



Landmark Study: Yoga Lowers Health Care Costs

by Timothy McCall, MD

Scientific evidence has been mounting suggesting that yoga can help people with a wide variety of health conditions improve their health. Even so, most insurance companies have been reluctant to reimburse for yoga or yoga therapy, because they wanted to see proof that doing so would actually save them money. Now for the first time, a major study published in *PLoS ONE*, a respected, open-access medical journal, is providing just that kind of documentation.

Principal investigator James E. Stahl, MD and his team studied a mind-body relaxation program that includes yoga poses, meditation, positive psychology, and mindfulness training, offered through the Benson-Henry Institute for Mind Body Medicine at Massachusetts General Hospital, part of Harvard Medical School. They followed 4,452 patients who did the program and practiced at home (and 12,149 controls) for a median of 4.2 years. To examine health care utilization, they measured "billable encounters" per year, dividing it into different categories including "clinical" (e.g. doctors' visits), "imaging" (e.g. X-rays, MRI scans), "laboratory" and "procedural" (e.g. biopsies, colonoscopies), as well as different disease categories (e.g. cardiovascular) and site of services (e.g. emergency rooms).

Total utilization of health care services decreased by 43%, clinical encounters decreased by 41.9%, imaging by 50.3%, lab encounters by 43.5%, and procedures by 21.4%. All of these results were highly statistically significant. Emergency room visits decreased from 3.6 to 1.7 per person per year. Program participants also significantly reduced utilization relative to the control group by 24.7% across all site categories and 25.3% across all clinical categories. In clinical categories, the largest reduction in utilization was found in the hematology-oncology group. Other categories of typically high utilization — neurologic, cardiovascular, musculoskeletal and gastrointestinal — also had very significant reductions.

Based on their results, Stahl et al estimate individual patients could expect to save anywhere from \$640 to \$60,200 per year. They wrote, "the cost savings from reduced emergency room visits alone in the treatment group relative to the control group, is on the order of \$2360/patient/year."

The researchers attribute the cost savings primarily to the psychological and physiological benefits of relaxation. While yoga is indeed a powerful stress reduction



technique, let's not ignore the health benefits of factors like improved posture, more efficient breathing, better balance (physically and emotionally), and having a greater sense of what you're on this planet to do (finding your dharma), all fruits of a dedicated yoga practice!

What exactly studies like this will mean for our health care system remains to be worked out, but it does give you hope that we may finally be preparing to make big changes before our dysfunctional health care system drives itself off a cliff. As the authors put it, "The focus in healthcare is shifting from high utilization of specialized care for the treatment of late-stage disease to an emphasis on patient-centered approaches and coordinated care teams that promote wellness, support self-care, provide preventive care and effective disease management. In the process of moving from transaction-based health care to wellness and prevention based care, it is prudent to identify strategies and therapies that are both clinically effective and cost beneficial. Our results indicate that mind body interventions... can reduce individual disease burden as well as the utilization of healthcare resources and are well suited to the changing healthcare environment."

That's music to a yogi's ears!



Timothy McCall, MD is a board-certified internist and the author of *Yoga as Medicine: The Yogic Prescription for Health and Healing* (Bantam). He is co-editor of forthcoming medical textbook on yoga therapy, *The Principles and Practice of Yoga in Health Care* (Handspring Publishing). Timothy is the Founder and Director of Yoga As Medicine Seminars and Teacher Trainings, which he teaches alongside his wife, yoga therapist Eliana Moreira McCall. They co-direct the Simply Yoga Institute for Yoga Therapy and Holistic Health, in Summit, NJ, near Manhattan.

Citation: Stahl JE, Dossett ML, LaJoie AS, Denninger JW, Mehta DH, Goldman R, et al. (2015) Relaxation Response and Resiliency Training and Its Effect on Healthcare Resource Utilization. PLoS ONE 10(10): e0140212.

You can [read the full study here](#) or [download a PDF](#).