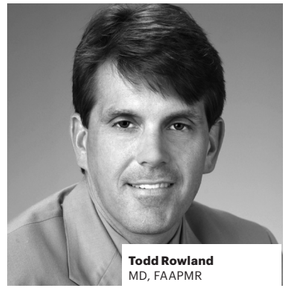
Physiatrists Lead Remote Patient Monitoring into The Future–An Interview with Dr. Stephen Lewis

Stephen B. Lewis
MD, FAAPMR



Todd Rowland
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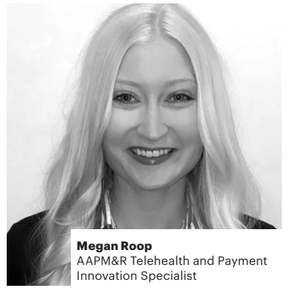

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Dr. Stephen Lewis is the founder and developer of **HEALTHGAMEPLAN®**, a remote patient monitoring and telehealth solution for physiatrists.* **HEALTHGAMEPLAN®** utilizes a team of "Technology Coaches" to facilitate all aspects of remote patient monitoring and telehealth after discharge from an inpatient setting. Patients and families learn how to use their smartphones to monitor and build functional capacity at home. Physiatrists learn how to plug in and bill for a technology team that facilitates remote patient monitoring and telehealth for rehospitalization prevention.

In this issue, Dr. Lewis shares his extensive experience integrating remote patient monitoring and telehealth into the traditional physiatry workflow. The interview was conducted by Todd Rowland, MD, FAAPMR, Chair of the Academy's Telehealth Innovation Workgroup. Responses have been edited for length and clarity.

1. How long have you been providing remote care for your patients and how did you get started?

I've been testing elements of remote care for my patients for the last seven years as a quality improvement initiative. As adoption of smart phones and smart tablets accelerated after 2010, and as other industries like banking were shifting their services away from traditional bricks and mortar onto smartphones, I saw an opportunity to rethink and modernize what I was doing as a physiatrist. Since I was seeing a large number of older patients that had recently been discharged from the hospital to skilled rehabilitation facilities, I wanted to use these mobile technologies to not only improve connectivity with patients after discharge to home but also to better address more of the underlying determinants of a possible rehospitalization.

With post-discharge rehabilitation in mind and my desire to participate in the new home-based models of care that were emerging, I began to work with a team of software developers to build the technological infrastructure that I would need to deliver telephysiatry or home-based medical rehabilitation. In essence, I really wanted to digitize what I have been doing as a physiatrist so I could extend my reach. When I saw that Medicare had released billing codes for telehealth video visits and for remote patient monitoring, I knew that I finally had the financial support to extend physiatry services out into the home using technology.

2. You have provided remote PM&R care for more than 3,000 patients in your practice— that is impressive. Why did you decide to take this journey?

Over the past several years, I had noticed that the drum beat of chronic disease and hospitalization prevention was getting louder from both the American Heart Association through various scientific statements and from Medicare through the release of new prevention-based billing codes like remote patient monitoring. I also noticed that hospitalization and rehospitalization prevention had become a major outcome measure for healthcare in general and that the predictive models for who's at most risk for hospitalization had identified functional capacity as perhaps the number one factor. Since there were new billing codes that could sustain home-based delivery of physiatry services, I decided to configure a mobile telehealth and remote patient monitoring platform that would make it easy for me to deliver care in the home. I had an eye toward maximizing functional capacity for the purpose of preventing a hospitalization or rehospitalization since those are disabling events, particularly for senior patients.

3. How can PM&R physicians be compensated for remote care? Has that changed during the COVID-19 crisis?

There's no doubt that the pandemic accelerated the use of telehealth at every level throughout healthcare. There were a lot of innovators within healthcare that have really tried to promote the use of technology. But there is no doubt that the pandemic accelerated all of that out of necessity. In fact, some hospital systems in Philadelphia reported an increase in telehealth visits from an average of 100 per day pre-pandemic to 3,000 per day. Medicare and other insurers in response to the pandemic have also expanded billing codes for both telehealth and for remote patient monitoring and these codes remain active today. PM&R physicians now have a unique opportunity to use these codes to expand our care into the home after discharge from inpatient rehabilitation. That is certainly a great place to start to deliver telephysiatry services. We can now use these telehealth codes for follow-ups after discharge and then monitor our patients in between telehealth visits using remote patient monitoring technology.

Here's a patient case to illustrate the potential and how we can do this:

I'll call him Randy. Randy is a 68-year-old male with a past medical history of diabetes, COPD, knee arthritis and depression who was admitted to the hospital with fevers, chills, sore throat and a productive cough. Eventually he developed shortness of breath and his oxygen saturations dropped to 70%. He was found to have COVID pneumonia and required intubation and spent two weeks in the ICU. He eventually was extubated but remained weak and unable to ambulate without assistance. He was transferred to a subacute rehab facility on 4L O2 NC and was initially ambulating 10 feet requiring moderate assistance. His functional status improved during his rehab stay to the point where he was ambulating 100 feet with a RW distant supervision and was independent in ADLs. He remained on 2L NC oxygen and was very fatigued and anxious about his future and whether he would get back to his old self. Upon discharge from the SNF, he agreed to receive home care, telephysiatry and remote patient monitoring services. Just prior to discharge, a Technology Coach called Randy's wife on the phone to help her download the Remote Rehabilitation Monitoring app from the Google Play store. The Technology Coaches then demonstrated how to send and receive messages using the app, and then sent home a Bluetooth pulse oximeter with Randy that would connect to the app for home monitoring of O2 sats and pulse rate. Once Randy returned home, staff called again to demonstrate how to use the pulse oximeter and the telehealth video feature. Randy then began monitoring his pulse ox and took walks in between home care physical therapy visits. He felt more safe and secure knowing he could message with me using the app and request a telehealth video visit on-demand as needed. As Randy continued home monitoring, we met over video routinely every four weeks. In between video visits, I was able to easily keep track of any abnormal pulse ox readings since the app would automatically send me an alert on Randy's dashboard. I knew that I could respond to any of his alerts through messaging, phone calls or telehealth video visits depending on what I thought Randy needed. Randy continued walking at home and monitored his pulse ox. I was able to safely wean him off the oxygen and advise him on strategies for building functional capacity over time. Randy was able to get back to doing the things he enjoyed like working around the house and visiting with neighbors. He frequently sent me messages to give me updates and to express his appreciation for the extra support.

To summarize, Randy was discharged from a skilled nursing facility in need of ongoing home-based pulmonary rehabilitation post COVID pneumonia. Because Medicare now covers both telehealth follow-ups at home and remote patient monitoring, I was able to bill for the delivery of this service while bringing value not only to Randy, but also to my referral sources who were interested in making sure Randy continued to recover without the need for a re-hospitalization.

4. What do you see as the next steps for our specialty in the rapidly evolving world of Telemedicine?

Since we know that building functional capacity at home will emerge as a primary outcome measure for healthcare going forward, I think there's a timely opportunity to show our value as physiatrists by extending our care out into the home setting using telehealth and remote patient monitoring. We can follow our patients at home after discharge from an inpatient rehabilitation unit or a skilled nursing facility as team-leaders for home care. We can team up with the home-care rehab team the same way that we do on the inpatient side. Telehealth technology can help to facilitate a similar model and integrate into the current system of home care.

Along with expanding our reach into the home, we will need to demonstrate going forward that physiatry-led telehealth services can help to prevent hospitalization and ER visits because these are important outcome measures that most population health initiatives are looking at. Through the right collaborations and the right demonstration projects that really show that we can achieve improved outcomes, we will get attention from risk-bearing entities like hospital systems and insurers. We'll better prepare physiatry to become leaders in these emerging home-based delivery models.

AAPM&R's Telehealth Innovation Workgroup is continuing to explore telehealth opportunities for physiatry. The Workgroup will provide additional updates regarding telehealth initiatives via the Academy website.

For more in-dept information, listen to Dr. Lewis' podcast on AAPM&R's online learning portal (**onlinelearning.aapmr.org**) and watch for more telehealth podcasts—coming soon!

To contact Dr. Lewis, email: **SBLEWMD@WELLNOME.COM**

** There is a fee associated with this service.*

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#PMRAdvocates: Academy Members Advocating for the Specialty


• Dr. Scott Horn and Dr. Annie Purcell attended the fall meeting of the American Medical Association Current Procedural Terminology (CPT) Panel.




• Dr. Matthew Grierson, Dr. Carlo Milani, Dr. David Reece and Dr. Clarice Sinn attended the fall meeting of the American Medical Association Relative Value Scale Update Committee (RUC).


• Dr. Nneka Ifejika and Dr. Greg Worsowic followed up after their meeting with MedPAC staff on Unified Post-Acute Care Principles and physician-driven PAC with a thank you letter that letter outlined our position on patient-reported outcomes and PAC reform.