

CASE STUDY

ShopCare proudly acknowledges



Harvey Norman Participative ergonomics pilot programme

shopcare.org.nz

 **ShopCare**
Charitable Trust

Introduction

In 2023, the electrical division at Harvey Norman saw a rise in shoulder and spinal injuries, driven by heavy manual handling demands and static work conditions. In response, the business partnered with ShopCare to take a different approach – putting workers at the centre of the solution.

Together, they launched a participative ergonomics pilot grounded in co-design, where frontline employees helped identify hazards, test improvements, and shape safer ways of working.

This case study shares the outcomes of the pilot, run between July 2024 and January 2025, which aimed to reduce musculoskeletal injuries, improve wellbeing, and lower injury claims.

By involving frontline staff directly to help identify risks and test solutions, the pilot delivered practical, low-cost changes that made a measurable difference – such as redesigned trolleys, early notification of discomfort reporting processes, and improved claim management.

The results speak for themselves: ACC claim costs dropped by 40%, long-term injury claims were resolved, and since the national rollout, Harvey Norman has had zero ergonomics-related incidents.

This pilot offers a proven model that other organisations can adopt – combining worker input, smart design, and practical tools to transform safety outcomes.

Thank you to Harvey Norman for allowing us to share their pilot learnings and insight.



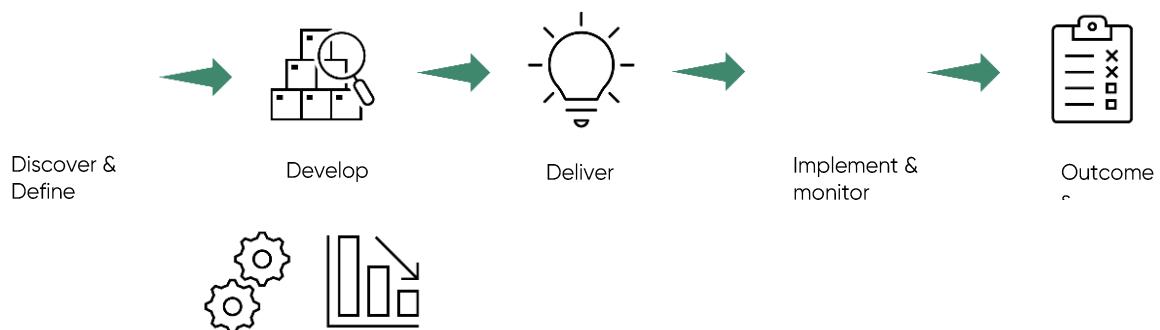
Pilot overview

The pilot had three specific aims:

1. Reduce the rate of musculoskeletal injuries.
2. Increase engagement by giving staff shared ownership of safety.
3. Embed scalable tools, equipment, and training that enable safer movement across the company.

The pilot used a four-stage participatory ergonomics process, based on a human-centred and iterative approach to problem-solving¹ ensuring worker-led solutions that are practical, cost-effective, and widely adopted. The methodology was iterative and focused on continuous improvement over 12 weeks through the following stages:

1. **Discovery** – baseline data is collected through injury records, staff surveys, interviews, movement monitoring technology, and task-specific observations.
2. **Define** – focus areas are identified based on insights from the discovery phase.
3. **Develop** – a co-design process where multidisciplinary teams create and prioritise solutions, balancing risk reduction with practicality and cost.
4. **Deliver** – selected interventions, such as equipment modifications, task redesigns, or behaviour prompts, enter a trial phase, where they are tested under normal conditions and refined using real-time feedback from staff and wearable metrics.



Discovery and define phase

During the discovery phase at Harvey Norman, the pilot team collected baseline insights through injury data analysis, movement monitoring through sensor technology, frontline staff interviews, and targeted task observations. These methods identified and confirmed ongoing physical strain associated with specific manual handling tasks, especially in the electrical and furniture departments. Staff provided valuable context about how work was performed versus best practice. Building on these insights, the define phase aimed to narrow the focus to high-impact areas.

¹ Design Thinkers Academy NZ. (n.d.). *Design Thinking Fundamentals*. <https://www.designthinkersacademy.com/anz/course-catalogue/>



Key findings from the discovery and define phase:

- Awareness and understanding of shoulder injury risks need to be increased. This could be built into the existing focus on spinal health.
- Additional training options beyond the current digital modules need to be explored to better accommodate diverse learning styles and promote ongoing practice.
- Hidden load risks – staff highlighted that small appliances, despite being compact, often resulted in more cumulative strain than larger whitegoods due to their misleading weight.
- Prolonged static postures – sales staff often stood for more than six hours per shift, while some administrative staff sat for over seven hours. Holding static positions for extended periods led to fatigue and increased risk of injury.
- Ill-suited equipment – the tools used to move or restock shelves frequently did not suit the specific tasks, leading to greater strain on the lower back.
- Normalising discomfort – many workers were unsure how to tell the difference between discomfort and injury and felt the pressure of accepting physical strain as “part of the job”.
- Injury recovery support – staff expressed the need for clearer procedures and stronger assistance when returning to work after an injury.

Develop phase

For the co-design phase, Harvey Norman brought together a multidisciplinary working group, including frontline staff and leaders, to co-design practical solutions based on earlier findings. Ideas were generated and prioritised using collaborative workshops that balanced risk reduction with feasibility, cost, and day-to-day usability.

This co-design work landed on four key areas to focus on:

- Collaboration and co-ownership: continuing to involve workers in finding and enacting solutions would boost acceptance and sustained use.
- Low-cost engineering changes: low-cost improvements (e.g., collapsible trolley, anti-fatigue mats, height-adjustable stools for customers and workers) can significantly reduce injury risk.
- Blended learning: combining micro-video refreshers with in-person demos to satisfy different learning styles while controlling costs.
- Policy and process: introducing early notification of discomfort processes and injury management support to reduce injuries and their impact when they occur.



Delivery phase

During the delivery phase, these interventions were trialled in-store under normal working conditions. Staff actively tested new equipment setups and workflow changes while wearing movement-tracking devices. Feedback loops were built into the process, allowing real-time staff input and wearable data to inform quick adjustments. This iterative approach not only refined the interventions but also fostered ownership and long-term adoption, reinforcing safer habits through lived experience.

What was put in place

Engineering and equipment

Several changes were implemented to reduce physical strain and improve ergonomics. A collapsible trolley with low-friction wheels, designed for easier manoeuvring of small, heavy appliances, was adopted as a national standard. To lessen the impact of prolonged standing, anti-fatigue mats were introduced behind service area counters.

Training and culture

The team launched a hybrid learning model that combined refreshed e-learning modules with quarterly in-store demonstration sessions. With further planning to introduce site-based champions/representatives to support workers on ergonomics, training, and general risk management.

Policy and process

Harvey Norman implemented a formal injury management support process, facilitated by a third-party provider, to better assist staff returning to work after injury. The pilot helped staff better understand the difference between discomfort and injury by removing some of the stigma around reporting early signs of strain. The initiative fostered more open, everyday conversations about health, safety, and well-being, resulting in a more proactive culture.



Challenges and workarounds

Each workplace has different environments and challenges that need to be addressed to achieve the outcomes that are being aimed for.

| Challenge | Workaround |
|---|---|
| During the peak retail season, staff experienced noticeable fatigue, which slowed uptake around change. | Shifted focus toward informal movement prompts and peer-led encouragement rather than enforcing structured sessions. This allowed staff to engage with the concept at their own pace, building gradual acceptance without adding pressure during high-demand periods. |
| Integrating wearable tracking data with data from a different reporting system presented technical hurdles. | Developed custom-built spreadsheets to align data sources and identify trends. |
| Pre-existing negative thinking around rest and recovery surfaced as a barrier. | Worked to create a more trusting environment to reinforce the importance of micro-breaks. |

Success stories and tangible outcomes

The pilot produced several noteworthy successes, demonstrating both measurable outcomes and cultural shifts within Harvey Norman's operations.

- The electrical division reported zero ergonomic injuries nationwide following the rollout of the selected trolley. This engineering solution significantly reduced the strain associated with handling heavy small appliances.
- In injury recovery, all long-term musculoskeletal injury claims were successfully closed. This was supported by the introduction of a structured return-to-work process and the implementation of proactive early intervention strategies.
- ACC claim costs dropped by 40%, reflecting not only fewer injuries but also faster, more effective support for those recovering.
- Staff had an increased understanding of the difference between discomfort and injury, becoming more positive around reporting early signs of strain.
- Proactive safety engagement improved with staff continuing to identify and communicate improvements.



Insights for similar projects

The pilot revealed several vital lessons that will help other companies run these types of programs:

1. Measure what matters: the combination of wearable sensor data with staff interviews proved invaluable. While wearables captured objective patterns of strain and movement, qualitative feedback from workers highlighted overlooked risks, such as the cumulative load from small appliances.
2. Have meaningful engagement with workers and management: having regular, high-quality exploratory conversations around workers experience helps uncover practical insights that both reduce risk and increase productivity.
3. Streamline data capture: use technology to automate data capture, visualisation, and theme identification, addressing manual reconciliation of data and notes that slowed insight synthesis. These tools accelerate turnaround and scale insights across sites and divisions.
4. Maintain momentum without losing depth: a key lesson was maintaining momentum, as long timelines risk losing engagement, especially in fast-paced retail sectors. Tools like the 4Ds (Dumb, Dangerous, Difficult, Different) can help accelerate delivery by providing a clear path from insight to action, supporting faster progress and sustained engagement.

Towards safer, smarter work

Following the success of the pilot, Harvey Norman is now focused on scaling its approach nationwide, integrating proactive health, safety, and wellbeing practices into daily operations across all sites.

A key priority is the national rollout of a discomfort notification and intervention process. By encouraging early reporting, the business aims to prevent injuries before they worsen and to foster a culture of openness where wellbeing conversations are normalised and supported.

Harvey Norman is also increasing its investment in ergonomics, with nationwide projects led by leadership, such as the introduction of height-adjustable stools and sit-stand workstations for both customers and staff. This allows for greater flexibility and comfort during the workday, thereby reducing the risks associated with prolonged static postures.

To reinforce learning, the company is enhancing its hybrid training model by combining digital learning with in-store demonstrations.

Worker engagement remains a key focus, and Harvey Norman is strengthening its engagement practices to ensure frontline voices continue to influence safety decisions and innovations. It plans to introduce site-based champions—trusted staff members who will support their teams with ergonomic guidance, safe work practices, and daily risk management. In parallel, Harvey Norman has rolled out foundational training for Health and Safety Representatives (HSRs).

They are preparing for the next phase: equipping HSRs with the skills to conduct risk assessments and manage risks effectively. This will enhance on-site leadership and expand safety capabilities across the organisation.

Finally, Harvey Norman is developing a national ergonomic strategy to systematically reduce musculoskeletal injuries across all locations and ensure that new staff are suited to the roles assigned to them.



Opportunities with ShopCare

We would love to engage with other organisations that are keen to improve health, safety and wellbeing outcomes for their workers.

If you believe that your company could also benefit from a similar pilot programme and would like to discuss it further, please email info@shopcare.org.nz.

ShopCare thanks Harvey Norman for their participation, and Design Thinking Academy New Zealand and CHASNZ for contributing their expertise to the Harvey Norman pilot programme.





Ngā mihi

info@shopcare.org.nz | shopcare.org.nz