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Supporting Computer Ergonomics Needs in a Virtual or Hybrid Work Environment

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Author Note: Jeremy Wilzbacher is a Senior Consultant with Aon, where he provides ergonomics services to Aon's clients. His experience related to the current paper is based on the solutions developed in partnership with various clients who have unique needs, and therefore strategies, for managing ergonomics in their work environments. Jeremy is grateful for the opportunities to partner with Aon's clients and learn together how to continuously refine strategies for managing ergonomics in remote and changing environments.

Abstract: The work environment for computer-based employees has changed significantly in recent years. Many organizations now have staff working in traditional offices, at home, in shared spaces, and in frequently changing work locations. As work moves into these less controlled environments, the risks associated with computer use and poor ergonomics can increase. In response, organizations must rethink their ergonomics strategy to support employees in spaces where they have less direct control.

This shift in work patterns requires a shift in approach: from centrally managed workstation setup toward empowering employees to recognize issues and make effective adjustments to their computer workstations—wherever they are working on a given day. At the same time, options for supporting employees have expanded, with greater use of virtual tools such as online self-assessment systems, micro-learning resources, and virtual one-on-one assessments. Early experience suggests that, when well designed, these virtual strategies can be at least as effective—and often more efficient—than traditional, in-person approaches.

Industry Status and Challenges

Many organizations have allowed workers to function in flexible work environments, including working from home or in a hybrid setup (working partially from home and partially at the work location), for many years. The COVID-19 pandemic accelerated the adoption of such work flexibility significantly. The U.S. Bureau of Labor Statistics notes increases of more than 30% for some industries when comparing 2021 data to 2019 (Pabilonia and Redmond, 2024). A slight drop in remote work occurred in 2022, with the dissipation of social distancing restrictions, but the numbers remained much higher than the 2019 levels. As illustrated in Figure 1, the BLS reported that in Q1 of 2024, 24.9% of workers over 25 years of age were still working remotely (up from 21.5% in Q1 of 2023) (BLS, 2025). There is also evidence that working from home may be beneficial for some workers, but not others (Smite et al, 2021). The overall numbers may continue to fluctuate, but the reality is that many organizations will maintain some level of remote workers for the foreseeable future.

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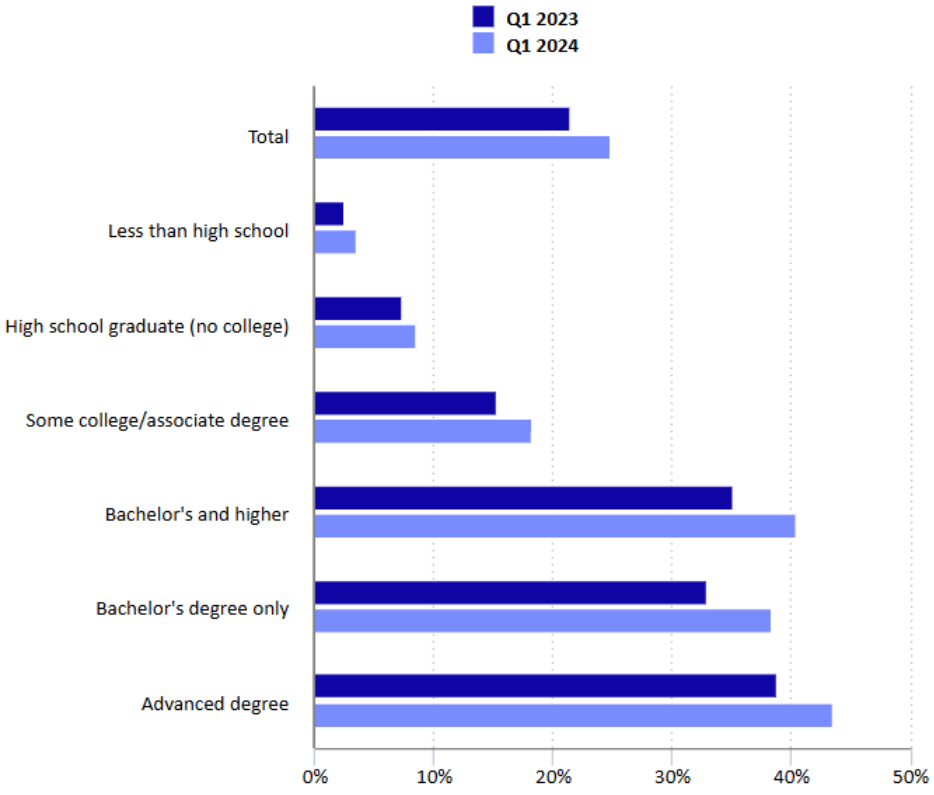
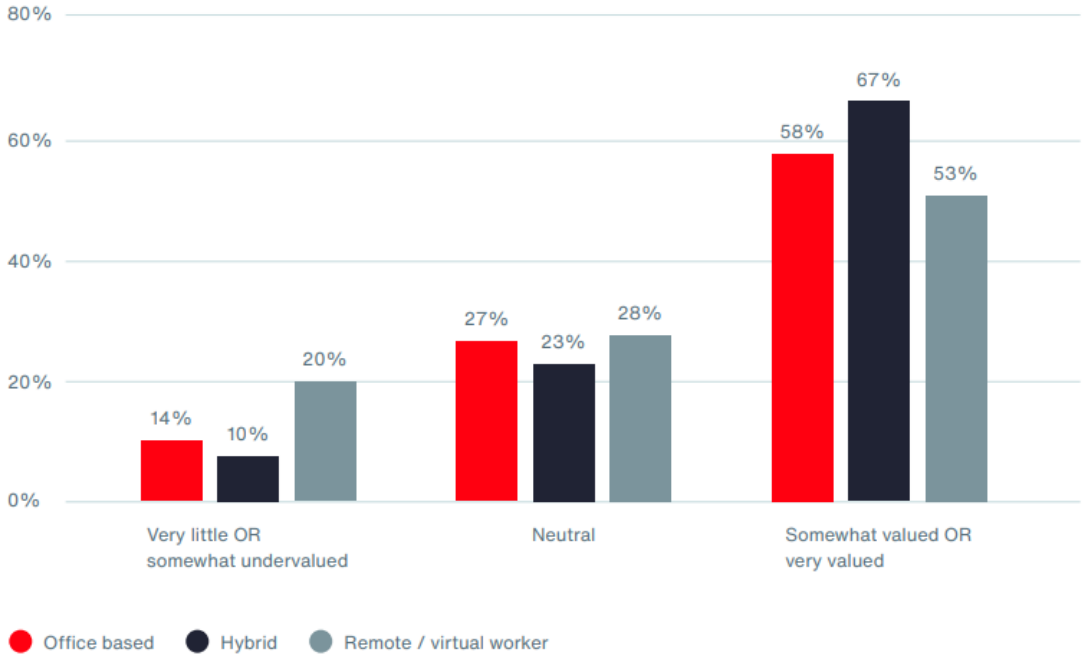
Figure 1. Percent of employed people 25 years and older who telework by educational attainment, first quarter 2023-34, not seasonally adjusted (2).



The question of whether hybrid work arrangements result in better business outcomes is being debated, and ultimately more studies will likely illustrate the trade-offs over time. In addition, the results may vary for different organizations and geographies depending on culture, business needs, cost and size of residential housing, among other factors. There is evidence that poor ergonomics can be associated with pain (Matisāne et al., 2021, Casjens et al., 2025, Gerding et al. 2021) and lower productivity (Maillard, 2023). In a time when retention of employees is a critical concern for many organizations, finding ways to keep employees satisfied and engaged carries increased value. Aon's Employee Sentiment Study (Aon 2024), conducted in August 2024, surveyed 9,202 people in organizations with more than 500 employees, across the world, to learn what workplace initiatives were valuable to them. As shown in Figure 2, those working in a Hybrid environment felt the most valued by their organization. As more and more organizations strive to keep their employees satisfied, these data suggest that the trend of hybrid work and working from home may continue to increase.

Figure 2. Survey results indicating that Hybrid workers feel the most valued (8).



With more workers working either at home or in a hybrid arrangement, the way in which organizations support employees with their computer ergonomics needs to evolve. Previous strategies often focused on in-person training and/or conducting ergonomics assessments within the office or work environment. Working from home removes employee access to these internal resources and experts. In addition, working from home introduces significant variability in the office equipment, furniture, and workspace available to employees. Surveys that have looked at the ergonomic setup in home offices provide evidence that home office workers often do not utilize adequate computer equipment to achieve a good ergonomic setup (Gerding et al. 2021). In addition, remote workers may work from a variety of locations, further exacerbating the challenge of controlling the ergonomics of the employee's workstation(s). These factors result in a greater challenge for organizations to ensure proper equipment is used and/or properly adjusted for the individual employees.

Research and client experience illustrated that lack of previous training and awareness in ergonomics was commonplace among workers who began to work at home during the COVID-19 pandemic (Ahmed et al., 2022). There is also evidence that implementing ergonomics training or providing or encouraging the use of proper computer equipment can support increased comfort (Ağar et al., 2025) and productivity when working at home. One of Aon's clients provided office equipment and training to their employees in Denmark during the COVID-19 pandemic. A follow up survey demonstrated that having a desk, chair, external keyboard, and receiving ergonomics training resulted in improved self-reported comfort. Receiving ergonomics training was associated with improved self-reported productivity (Nguyen et al., 2025).

Remote servicing options and a shift in mindset are required to address the new challenges. It is not practical, nor in many cases an acceptable work practice, for employers to send staff into the homes of employees to support their ergonomics needs. As a result, a shift in mindset is required, from a more traditional approach of providing in-person training and assessments, or making workstation adjustments for employees, to an approach that is based on empowering employees to learn how to make their own assessments and adjustments to their workstations, regardless of where they may be working. Individual support, when needed, must be delivered virtually as well, introducing new challenges to knowledge transfer.

Developing an Ergonomics Strategy for Remote Workers

As Aon has partnered with clients to develop strategies to support the ergonomics needs of employees working remotely, the following five-step structure has served to guide the process of program development. Define, Establish, Educate, Intervene,

Resolve. Each of the five steps include activities that organizations can go through to ensure their program is launched and sustained effectively. The elements of each step are shared here. If an organization follows these steps, it will be able to develop a strategy that is aligned with its goals, while meeting the ergonomics-related needs of its employee population.

Define:

- Organization goals, needs, expectations, current process/state and pain points
- Identify stakeholders, resources and tools needed

Establish:

- Policy, process, procedures
- Communication and messaging strategy
- Eligibility, requirements, exclusions, escalation protocol, compliance
- Equipment/vendors
- Reimbursement/stipend
- Self-help tools
- Work-From-Home (WFH) protocol
- Intake and education center

Educate:

- Build awareness and understanding of self- help tools, intervention processes, resources/ equipment and key contacts
- Train employees on:
    - Workstation setup
    - Postures and habits
    - Symptom management and reporting
    - Available support / tools

Intervene:

- Strategic, tiered approach
- Training, self-help, virtual assessments, and support

Resolve:

- Resolve employee needs through documented follow up, ongoing support, and connection to resources
- Utilize assessment data to modify program as needed

While working to "Define" the goals and support strategies, an organization must make some important decisions that will ultimately provide clarity on the selected approach.

Decisions to be made regarding the selected strategy:

- Do we offer support proactively (like a health benefit) or reactively (in response to symptom complaints or claims)?
- Will we have an online resource (or virtual support center) that is available 24/7, or will employees have to reach out to specific individuals for support.
- Will an online self-assessment system be offered?
- Will the online self-assessment system include a symptom survey?
- Are one-on-one virtual or in-person assessments offered?
- If available, what types of automated follow-up emails should be sent to employees after an online self-assessment has been completed.
- Do we require that employees go through the steps of the tiers in order? Or can they skip steps (i.e. just right to the self-assessment, or to a one-on-one virtual assessment)?
- Do we provide equipment for home offices?
- If we provide equipment, what guidelines will be followed to determine what equipment is provided?
- Who will pay for equipment if it is provided? A corporate safety fund, or the employee's supervisor, for example.
- How do we triage requests for support? Online portals can be used, or perhaps a selected individual reviews cases and recommends next steps?
- Do we manage the triage process internally or contract it out?
- What type of deliverable do we want provided after a virtual one-on-one assessment? Formal report, simple email, or other?

- Who should the reports be sent to? Directly the employee with a copy to a corporate representative? Or perhaps all sent to a corporate representative for a review of the recommendations before sending to the employee?
- If an online self-assessment is used, who will manage the administrative functions associated with the system? Corporate representatives, third-party vendors, both, etc.?
- Who is in charge up updating materials, resources and protocols within the system?

In establishing the organization's ultimate support strategy, Aon has found that each organization can develop their own, customized virtual support system that meets its unique needs. In almost all cases, the ultimate strategy relies on a tiered support approach. The general philosophy of the tiered approach is based on the premise that the organization strives to meet the needs of as many employees as possible with the least amount of effort (from supporting staff) possible. Supporting each employee individually can be cost-prohibitive and misses out on the opportunity of empowering the workforce to be able to resolve their own ergonomics challenges on an ongoing basis, in any work environment.

Aon has found that there is not one strategy that fits all companies. Therefore, each organization selects the support elements that best fit their culture and priorities, but is often made up of some combination of the following support activities, at times referred to as support "tiers". Detailed descriptions for some of the tiers are provided below.

- Build a virtual support center, which is an online location that guides all employees through the steps of the support process and provides the requisite resources or links.
- Offer online guidance documents, which could include ergonomics setup handouts or static self-assessments.
- Live program kick-off web-meetings.
- Live web-based training sessions can be offered (considering languages and time zones).
- Recorded web-training can be loaded to the virtual support center for reference.
- Train-the-evaluator workshops to teach internal employees how to conduct ergonomics assessments, for either in-person or virtual assessments.
- Online Self-Assessment systems. Employees go through a self-assessment system that provides feedback and recommendations.
- Virtual one-on-one assessments, conducted via mobile phone using video-call applications.
- In-person assessments. If desired, in-person assessments could be offered, either by in-house experts or contracted ergonomists.

Virtual Support Center: Organizations should consider building a central, online location where all computer ergonomics resources and links are housed together. This could be an internal web location or a third-party site. QR codes can be used in employee communications to point them to these resources. Ideally, the site will include a guide that explains the support options available, and gives instructions on which steps should be taken first.

Web-based training: A variety of web-based training options can be offered to employees, to help them raise awareness and learn how to adjust their own workstations. Offering live training at a variety of times, in the appropriate languages, can be an effective way to demonstrate to employees that the organization cares about their well-being. Often these sessions are sponsored by Human Resources departments and presented as a benefit to employees. Recorded versions of the training can then be made available on the Virtual Support Center.

Online self-assessments: An online self-assessment system can be an effective resource that allows large numbers of employees to review their own situations, and receive recommendations and feedback, without any engagement from internal safety or support staff. Ideally, the self-assessment system will provide immediate feedback to the employee as they answer questions or prompts, allowing them to make adjustments immediately in the moment.

Individual virtual ergonomics assessments: Offering one-on-one virtual assessments can be an effective alternative to in-person office assessments that may have been offered in the past. The virtual assessments have been found to be equally as effective as in-person assessments. Aon recommends that this offering be treated as the "last resort", only utilized once the employee has gone through the other "tiers" of support, which would hopefully help the majority of employees resolve their own challenges.

Whatever combination of support tiers are ultimately offered, the goal is to provide a system that can be accessed virtually by all employees, providing resources for them to educate themselves and empower themselves to make adjustments to optimize their computer workstation regardless of where they happen to work on a given day. Providing an online self-assessment system that can provide recommendations based on inputs has found to be a commonly desired tier. In addition, offering one-on-one virtual ergonomics assessments as a final option ensures that individualized support is available when the self-help options have not been sufficient to resolve more complicated cases.

Conclusions

Ultimately each organization develops their own strategy. In some cases, companies offer one-on-one virtual assessments to anyone who wants them within the company, and that is the strategy. In another example, one-on-one virtual assessments are offered, but only to those individuals who have requested one, or who are in the Accommodations process. More common are organizations that include a set of support processes that work to support employees. Online self-assessment systems are an efficient way to offer a great resource to a large population, especially if the system offers guidance and recommendations based on the answers of the self-assessment system. And lastly, with the advancement and adoption of video-call technologies, it is now more acceptable than ever to conduct one-on-one virtual assessments that can achieve the same results as in-person assessments, when one-on-one attention is warranted.

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