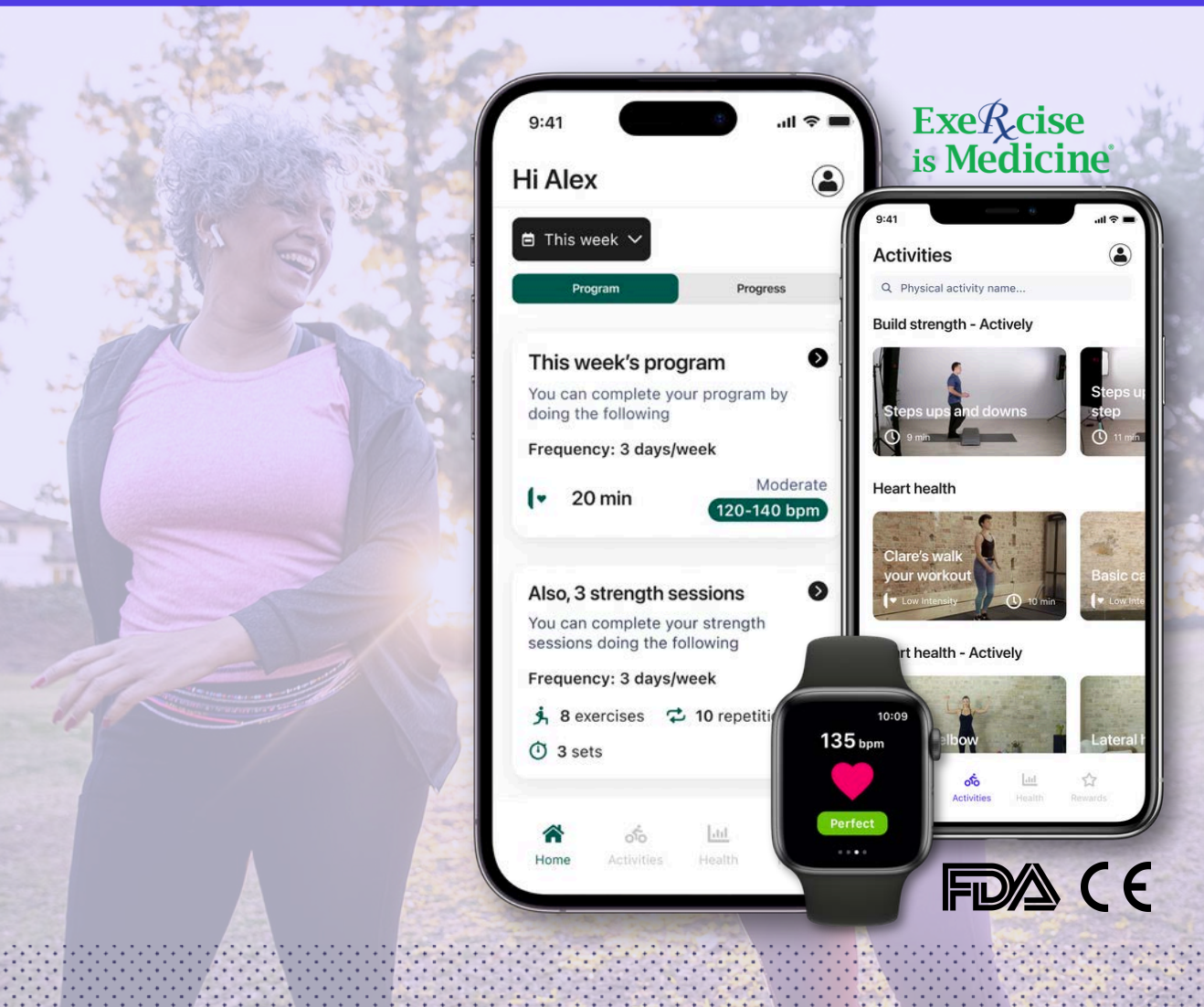


EXI<sup>®</sup>

Anything is  
**everything**  
exercise intelligence



Enhancing Physical Activity Levels among  
Least Active Employees: The Impact of  
EXI within a US Self-Insured Workplace

# Overview

US-based healthcare organization Logan Health has always been highly proactive in its embrace of Exercise is Medicine<sup>®</sup> – the global health initiative encouraging physicians and other healthcare providers to include physical activity in patients' treatment and/or to refer patients to evidence-based activity programs.

But what about Logan Health's own team?

In 2023, seeking to lead by example, Logan Health partnered with EXI (Exercise Intelligence) to bring a new dimension to its employee wellness scheme. Leveraging the 24/7 power of technology, it aimed to help its team members increase their activity levels and tap into the many health benefits of being active.

Selecting those with the most to gain from the program – inactive individuals, often with health conditions – participants were split into two cohorts to explore the impact additional wellness coaching had on program success.

**All participants increased their steps significantly over the intervention. Still, the greatest improvements were seen among those who had previously been the least active and, therefore, had the most to gain.**

## Cost of Employee Health Conditions and Inactivity:

- ✓ Physical inactivity costs employers an estimated US\$300bn globally per year.
- ✓ Productivity losses due to chronic illness and injury cost employers an estimated US\$2,945 per employee, per year.

## Key Outcomes

- ✓ All participants: 32% increase in steps at week 12 and 26% increase in steps sustained at 26 weeks.
- ✓ Apple Watch + wellness coach: 46% increase in steps at week 12.
- ✓ Previously least active participants: 51% increase in steps at week 12 and 42% increase in steps sustained at 26 weeks.
- ✓ Previously more active participants: 23% increase in steps at week 12 and 18% increase in steps sustained at 26 weeks.

## The Value of Employee Wellness

Physical inactivity has a high cost burden to employers: an estimated US\$300bn a year globally by 2030, according to the World Health Organization (WHO) Global Status Report on Physical Activity [1].

Developed countries bear a large proportion of that financial burden. In the United States, productivity losses linked to absenteeism and presenteeism from chronic illness and injury cost employers an estimated US\$2,945 per employee per year [2] – a figure that includes sick days, short-term disability, long-term disability, and impaired job performance.

The correlation with lack of physical activity is clear, given the many known mental and physical health benefits of being active. Yet still, fewer than 40% of Americans meet the US physical activity guidelines for aerobic exercise and resistance training.

The need to get more people active sits at the heart of Exercise is Medicine<sup>®</sup> (EIM) – a global health initiative co-founded in 2007 by the American College of Sports Medicine (ACSM) and the American Medical Association, now managed by the ACSM. Rooted in the belief that physical activity is integral to the prevention and treatment of many medical conditions, EIM aims to make physical activity assessment and promotion a standard in clinical care.

Logan Health – the operator of 6 hospitals and 68 outpatient clinics in Montana – is one organization blazing an EIM trail. Executive Director Dr. Brad Roy of the Logan Health Medical Fitness Centers is the editor-in-chief of the ACSM's Health & Fitness Journal and, as such, a key advocate of Exercise is Medicine<sup>®</sup>.

On-site at the Kalispell hospital, a fully integrated health and fitness facility – the Logan Health Medical Fitness Center – comes complete with a swimming pool, walking track, and highly skilled wellness coaches. Patients referred by the hospital's physicians can, therefore, have their exercise-based rehab needs met on-site.

Physical inactivity costs employers an estimated

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globally per year.

Productivity losses due to chronic illness and injury cost employers an estimated

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[1] <https://www.who.int/publications/i/item/9789240059153>

[2] <https://www.ibiweb.org/resources/cost-of-poor-health-infographic-2019-data#>

## The Role of Technology

Yet despite this, 2023 data revealed that only 31% of the Logan Health Medical Center (LHMC) staff were members of the Logan Health Medical Fitness Center (LHMFC).

Many of those not participating did not meet the physical activity recommendations. Additionally, resiliency and burnout challenges have significantly increased over the past two years among healthcare professionals in the United States, with over half of all physicians and one-third of nurses experiencing such challenges and, to a slightly lesser degree, other healthcare workers.

– Consultant

To address these challenges, the LHMFC team began to explore new ways to get hospital employees moving. Technology, and specifically digital therapeutics, quickly came to the fore.

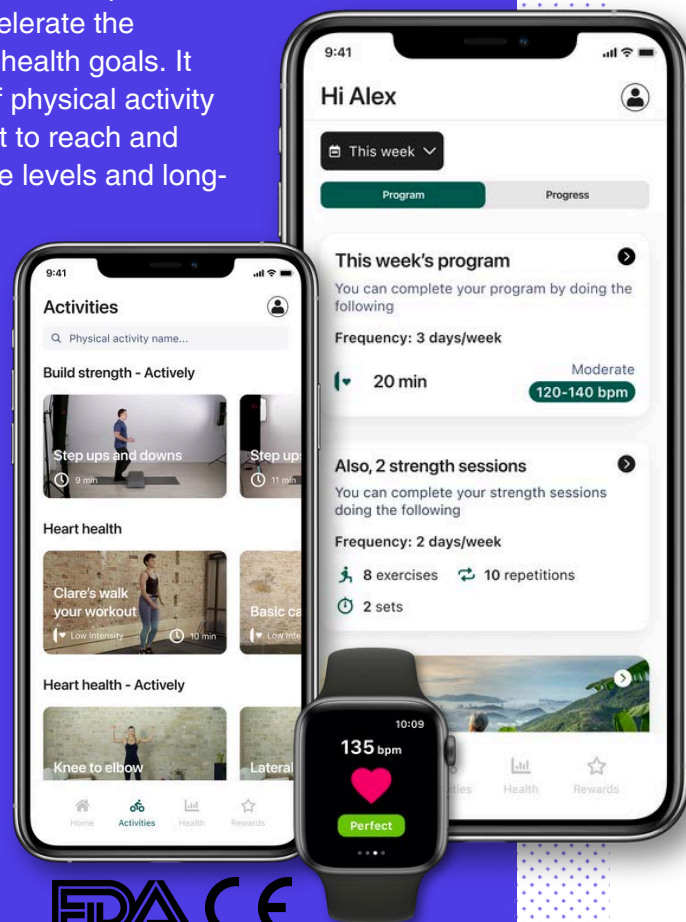
EIM isn't just about referring people to evidence-based exercise programs and professionals in convenient exercise facilities/places; it's also about using self-directed resources such as smartphone apps and digital activity trackers.

This is where EXI comes in.

EXI is FDA-approved medical software that helps millions of people engage with activity and accelerate the achievement of their most challenging health goals. It unlocks the health-enhancing power of physical activity for those who need it most: the hardest to reach and engage, individuals with low confidence levels and long-term health conditions.

In January 2023, EXI was appointed as a strategic partner to the ACSM's EIM program – the first tech platform to incorporate Exercise is Medicine<sup>®</sup> protocols. In July 2023, EXI was implemented in a pilot employee wellness intervention at Kalispell's LHMFC.

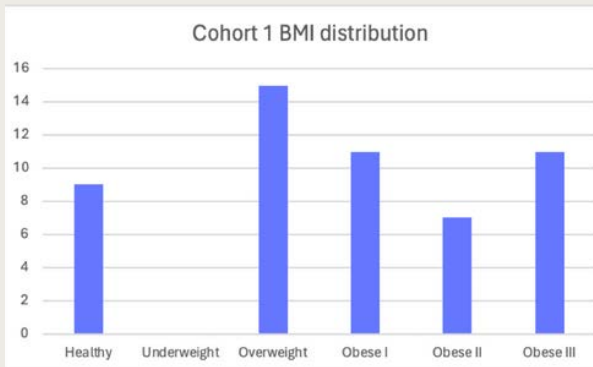
The goal: to harness EXI's evidence-based digital software to promote physical activity and health behavior change among the Logan Healthcare System workforce, to in turn enhance overall health and wellbeing.



## Cohorts for Data Comparison

Where many employee wellness programs engage the already-fit population, this voluntary Kalispell pilot was conceived to activate the inactive – that is, people whose health and wellbeing would most benefit from getting active. Incentives were, therefore, offered to encourage participation, and applicants were triaged according to their health conditions and activity levels.

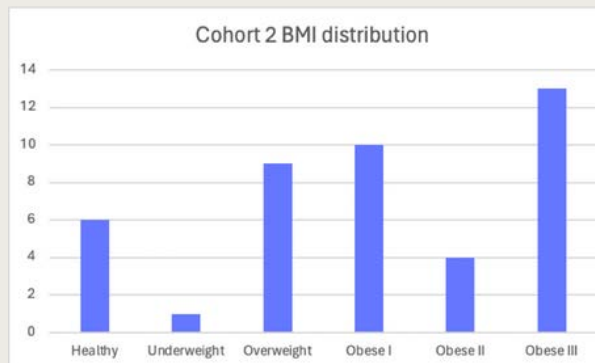
Of the 105 participants selected, 57 people were placed into Cohort 1. With a mean age of 50 and a mean BMI of 33, 91% of the group were female and 9% were male.



This first group used EXI and also received an Apple Watch as a reward for participation, at no cost to themselves provided they followed and completed their program for the full six months. They had an initial in-person coaching session, followed by regular accountability meetings with LHMFC wellness coaches.

The remaining 48 participants formed Cohort 2. With a mean age of 46 and a mean BMI of 33, 96% of the group were female and 4% male. Owning a wearable was a prerequisite for Cohort 2, and the group’s mean step count before the pilot began was higher than in Cohort 1’s.

This group also used EXI but had limited wellness coaching – just the initial session to set goals and a three-month progress session. They were, however, entered into 4 x US\$500 cash prize draws over the six months, provided they were actively engaged in the program.



The pilot began at the end of July 2023, enrolling Cohort 1 first. Cohort 2 came onboard in the second week of August 2023.

## The Power of the Apple Watch

Once participants were onboarded with EXI's easy-to-use app, each received a physical activity program based on their unique needs – one that safely applied ACSM and WHO medical guidelines for multiple chronic conditions, medications, and activity levels to ensure patient safety.

Based on the three parameters of frequency, intensity and time, that personalized program started as low as 3 days x 10 minutes of low-intensity activity a week, if needed. The program adapted weekly to the individual's changing health status.

Along the way, multiple embedded behavior change methodologies tapped into personal motivations to empower sustainable lifestyle changes.

Knowing they could keep their Apple Watch as long as they continued to complete their program proved a highly motivating driver of behavior change for Cohort 1.

Two years ago, I changed from a job that was a little more energetic to a job that was in the office just sitting down. I started to lose my fitness level. I was getting short of breath just going upstairs.

I was waiting for something to come along to motivate me and I got an email that said this program was going to be starting and you could get an Apple Watch, but you'd have to give it back if you didn't participate in the exercises. It was exactly what I needed – something externally motivating to get me started.

When you get to be that big and out of shape, everything hurts, so it was it was difficult at first. But I just kept doing it because I didn't want to lose the Watch. Without the Watch, I wouldn't have done it.



## The Importance of Accountability

A Cohort 1 participant with degenerative disc disease, high blood pressure and “some heart stuff going on” was keen to continue with EXI at the end of the six months. “[The program] made a difference in my health. It gave me a better outlook on what my future might be.”

Nevertheless, that same individual highlighted the support and encouragement of the coaches as a key motivating factor during the intervention itself: “If I have to be accountable, I tend to finish things.”

This view was shared by the coaches, who said visibility of data through the practitioner portal drove accountability that “really helped,” adding that participants “really liked the assurance that we as coaches were watching”.

The coaches also said EXI helped prompt conversations and helped participants understand the importance of exercise intensity.

Meanwhile, for Cohort 2, EXI’s 24/7 access to “support, tools and classes for people to follow” helped address the fact that “in Montana, we can get kind of isolated”.

Confidence in the safety of the program was also important for participants. One woman started with just 10 minutes of walking at a time, but by the end of the summer had worked her way up to doing a moderate-rated hike with her husband.

**I kept looking at my Watch to see how my heart was doing. I thought my heart rate must be at least 200 and I'd have to stop, but no – I looked down and it was 153, so I knew I could keep going. And when we finished the hike, it was a momentous occasion, because I hadn't been able to do that before.**



## Significant, Sustained Results

Across both cohorts combined, all EXI users achieved a significant increase in weekly steps at 12 weeks – despite this coinciding with Thanksgiving – and 26 weeks.

Those who completed 12 weeks of the program logged 40,013 steps in week 12 – a 32% increase from before EXI was introduced.

Those who completed 26 weeks of the program sustained an almost 26% increase from before EXI was introduced.

Breaking this down by cohort, however, it's clear the strength of this performance was driven predominantly by Cohort 1, where average weekly steps among those completing 12 weeks rose from 26,890 before EXI to 39,329 in week 12 (+46%) – notably via a peak of 47,500 in week 8 before the impact of Thanksgiving was felt.

Cohort 1 participants who stayed with the program until week 26 achieved 34,383 steps that week.

Among Cohort 2 participants completing 12 weeks, average weekly steps rose from 36,598 before EXI was introduced to 41,296 in week 12 – higher than Cohort 1, but a far smaller rise in percentage terms.

Cohort 2 participants who stayed with the program until week 26 achieved 33,384 steps that week – fewer than those in the previously less active Cohort 1, and fewer than Cohort 2's average steps before the program started while Cohort 1 sustained its average step increase.



**This highlights the value of best practice EXI implementation – incorporating both the Apple Watch incentive and regular, expert human support – as experienced by Cohort 1.**

**32%**  
increase in  
steps for those  
who completed  
12 weeks of the  
program.

**26%**  
increase in  
steps sustained  
at 26 weeks.



## Greater Need, Greater Impact

The data analysis went on to categorize all participants according to the median steps prior to starting EXI. We defined the low baseline group as those who achieved fewer steps than the median before using EXI. The high baseline group was defined as those achieving more than the median steps before using EXI (although still not achieving the recommended 10,000 steps per day).



### The Findings

Although both groups significantly increased their median step count, the low baseline group achieved a greater increase in weekly steps at week 12 and week 26 than the high baseline group.

Specifically, those who began their journey in the low baseline group increased their weekly steps by 51% by week 12 – from 20,667 prior to the program to 31,245 weekly steps.

Those who continued to week 26 maintained a 42% increase in weekly steps.

For the high baseline group, the increase was 23% among those completing 12 weeks and almost 18% among those still participating at week 26.

**This is fantastic. It reinforces the very purpose of EXI: to help sedentary people with health conditions to get active safely and sustainably.**

– Dr. Lou Atkinson, Head of Research at EXI

# 51%

increase in step count at week 12 among the **low baseline** group.

# 42%

increase in step count sustained at week 26 among the **low baseline** group.

# 23%

increase in step count at week 12 among the **high baseline** group.

# 18%

increase in step count sustained at week 26 among the **high baseline** group.

## Making Activity Achievable

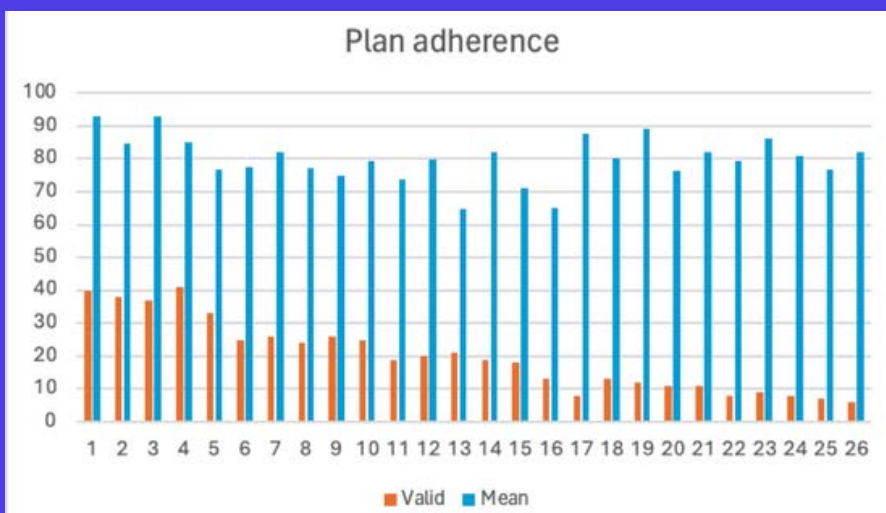
Average plan adherence – defined as completion of weekly activity programs – was also strong, and almost identical for both cohorts across 26 weeks. It also stayed fairly consistent across the period, suggesting the plans were achievable.

In the charts below, the orange bar shows the actual number of individuals still logging data, and the blue bar shows the average percentage of program completion.

In Cohort 1, the mean adherence across the 26 weeks was 79%.



For Cohort 2, mean adherence across the 26 weeks was 80%.



**32%**

increase in steps for those who completed 12 weeks of the program.

**26%**

increase in steps sustained at 26 weeks.

Exercise is Medicine<sup>®</sup> is evolving to become more proactive. We were delighted to partner with Logan Health as they pioneered a new way of working, implementing EXI to streamline the delivery of Exercise is Medicine<sup>®</sup> – efficiently, effectively, safely and at scale – to achieve improved health outcomes for a far greater number of people.

– Grace McNamara, EXI CEO



## About EXI Exercise Intelligence

EXI's core strength lies in the effectiveness of the algorithm, which learns about each member and creates a safe, personalized, adaptive physical activity program which accurately monitors a person's adherence to that program using a wearable. These tools, along with a variety of interventions – including analytical, behavioral and financial tools – inspire each person to sustain their efforts, instilling confidence in our approach.

EXI is the solution that makes this an everyday reality.  
Find out more: [info@exi.life](mailto:info@exi.life) / [www.exi.life](http://www.exi.life)

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