

Posture Puzzles

How Ergonomics Helps Practices Fit Their Workers

By Pamela Schumacher, MS, Prosci

Fitting workflows and workspaces to medical assistants is key to their health, happiness, and longevity on the job, because they are at high risk for work-related musculoskeletal disorders (WMSDs). In 2023, the U.S. health care and social assistance sector reported a nonfatal injury and illness incidence rate of 3.6 cases per 100 full-time workers, the highest among all industries.¹ This means that ergonomics, the design of work tasks to suit the capabilities of workers,² is not a luxury but a necessity in the medical practice.

Backbone of a Healthy Practice

Ergonomics aims to reduce and prevent musculoskeletal disorders caused by multiple factors:

- Physical (work tasks such as pushing, pulling, or lifting)
- Psychosocial (mental well-being influenced by social factors)
- Personal (age, sex, and body mass index)²

“In occupational health, ergonomics is the design of work tasks and job demands to fit the working population,” says Mark

E. Benden, PhD, CPE, department head of environmental and occupational health at the Texas A&M University School of Public Health in College Station, Texas. “Specifically, it is a science that seeks to match human capabilities with work demands in a manner that is both productive and safe. We want to fit tools, environments, and tasks to people, rather than making people fit things.”

“By creating an ergonomic workspace, employers can reduce the risk of workplace injuries and improve employee comfort and productivity. Psychological, physical, and social aspects are also considered. I like to say we are designing for a more user-friendly world,” says Nancy J. Stone, PhD, professor and chair of the psychology department at Middle Tennessee State University in Murfreesboro, Tennessee.

Not only is it the right thing to do, but paying attention to ergonomics is *required* under the Occupational Safety and Health Administration’s General Duty Clause, which stipulates that employers must keep their workplaces free from recognized serious hazards, including ergonomic hazards.³ Additionally, some U.S. states, such as California and Oregon, have implemented or are in the process of implementing their own mandatory ergonomics programs.⁴

Find the Perfect Fit

WMSDs are costly and can significantly reduce worker productivity and morale. In 2019, the Bureau of Labor Statistics reported 29% (325,270) of cases were related to WMSDs. The median days away from work for a WMSD was 14 days, compared to nine days off for other work-related injuries.⁵

“My coworkers and I have had work-related injuries such as back pain, foot pain, wrist pain, and headaches—all from incorrect ergonomics at work,” says Melodie Valencia Plumb, CMA (AAMA), who works at Valley Healthspan in Phoenix, Arizona. “These injuries could have been prevented if the medical office had ensured the desk or work area fit the individual. When that doesn’t happen, employees get injured and miss work for medical appointments and even surgery.”

“Common injuries are related to what one is doing,” says Dr. Stone. “If there is a great deal of seated computer work, then there could be higher incidents of wrist [e.g., carpal tunnel], neck, back, or shoulder issues. These injuries arise due to improper posture, which is often caused by improper seating, standing too long, and improper wrist position when typing.”

If a desk or chair is the wrong height, the employee will hunch over, leading to poor

posture and pain over time. Poor placement of a computer monitor or inadequate lighting can cause eye strain, headaches, and even vision problems.⁶

“I had a hand injury, and an orthopedist suggested I use an ergonomic mouse to help alleviate pain and create a more natural hand position,” says Christine Hricak, CMA (AAMA), a maternal fetal medicine genetic counseling assistant at Lehigh Valley Health Network in Allentown, Pennsylvania. “A lot of it is common sense. When we had to move heavy simulation mannequins, we’d buddy up so as not to hurt our backs.”

Using an understanding of ergonomics, medical assistants and other employees can design effective programs to prevent and minimize work-related discomfort and injuries. A workplace ergonomics safety program should do the following⁶:

- Analyze a job’s tasks and physical demands
- Design workstations and tools to fit the worker
- Use ergonomically designed tools
- Implement practices like frequent breaks and stretching exercises

“From an organizational or administrative perspective, medical offices should evaluate risk with the help of an ergonomist and then form a plan for prevention and response,” advises Dr. Benden. “Computer workstation upgrades, such as the desk and chairs, and computer hardware tend to be the lowest cost and biggest risk reduction for employees, but any intervention needs to include training and follow-up with the employees to maximize benefits.”

“Employees are more likely to be engaged with their work and perform at a higher caliber when they feel comfortable and supported in their workspace,” says Dr. Stone. “However, we want to be careful that we are not removing one risk for another.”

Putting the Pieces Together

Improve your well-being with these posture tips:

- Be alert and avoid situations that can cause repeated strain to the arms, hands, back, and neck.
- Try to maintain a neutral hand or arm position while doing any task.
- Report to your supervisor any situations that may cause repeated strain or stress to your body.
- Avoid situations that may create strains or muscle pulls due to the force or position required to complete the task.
- In order to reduce the possibility of strains, prepare your body by stretching or participating in simple warm-up activities early in your shift.⁸

The Big Picture

An important step is following up to ensure the ergonomic program reduces or eliminates the WMSD risk factors and that no new risk factors were created in the process. A medical practice can measure the effectiveness of its program by comparing data from before and after interventions using the following⁷:

- Symptom surveys
- OSHA recordkeeping forms
- Employee absentee rates
- Turnover rates
- Workers’ compensation costs
- Productivity indicators
- **Quality of products and services**
- Total savings

“Remember that workers will not experience the benefits of an ergonomic program immediately; it can take months for WMSD symptoms to disappear,” says Dr. Benden. “You will need to modify your intervention if new symptoms appear.”

Hricak has seen the benefits of these programs firsthand: “Ergonomics can improve job satisfaction and productivity, because if an injury occurs, [it] ends in lost time. Working in health care is rough, and many offices are short-staffed. If someone is out for a work injury, that creates more work for the other employees.”

Sometimes all it takes is alerting management to the problem, observes Valencia Plumb: “At my previous employer, the desks and chairs were quite high, and we did not

have good foot support either. This caused significant back pain that would hurt at all times of the day, and even stretching didn’t help. We brought it up with the manager, who sent someone to observe our working arrangements and posture. They ordered new chairs and lowered the desks, and our aches and pains subsided

after this correction.” ♦

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