

septum than patients with idiopathic pulmonary arterial hypertension, although increased fibrosis did not seem to explain RV diastolic dysfunction, which was quite similar in these two groups of patients (7).

PA stiffness occurs early in the development of PH, causes an increase in pulsatile afterload that affect RV remodeling, and is associated with poor outcomes (8–10). However, whether RV fibrosis is a consequence of PA stiffness, and whether RV fibrosis represents maladaptive RV remodeling remain unclear. Although determinants of RV fibrosis are largely unexplored, a recent preclinical study demonstrated that galectin 3 was an important driver of RV fibrosis through the expansion of PDGFR α (platelet-derived growth factor receptor α)/vimentin-expressing cardiac fibroblasts. Curiously, interventions that successfully targeted fibrosis failed, however, to improve RV function, suggesting a potential disconnect between fibrosis and RV dysfunction in this animal model (11). Future studies should prospectively examine temporal relationships among RV fibrosis, metrics of RV function, and clinical outcomes in homogeneous cohorts consisting of patients belonging to a single WSPH group. It would be particularly interesting to use serial ECV assessments to study the extent to which RV fibrosis is reversible with PH therapies and interventional or surgical procedures that unload the RV.

The ability to reliably assess the extent of RV fibrosis noninvasively with novel imaging techniques raises new questions and invites a host of investigative possibilities. The particular circumstances under which RV fibrosis develops and progresses, and the clinical consequences of such progression, are now amenable to longitudinal study. With further study, we may come to recognize RV fibrosis as a maladaptive clinical feature of disease progression that should prompt escalation or tailoring of specific PH therapies. The study by Jankowich and colleagues marks an important initial step in the overall investigation into the clinical relevance of RV fibrosis in PH. ■

Author disclosures are available with the text of this article at www.atsjournals.org.

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⌘ The MISSION Act: Challenges to Sleep Medicine and Other Specialties in the Veterans Health Administration

On June 6, 2018, President Trump signed into law the Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act, directing the Veterans Health Administration (VA) to give veterans greater access to non-VA community care to address long wait times for

appointments within the VA (1). The MISSION Act program replaces the community care provided previously to veterans through Fee Basis agreements between VA facilities and local private providers and the Choice program that used third-party administrators to contract with outside providers. Under the MISSION Act, many more veterans are eligible for non-VA care. Among other criteria, veterans needing specialty care are now eligible for community care when their average drive time to the VA is greater than 60 minutes or their wait time for a VA appointment is greater than 28 days. The MISSION Act was officially launched on June 6, 2019. Its implementation is likely to increase the transformation of the VA healthcare system to a make-buy model of care delivery (2).

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Originally Published in Press as DOI: 10.1164/rccm.201906-1278ED on July 16, 2019

The MISSION Act's determination of where veterans obtain their care will have a direct impact on the VA's cost of care. In their letter to the editor appearing in this issue of the *Journal*, Donovan and colleagues (pp. 779–782) used VA administrative data to compare the type and cost of sleep testing delivered from October 2014 to July 2016 to veterans being evaluated for obstructive sleep apnea (OSA) by VA providers versus community care through Fee Basis or Choice (3). Although polysomnography was performed in the majority of veterans receiving either VA or community care, home sleep apnea tests (HSATs) were performed in 37.7% of veterans by VA providers, compared with 19.0% referred to Fee Basis and 4.1% referred to Choice. These differences had a significant impact on cost. The Medicare cost of an HSAT is about 25% of the cost of polysomnography. Compared with care delivered by VA providers on the basis of Medicare rates, Fee Basis represented \$8,831 greater cost per 100 referred veterans, and Choice represented \$15,814 greater cost per 100 referred veterans. The authors point out that their results probably underestimate actual differences, because VA services typically cost less than Medicare (4), and other community-based costs such as extra clinic visits were not captured. Although the results reported by Donovan and colleagues (3) are drawn from past VA outsourcing programs, they have important implications to the successful implementation of the MISSION Act. The VA needs to contract for services that not only improve access to care but also regulate the specific type and therefore cost of the care provided.

The Mission Act presents a particular challenge to specialty care within the VA, which is largely concentrated in VA medical centers to which many veterans do not have ready access (5). Failure of VA specialists to provide remote access could potentially result in VA resources being diverted to buy extramural specialized services rather than investing in intramural programs. As reported by Donovan and colleagues (3), VA sleep providers are much more likely to perform HSAT than non-VA providers; however, we are still too reliant on polysomnography for diagnostic testing. Polysomnography is not only more costly but also limits access because of the fixed number of sleep center beds and need to travel often long distances to a sleep center for testing. Randomized studies in the VA population demonstrate that veterans with OSA have similar patient-centered outcomes after home versus in-laboratory sleep testing (6, 7). The high prevalence of OSA in veterans further justifies HSAT as the preferred diagnostic test. VA sleep providers need to rapidly increase their use of HSAT to further improve access and lower cost of sleep testing.

VA sleep providers have already made significant progress addressing these challenges. Over the past 3 years, VA administrative data show that the number of HSATs increased by about 15% per year, whereas the number of in-laboratory polysomnograms has remained relatively constant. VA sleep providers have also developed innovative programs to reach veterans with OSA who cannot readily travel to a VA sleep center. Using a telemedicine-based, hub-spoke model, VA sleep providers are delivering care remotely using videoconferencing, HSAT, wireless transmission of continuous positive airway pressure data, and nonphysician sleep providers. Spearheading this initiative, the VA Office of Rural Health is funding six VA comprehensive sleep centers to provide care remotely to veterans with OSA who live in rural areas. Widespread expansion of this hub-spoke model across the VA is needed. To support this emerging telesleep network, an interactive web-based patient portal called REVAMP (Remote Veteran Apnea Management Platform) has been developed under the auspices of the VA Office of Connected Care and Office of Rural Health and deployed to more than 50 VA medical centers. REVAMP collects information from veterans about their sleep

symptoms and continuous positive airway pressure results and shares that information with the veterans and their sleep providers. These novel VA programs are allowing veterans with OSA to receive care remotely without traveling to a VA sleep center. Of note, this hub-spoke model of care is potentially scalable to other VA specialties, including pulmonary medicine.

The ability of veterans with OSA to obtain care within the VA ensures the continuity of their care and facilitates the ability to monitor the quality of that care. As the MISSION Act is implemented, the VA will need to address not only the way community care is delivered and its cost but also the quality and continuity of care. VA sleep providers are already struggling to manage veterans returning to the VA with a report of a sleep test performed at a non-VA sleep center without the ability to review the actual recording. Furthermore, OSA is a chronic condition, and sleep testing is only the beginning of a patient's long-term management. Robust sharing between VA and non-VA facilities through electronic health record portals will be required as part of the ongoing relationship (2).

The findings of Donovan and colleagues (3) highlight the urgent need to initiate research studies to assess the implementation and performance of the MISSION Act. In addition to focused comparisons such as that performed by these investigators, assessment of differences in patient-centered outcomes and veteran and practitioner experience and perceptions of VA versus community care will be of importance. The MISSION Act is ushering in a new era in VA health care and needs to be rigorously assessed as it transforms the care administered to our veterans. ■

Author disclosures are available with the text of this article at www.atsjournals.org.

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