Kaiser Permanente **Research**



Activity coaching to help reduce admissions

Coaches help COPD patients get physically active at home

bout 1 in 5 patients with chronic obstructive pulmonary disease is readmitted within 30 days of leaving the hospital. Reducing hospital readmissions is more important than ever—to the government, to hospitals, and certainly to patients themselves. Kaiser Permanente Southern California researchers have found a potentially effective tool to help keep these patients out of the hospital—physical activity.

According to a KPSC study published in the Annals of the American Thoracic Society in June 2014, patients who participated in any level of moderate to vigorous physical activity before their initial hospitalization had a 33% lower risk of readmission within 30 days, compared to those who were inactive.

"This study provides evidence that supports the promotion of physical activity and suggests that regular physical activity could buffer the stresses of hospitalization," said KPSC research scientist and the study's lead author, Huong Q. Nguyen, PhD, RN.

Although it's known that supervised exercise training as part of pulmonary rehabilitation improves outcomes, very few patients are able to participate.

"The problem is that pulmonary rehabilitation programs are not accessible to most patients," said pulmonologist and study co-author, Smita Desai, DO, of our San Diego Medical Center. "So getting someone who is chronically breathless to increase physical activity on their own can be challenging."

Above: Dr. Huong Nguyen and Augusto Cam





This Kaiser Permanente Southern California study found that patients with COPD who participated in any level of moderate to vigorous physical activity had a lower risk of hospital readmission within 30 days, compared to those who were inactive.

To facilitate increased activity, researchers are conducting an innovative real-world trial of a personalized 12-month physical activity coaching program for patients with COPD. The study will measure outcomes of greatest importance to patients, such as staying out of the hospital. If the study is successful, physical activity coaching could offer COPD patients an effective way to become more active.

"When I was first diagnosed with emphysema, I felt like I was lost because I didn't know how to help myself... I don't feel like that now. This program gives you a lot of support and encouragement."

- Ron Fox, Kaiser Permanente member

But what about a phone-based program where patients could exercise at home on their own time and at their convenience—could such a program avert or delay adverse outcomes, including hospitalization?

To find out, KPSC initiated a study funded by the Patient-Centered Outcomes Research Institute. The 4-year study will test the effectiveness of a patient-centered, physical activity coaching program (Walk On!) in a real-world health care setting. It will measure outcomes that are most important to patients, such as quality of life and staying out of the hospital. Participants will receive a personalized activity coaching program over 12 months.

"Coaches will monitor patients' activity, provide guidance, and help them overcome barriers," said study co-investigator and physical activity coach, Augusto Cam, RRT, RPFT, of our Los Angeles Medical Center. "Our research will give us a rare opportunity to look inside and find out what is really going on with our patients who have COPD."

The potential for this real-world trial of physical activity coaching for patients with COPD is encouraging. "The clinical impact of this study could be tremendous," said Dr. Nguyen. "If this study shows that physical activity coaching can improve outcomes, we can offer patients an effective alternative to formal pulmonary rehabilitation programs.

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For more information, contact research-communications@kp.org or visit kp.org/research.



Augusto Cam and Kenneth Desjardins Jr.

Patients join Walk On! study research team

Patients with COPD often have to abandon the active lifestyles they once enjoyed. And they often need to be hospitalized, sometimes for extended stays.

When Kaiser Permanente was starting a 3-month trial run of a physical activity coaching program for patients with COPD, Kaiser Permanente member Ron Fox was happy to participate. The pilot study was conducted in preparation for the 4-year physical activity coaching study funded by the Patient-Centered Outcomes Research Institute.

After the trial run, Fox was invited to join the study's research team as a Patient Advisory Board member. "We regard Mr. Fox and the other 5 advisory board members as equal partners on the team," said principal investigator, Huong Q. Nguyen, PhD, RN, a KPSC research scientist. "We want his perspective to ensure that the study reflects the needs and priorities of our patients."

Fox has already shown progress in the program. For him, a key measure of its success to date is that he can now mow his lawn in 30 to 45 minutes instead of 2 hours, and he has stayed out of the hospital for many months. He attributes much of his success to the quality of the coaching.

Kaiser Permanente member Kenneth Desjardins Jr. also serves as a patient advisor for the study.

"When they asked me to be an advisor for the Walk On! Program, I said yes. I've been through it all with COPD, so I thought I had a lot to offer," said Desjardins. "If I can help people with COPD to help themselves, I will have done my job."