Employers incur significant medical care costs and lose productivity (and sometimes lives) due to depression and other psychosocial problems. Readily-available, easily-accessible and self-directed resources could: (a) Reduce medical care costs--an individual can do the programs on his or her own, which minimizes visits to providers and reduces medication use, (b) Improve productivity--studies have shown that depression and other psychosocial problems have a major impact on work productivity, and that effective treatment increases hours worked, (c) Improve treatment for individuals reluctant to seek care--many employees may be willing to seek out technology-based mental health solutions if they are reluctant to visit a provider, (d) Reduce suicide--depression is a pathway to suicide and it is likely that a proportion of those deaths could be prevented if the afflicted individuals receive effective treatment, (e) Improve access by overcoming barriers to care--many barriers prevent those in need getting the care they need including mental health workforce shortages, stigma, scheduling constraints, and cost of care.

We have been testing a suite of psychological training and treatment programs initially designed for use by astronauts on long-duration spaceflights. This suite makes extensive use of interactive media and contains material on conflict resolution/prevention, stress management, and depression treatment. The design creates an environment that serves as a portal to various types of learning experiences, and offers experienced mentors to guide the employee through the content. Use in isolated and confined environments has shown that the content is rated as highly acceptable and usable, and that the lessons learned are incorporated into daily interactions. The mood program (a six-session, self-directed depression treatment program based on problem-solving treatment) has been offered to employees at
Dartmouth and Dartmouth-Hitchcock via local advertisements and referrals from employee health. To date, 60 individuals have signed on to the program, 11 have progressed to the second session, and 7 have completed all 6 sessions. The stress and conflict management content will be made available later this year, and evaluations are ongoing. Evaluations consist of questionnaires automatically presented to users after they have completed a module that ask about usability, acceptability, and perceived value. Also, the depression and stress content include self-assessments of depression and stress that can be tracked over time as a measure of effectiveness. After completing a module, users are also asked if they would be willing to participate in a face-to-face interview about their experiences. The long-range goal is to make available evidence-based, fully-autonomous, web-based psychological support tools tailored for the workplace that are scalable nationwide. A substantial gap exists between available psychiatric/psychological help for employees and the need for it. These programs could potentially fill that gap.