



# Looking to the Future

*Adam T. deJong, MA, FAACVPR, FACSM*

“The best way to predict your future is to create it.”

— Abraham Lincoln

**W**e are all aware of the important role cardiac and pulmonary rehabilitation plays as a component of comprehensive treatment plans. Yet, despite the benefits, participation rates for eligible patients remain low. Personal barriers to patient participation, such as poor social support, career responsibilities, limited finances, travel difficulties, and diminished confidence, can result in low or inconsistent attendance. Systematic limitations including poor referral patterns, limited availability, and center location also pose barriers to participation.

Improving referral patterns and utilization of cardiac and pulmonary rehabilitation is a top priority for AACVPR. Improvements in patient participation are realized through process improvements, including the use of automated referrals and direct counseling of physicians. AACVPR is also working closely with the Centers for Medicare & Medicaid Services (CMS) to raise awareness

regarding the significant barrier high co-pays pose in cardiac and pulmonary rehabilitation participation. Progress is being made in this regard as the CMS office responsible for Medicare Advantage Plans investigates co-payments that are a barrier to participation by Medicare beneficiaries.

Additionally, AACVPR continues to push for passage of bills in both the Senate (S 488) and House of Representatives (HR 3355) through its Day on the Hill (DOH) and home office visits in each congressional district. These bills would allow for non-physician practitioners to supervise cardiac and pulmonary rehabilitation. This change in supervisory requirements would reduce the non-reimbursable costs associated with the CMS requirement of direct physician supervision and would ease the ability for hospitals to provide services.

Technology is another area that has the potential to improve

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## News & Views

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### About News & Views

*News & Views* is a digital newsletter distributed bimonthly to all AACVPR members. Each issue includes scientific content, reimbursement updates, research updates, Affiliate Society news, upcoming event reminders, and a leadership message highlighting current issues in cardiovascular and pulmonary rehabilitation. This is a great opportunity for you to connect to our 3,000 members as well as our 42 regional Affiliates.



the fate of polyphenols in vivo shows they are poorly conserved (less than 5 percent), with most of what is absorbed existing as chemically modified metabolites destined for rapid excretion.

The increase in antioxidant capacity of blood seen after the consumption of polyphenol-rich (ORAC-rich) foods is not caused directly by the polyphenols, but most likely results from increased uric acid levels derived from metabolism of flavonoids. Scientists can now follow the activity of flavonoids in the body. One thing that is clear is that the body perceives them as foreign compounds and is trying to get rid of them.

Spices shown to have beneficial effects on the cardiovascular system are:

- red chili peppers (reduce blood cholesterol, triglycerides, and platelet aggregation)
- cloves (inhibit platelet activity and function as an anti-inflammatory)
- ginger (may reduce blood pressure)
- garlic (improve conditions related to high blood pressure, high cholesterol, coronary heart disease, heart attacks, and hardening of the arteries).

Your local farmers market is the best place for your patients to shop for herbs and spices. Most products are grown within 100 miles, which helps to preserve nutrients while contributing to sustainable agriculture. ■

## Embrace Technology

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Former Microsoft CEO Steve Ballmer said, “The number-one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn’t think they could learn before, or so in a sense, it is all about potential.”

The field of cardiac and pulmonary rehabilitation has always been described as “low-tech and high-touch.” A mainstay of our practice will remain the personal touch and clinical judgement we provide to our patients, but technology is what helps us accomplish our patient care goals more efficiently.

Technological innovations are everywhere. Our telemetry systems can be connected with the hospital EMR/HER; billing and patient tracking software programs are used for efficiency and accuracy of finances and productivity reporting; outcomes are tracked/benchmarked via the AACVPR Registry; smartphone apps connect our patients to staff to provide program alternatives or adjuncts for improved outcomes and, ultimately, lifestyle changes.

Many technology-based practices that are commonplace today were not even thought of not so long ago. It is exciting to imagine where these technological advances will take us in the future. ■

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participation in — as well as potential health benefits achieved through — rehabilitation services. Through the use of technology, alternative delivery models may be easier to implement and outcomes may be tracked outside of the traditional rehabilitation setting.

While AACVPR does not recommend specific technologies to enhance utilization, reviews are ongoing to identify viable options, including telemonitoring or application-based services, that may help promote safe home-based rehabilitation or other alternative delivery models that could boost patient participation in cardiac and pulmonary rehabilitation services.

The move toward bundled payments and away from fee-for-service reimbursement reinforces the need to identify changes that will improve utilization and compliance of cardiac and pulmonary rehabilitation services, while decreasing barriers and improving efficiencies. Through our collective efforts as a specialty, process improvements and technological advances will be identified to enhance cardiac and pulmonary rehabilitation services. How, and to what extent, only time will tell. ■

