at least six months (11). From a predictive perspective having the smart watch integrated into the model will provide insights into wellbeing analysed by AI that drives actionable care supported by data. The watch can be programmed to track sleep, diet, physical activity and heart rate providing insights to some of the key elements of overall health and triggering warnings to seek advice where abnormalities are detected. One study even demonstrated that wearables can be leveraged for stress detection and resilience assessment via measuring heart rate variability (12). Understanding stress status could prompt actions to manage psychological well-being.

## **Connected Human Services**

Connecting customers with human services is also an integral part of the 'eco-system'. A hybrid model combining AI and human intelligence when and where required. Customers have expressed a desire to be connected with services that support their health (13) such as medical professionals, financial advisers and nutritionists. Connecting customers with

medical professionals for preventative health screenings and specialist care, financial advisers to support financial wellbeing (which we know is closely connected to psychological wellbeing (14)) and nutritionists to support healthy diet and exercise for these critical

human interactions and where AI thresholds are exceeded will be key to the model.

### **Gamified Wellness Programs**

Gamification involves the use of game techniques and elements in a non-game context to influence the behaviour of individuals and motivate them to meet specific goals (15,16). Gamified wellness programs have been included in the proposed 'eco-system' as a way to reach younger customers with research showing millennials prefer learning through gamified platforms (17).

The games could feature educational aspects of preventative health and combined with AI driven analytics, programs could be tailored at a personal level to those with higher risk factors for certain conditions or where high-risk behaviours were identified. For example, a customer's connected wearable may indicate that optimal activity levels are consistently not reached, putting them at higher risk of developing a chronic illness. The model would then engage the customer in a gamified wellness program specifically targeting improvements in activity level. Customers would be incentivised by rewards, badges, points, scorekeeping, and competition.

### **Chat Bots**

AI Chat Bots have traditionally been used in customer service however, in recent years more sophisticated Chat Bots have evolved in the health space to provide support, guidance and resources through a conversational interface. Chat Bots have been incorporated into the proposed 'eco-system' to replicate human interactions and respond to user inputs to deliver tailored care. More recently Mental Health Chatbots have gained traction in healthcare targeting a range of mental health concerns including anxiety, depression and reactions to stress where consumers are most concerned and where most disability claims arise (18).

Swiss Re have entered a partnership with a digital mental health provider, Wysa to create an insurance- specific app which helps consumers better track their mental wellbeing and improve links to insurers' existing support networks, such as therapy providers or Employee Assistance Programmes (19). Leading UK health insurer Vitality shared results of a successful pilot with WYSA and reported a 30% - 40% reduction in anxiety and depression for their members after 28 days (figure 1 & 2) (20).

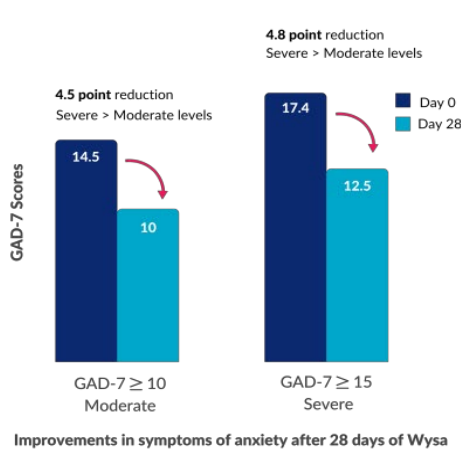


Figure 1 WYSA 2023

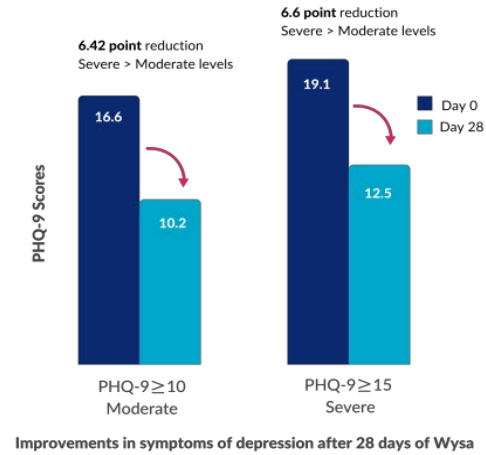


Figure 2 WYSA 2023

Chat bots and more specifically, mental health chat bots provide life insurers with the opportunity to engage in preventative solutions for one of the highest causes of disability and the leading cause of total and permanent disability claims in the Australian life insurance industry (21). Early intervention and accessible support before a condition becomes clinical and providing warning signals that direct a user to seek specialist assistance when required is critical to the ‘eco-system’.

**“The Experiment” – My Own Experience with a Chat Bot**

As a chat bot sceptic, I queried whether such technology could feasibly be incorporated into the life insurance ‘eco-system’. As part of researching this paper I download the WYSA mental health application from the App Store (22) and used it over a four-week period.

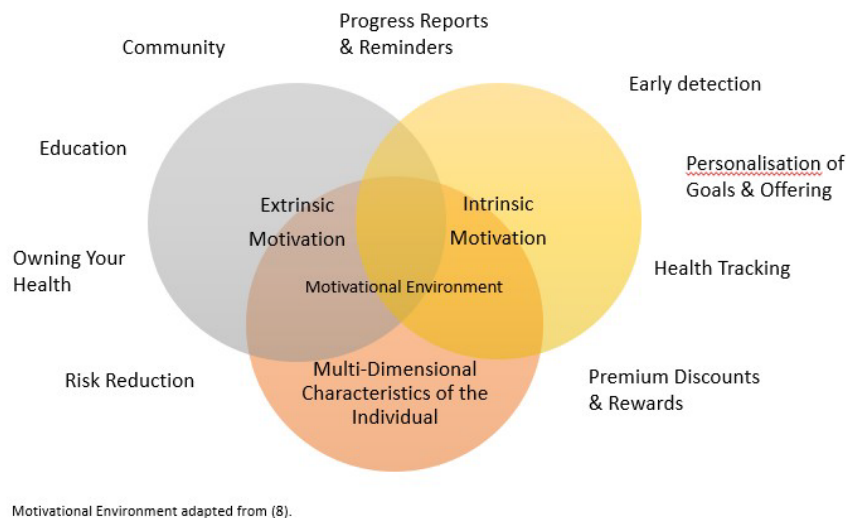
I found the application to be ultimately convenient, available 24/7, accessible with freely available conversations and content, effective in responding to my concerns and providing strategies to improve wellbeing. My experience indicated that utilisation of a mental health application in the life insurance setting could have a positive impact on addressing customers mental health concerns before they become clinically significant. Mental health applications could provide access to resources for those who would perhaps not otherwise seek care or timely care and have the potential to reduce the overall impact and severity of a condition as well as the impact of mental health claims on the life insurance industry.

**Motivation and Reward**

For customers to engage in preventative health solutions offered by life insurers we need to consider the principles of motivation that will provide a solid base to build upon for better health outcomes. There are three key components of motivation: extrinsic motivation which is an external condition or stimulus usually in the form of a reward which is meant to compel an individual to act, intrinsic motivation which is an internal reason or stimulus for an individual to act in a desired way (e.g. a desire for optimal health) and the motivational environment which is

the optimal set of conditions whereby an individual engages and sustains a desired behaviour (23).

Whilst external motivators like rewards, discounts and financial incentives might encourage a person to act initially, they won't motivate a person to sustain a long-term behaviour. Life insurers need to tap into a customer's intrinsic motivators i.e. the desire for optimal health. Studies have consistently shown that intrinsic motivation leads to greater wellbeing and enhanced performance and that intrinsic motivation can be encouraged by building environments that promote: autonomy, relatedness and competence (24). In the life insurance 'eco-system' setting, a model that provides customers with choices about how they engage, connects their efforts to a higher cause i.e. health and longevity and that equips customers with the skills and opportunities to execute healthy living solutions will create the motivational environment for positive health related behaviour change.



## The Fine Print

The utilisation of advanced digital and data capabilities is not without its challenges and life insurers need to understand the risks and how to best mitigate them. Data privacy and security will be a challenge with the increasing volume of customer data stored in the cloud making it vulnerable to cyber-attacks and requiring robust security measures. The collection and use of customer data via wearables and app interactions will require transparency and customer consultation to address concern and mistrust. For example, life insurers will need clear protocols and communication to explain how the use of any app, linked device, utilisation of a connected service or information obtained via a customer's engagement with a wellbeing program will impact the underwriting of future risk. Maintaining awareness of any increases in operational risk due to increased reliance on technology and awareness of the changing regulatory environment whilst working closely with the regulators to ensure compliance will be also be key to the success of the transformation.



## **A New Value Proposition**

Understanding the customer and finding the right tools to support their changing needs in a digital environment has never been more important. Shifting the focus from traditional value propositions around providing financial support in a time of need to supporting people to live longer, healthier, more productive lives will resonate with customers by tapping into their intrinsic motivations. By embracing advanced digital and data capabilities, life insurers have the opportunity to engage with customers like never before by offering preventative health services and solutions whilst more effectively managing their own costs and building a more sustainable industry. Successful implementation of a life insurance 'eco- system' would transform the current landscape of our industry as well as the customer's life insurance journey.

## References

1. Naujoks, Schwedel, Brettel (2023); Customer Behaviour and Loyalty in Insurance: Global Edition 2023. Retrieved (August 2023); <https://www.bain.com/insights/customer-behavior-and-loyalty-in-insurance-global-edition-2023/>
2. Oxford Reference Online: Retrieved (August 2023): <https://www.oxfordreference.com/display/10.1093/oi/authority.20110803100344375;jsessionid=DE5DAE3B3D3FC33F4AAC84A06EDFC429>
3. Zurich (2023): Why Prevention is Better than Cure. Retrieved (August 2023): <https://www.zurich.com.au/latest-news/magazine/my-wellbeing-hub/why-prevention-is-better-than-cure.html>
4. Australian Government National Preventative Health Strategy 2021 – 2030. Retrieved August 2023: [https://www.health.gov.au/sites/default/files/documents/2021/12/national-preventive-health-strategy-2021-2030\\_1.pdf](https://www.health.gov.au/sites/default/files/documents/2021/12/national-preventive-health-strategy-2021-2030_1.pdf)
5. Katz D. et al (2018). Lifestyle as a Medicine: The Case for a True Health Initiative. Retrieved August 2023 from: <https://pubmed.ncbi.nlm.nih.gov/28523941/#:~:text=Approximately%2080%20of%20chronic%20disease,all%20influenced%20by%20lifestyle%20choices.>
6. AIA (2023) AIA Vitality. Retrieved August 2023 from: <https://www.aia.com.au/en/health-and-wellbeing/aia-vitality>
7. MLC (2023) Vivo. Retrieved August 2023 from: <https://www.vivowellbeing.com.au/vivo-services>
8. TAL (2023) Health Sense. Retrieved August 2023 from: <https://www.tal.com.au/insurance-products/tal-health-sense>
9. Hai T et al (2022). Frontier Digital Technology: Transforming Noncommunicable Disease Prevention Among Youth. Retrieved August 2023 from: [https://www.thelancet.com/pdfs/journals/lanwpc/PIIS2666-6065\(22\)00205-X.pdf](https://www.thelancet.com/pdfs/journals/lanwpc/PIIS2666-6065(22)00205-X.pdf)
10. Northwest Primary Care (2023). Retrieved August 2023 from: <https://www.nwpc.com/how-smartwatches-could-improve-your-health/>
11. Ferguson et al (2022). Effectiveness of wearable activity trackers to increase physical activity and improve health: a Systematic Review of Systematic Reviews and Meta Analyses. Retrieved August 2023 from: <https://www.thelancet.com/journals/landig/article/PIIS2589-75002200111-X/fulltext>
12. Shiffer E (2023). Could Smart Watches Solve the Mental Health Crisis. Retrieved August 2023 from : <https://www.webmd.com/mental-health/news/20230613/could-smartwatches-solve-the-mental-health-crisis#:~:text=In%20a%20recent%20study%2C%20they,wearable%20devices%2C%E2%80%9D%20Hirten%20said>
13. Callahan S. et al (2022) McKinsey and Company. Still Feeling Good: The US Wellness Market Continues to Boom. Retrieved August 2023 from:

- <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/still-feeling-good-the-us-wellness-market-continues-to-boom>
14. Ryu S and Fan L (2022) The Relationship Between Financial Worries and Psychological Distress amongst US Adults. Retrieved August 2023 from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8806009/#:~:text=Individuals%20who%20were%20employed%20and,the%20highest%20household%20income%20category>.
  15. Wassink. B, Russignan. L (2019); Implementing a Gamifications Strategy. The Importance of a Winning Game in Insurance. Retrieved (August 2023); [file:///C:/Users/s0050347/ChromeDownloads/ey-gamification-brochure-digital-final%20\(1\).pdf](file:///C:/Users/s0050347/ChromeDownloads/ey-gamification-brochure-digital-final%20(1).pdf)
  16. Popilian-Yona M (2022). How Insurers Can Boost Wellness Program Engagement with Gamification. Retrieved August 2023 from: <https://www.binah.ai/how-insurers-can-boost-wellness-programs-with-gamification/>
  17. Jain A, Dutta D (2019). Millennials and Gamifications: Gurilla Tactics for Making Learning Fun. Retrieved (August 2023): <https://journals.sagepub.com/doi/pdf/10.1177/2322093718796303>
  18. Financial Services Council Media Release (2020). Life Insurance Awareness Week: Community Day – Data Reveals The Mental Health Burden Shared Across the Nation. Retrieved August 2023 from: [file:///C:/Users/s0050347/ChromeDownloads/20200730\\_FSC%20Media%20Release\\_data%20reveals%20the%20mental%20health%20burden%20shared%20across%20the%20nation%20\(1\)%20\(2\).pdf](file:///C:/Users/s0050347/ChromeDownloads/20200730_FSC%20Media%20Release_data%20reveals%20the%20mental%20health%20burden%20shared%20across%20the%20nation%20(1)%20(2).pdf)
  19. Swiss Re (2023). Swiss Re and Leading Mental Health Platform Wysa, Create Mental Wellbeing App Designed Specifically for Insurance (2021). Retrieved August 2023 from: <https://www.swissre.com/reinsurance/life-and-health/solutions/swiss-re-wysa-mental-wellbeing-app.html>
  20. Crosby J (2023). A Role for Insurers to Boost Mental Health and Wellbeing. Retrieved August 2023 from: <https://www.swissre.com/reinsurance/life-and-health/l-h-risk-trends/boost-mental-health-wellbeing.html>
  21. Financial Services Council Media Release (2020). Life Insurance Awareness Week: Data Day – Detailed Data Reveals Top Causes of Claim for the Industry. Retrieved August 2023 from: [file:///C:/Users/s0050347/ChromeDownloads/20200729\\_FSC%20Media%20Release\\_Detailed%20data%20reveals%20top%20causes%20of%20claim%20for%20the%20industry.pdf](file:///C:/Users/s0050347/ChromeDownloads/20200729_FSC%20Media%20Release_Detailed%20data%20reveals%20top%20causes%20of%20claim%20for%20the%20industry.pdf)
  22. WYSA Mental Health Application (2023). Downloaded from the App Store July 2023.
  23. Feyrer-Melk. S (2018). When it Comes to Health Behaviours and Sustaining Change, traditional Incentives May Not Have the Results You Were Hoping For. Retrieved August 2023 from: <https://nudgecoach.com/blog/incentives-motivation-and-engaging-members-in-health-programs>

24. Sutton J (2021). How to Increase Intrinsic Motivation (According to Science).

Retrieved August 2023 from: <https://positivepsychology.com/increase-intrinsic-motivation/>