

**SPEAKER 1:** We know that people who have a heart attack and then undergo angioplasty have a much higher incidence of morbidity and mortality following. And we know that we can ameliorate some of these burdens with cardiac rehabilitation. Patients can have a 50% reduction in all-cause mortality if they undergo cardiac rehabilitation.

So we know that patients are adherent to their smartphones and their tablets and the internet. So we took the AHA/ACC guidelines and used some Mayo expertise, along with an IT company, to build an online and smartphone based cardiac rehabilitation program.

We asked the patient to log in approximately every day or every other day. They'll input their weight, blood pressure. We ask them to record their physical activity minutes and their dietary information. They're also able to look up different educational components, such as physical activity tips, diet tips, recipes, and ways to really incorporate a healthy lifestyle after their heart attack.

So a little bit of a smaller study, 44 patients, and we had 19 of them undergo usual Mayo Clinic cardiac rehabilitation. The other 25 we asked to do cardiac rehabilitation plus use the application. In the patients that use the application, we found a significant reduction in weight, blood pressure, and an improvement in quality of life scores after 90 days, along with the Mayo Clinic cardiac rehabilitation. Interestingly enough, when we looked at the two groups, there was a 40% reduction in emergency department visits and rehospitalizations during the three months of cardiac rehabilitation.

Well, I think it reinforces the importance of cardiac rehabilitation to patients after they have a heart attack. And patients should also know that there are multiple different versions of cardiac rehabilitation, and this is just one more in the technological age that we can provide patients. Hopefully, we can extend the reach to rural, underserved populations and improve secondary prevention of cardiovascular disease. I think it further enforces that digital health is really coming down the road, and physicians should pay attention and look at all possible avenues to provide cardiac rehabilitation to their patients seeking secondary prevention.