EARLY INTERVENTION AND ACCOMMODATIONS FOR UPPER LIMB PROBLEMS — RESEARCH AND DATA ENTRY WORK

Sector: Research

Job: Scientist

Size: Medium-sized enterprise

Country: International

Health problem: Sore wrists and painful symptoms in fingers

Context/background

The research organisation in question has in-house ergonomists who carry out regular risk assessments, including for display screen equipment (DSE) work. The organisation provides sit–stand desks, restrooms and alternative equipment such as voice recognition software (VRS), non-conventional mouses, touchpads, fully adjustable chairs, and individual adjustments to chairs and desks when needs are identified through risk assessments (e.g. cushions, two or three screens, laptop raisers).

The organisation allows flexible working, including start and finish times, and teleworking, so that individuals can work at home or in other external locations. The company also offers the opportunity to use time in lieu, meaning that a worker can work more hours if there is a need to do this at a certain point and then later take this time off work.

Demographic and health information

The worker is a woman in her 60s who has worked for the same organisation for the past 10 years as a researcher and consultant. Her main tasks include data collection on site, data entry, report writing, and liaising with project leaders and study participants.

While diagnosis of her particular disorder is currently under way with the help of her general practitioner (GP), the main issues are sore wrists when typing and feelings of numbness and pins and needles in her fingers. The worker received an initial diagnosis of carpal tunnel syndrome. However, this has not been confirmed by further tests, and the symptoms have worsened over the past 4 months. A further issue highlighted by the worker is shoulder discomfort that has occurred over the preceding 3 to 4 years. The worker is continuing to discuss her symptoms with her GP and is seeking advice from the in-house ergonomists and a company occupational health provider.

Work, job and tasks

The worker's main job as a researcher is to analyse and evaluate research, as well as direct and conduct new scientific research. She is office-based for much of her working time. She mainly works with a computer and multiple screens for prolonged hours, and her tasks involve a lot of typing for report writing and entry of data from workplace visits into spreadsheets. However, she can manage her own workload and is actively encouraged to do so.

Process for retention at work

The worker has remained at work without taking any sickness leave. On the advice of her line manager and GP, an ergonomist carried out an additional DSE risk assessment (in addition to the regular risk assessment), which included an examination of the workplace, desk layout, postures adopted and work tasks. The work tasks that mainly cause problems are those that involve typing; however, the worker is in control of her working time and can build in breaks from typing, depending on timescales and deadlines. At times, the worker's tasks can include large amounts of data entry, and this can be to tight deadlines. The worker is able to take advantage of flexible working and thus can maintain control of when she starts and finishes work and where she wishes to work (in the office or at home). Her office workplace has been assessed under the DSE regulations, and there is a process of continuous follow-up to ensure that equipment or methods of working are not causing further discomfort.

The company has adopted flexible working for all, so there is no stigma when a worker prefers to come into the office later or earlier.

Support given and by whom

The line manager has been supportive throughout the whole process of the ergonomic risk assessment and during the trial of novel equipment. The team of in-house ergonomists and the worker's line manager have been involved since musculoskeletal disorder (MSD) issues were first reported, to try to enable the employee to accomplish her work tasks in relative comfort.

The human resources (HR) function in the organisation has also organised an appointment with an occupational health physician to enable a professional assessment of the disorder.

Most chronic MSDs are difficult to diagnose, and the initial diagnosis by the GP has changed, with a formal diagnosis yet to be made. Therefore, it is important during the process of adjustment for the worker to try out various tools and strategies.

Workplace changes

Tools and equipment

A range of different measures have been tried, including the provision of a wrist splint, which continues to be used by the worker. The worker, on the advice of the in-house ergonomists, has been provided with a range of interventions, including an upright mouse, a smaller mouse, a wrist rest (no longer used) and VRS. The opportunity to trial different items of equipment to find out if something would help was important in this case.

While VRS is a useful tool, consideration must be given to what the individual is using the equipment for. For example, VRS is not always helpful when working with data and spreadsheets. Furthermore, the location of the individual needs to be considered, for example if they are working in an open-plan office and their talking might disturb other people. In addition, the learning time for both the worker and the VRS, to ensure it works efficiently, needs to be considered.

Workplace

As a result of a DSE assessment, the worker's desk area has been rearranged on the advice of an ergonomist, with her keyboard being positioned under the desk on a movable shelf, to allow her to sit with her feet on the floor rather than on a footrest. This was to reduce the feeling of being too high up on the seat to reach the desk surface, as she is small in stature.

Tasks

Methods were also identified to reduce typing tasks for the worker, as these can cause discomfort. Some data entry tasks have been passed to other support staff in the organisation. This intervention was requested by HR and the worker's line manager. This has reduced the need for continuous typing under time pressure and for extended periods of time or to input data using VRS, which can be difficult.

Work travel

The worker works flexibly, so does not need to be at her workplace for a specific time. She commutes by car but does not have any issues when driving. Travelling to external workplaces and meetings is not considered a problem or to trigger her symptoms, and for this reason no specific adjustments regarding travelling have been made.

Working time

Working flexibly allows the worker to arrange her appointments with various specialists. Since her condition is not yet fully understood or diagnosed with certainty, it is quite important for her to be able to arrange her working time around her medical appointments.

Health and safety risks identified

A health and safety risk identified was continuous working without breaks, and as part of this continuous typing was identified as a risk. The employee was advised to take frequent breaks and to avoid typing when she feels pain, if possible. In addition, she was advised by the ergonomics team not to overuse her wrists and to try to use her keyboard without twisting her wrists in the horizontal plane.

Ease or difficulty of implementing the advice

The changes that have been implemented have been minimal in relation to ensuring that the worker understands she can take a flexible approach to work. They have included simple changes such as new equipment (e.g. a new mouse) and moving the height of the keyboard (e.g. the moveable shelf).

What has been more difficult has been the introduction of VRS, as how long it takes to learn how to use the software and how long it takes the software to learn the voice of the user were not anticipated. While this was a challenge, it was important to ensure that technical support was made available to the worker and that time to learn how to use the software was negotiated with the worker's line manager.

A difficulty with the workplace changes was the need for various options to be tried and tested before successful solutions could be identified. During this process, it is important to ensure that the worker is aware that the first solution tried may not be effective. Ensuring that new equipment or new desk layouts are tested by the user is important to ensure that they are effective.

Transferability

The trying out of potential solutions could be transferable. While many MSDs do not have an exact and immediate diagnosis, early intervention is important to prevent worsening of symptoms. It is important therefore to try to alleviate discomfort or pain even without a proper diagnosis, and this implies trials of different items of equipment. From the viewpoint of a small business, this need not be a wasted investment, since these tools may be used by other workers.

The process of identifying problems using the DSE risk assessment method (a requirement under the DSE regulations) and as a result of this suggesting interventions and evaluating the results (both positive and negative) is also transferable to all organisations. Taking a structured approach helps in identifying what tools or changes work and why some tools do not work.

Lessons learned

The lessons learned from this case include the following:

- Continued support from the line manager and HR is important.
- Access to ergonomics expertise informs the decisions made and the interventions trialled.
- Support measures can be put in place as soon as the worker raises the issue, whether or not there is a diagnosis.
- It was important that the healthcare professionals, HR, the line manager and the worker were able to work together to resolve issues.
- It is important to ensure that time is allocated to learning how to use new equipment.
- Trialling different items of equipment should be included in the process of accommodation.

This case teaches us that MSDs are problems that need to be addressed through a multidisciplinary approach. This includes line managers, HR, occupational health physicians and ergonomists. Good organisational support is important, and in this case the national health system was important for the worker, who was able to access help from her GP. The employee hopes to obtain a formal diagnosis soon for her MSDs and knows that her company are ready to support her with workplace accommodations.

Taking a structured approach to identifying problems, suggesting interventions and evaluating the results helps in identifying what tools or changes work and why some tools do not work.

Costs and benefits

Beyond the direct benefits of keeping an expert employee at work, the case shows that novel solutions, such as technological tools and workstation transformation, can be employed quite simply and can present an immediate and easy solution, thus enabling the employee to continue working. While some items of new equipment, such as the upright mouse and the wrist rest, were rejected by the worker, such equipment is not expensive and can be easily replaced. Some such new computer tools, for example VRS, can be used by other colleagues, too, contributing to transforming the workplace into a more inclusive one.

The support provided by the worker's colleagues to help to ensure that data entry tasks are finished on time has also proven to be very helpful, and there needs to be organisational commitment to continuing this. Similar support is available to all within the organisation.

Summary of changes

A full DSE assessment of the workplace by in-house ergonomists and advice from an occupational physician resulted in workstation modification (lowering of the keyboard) and the introduction of new technologies, including a smaller mouse and VRS. Furthermore, the removal of high-intensity data entry work, as perceived by the worker, has reduced the physical and psychosocial pressure on her.