Payment Reform as a Means of Achieving Justice

A Look at Pulmonary Rehabilitation Reimbursement

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Pulmonary rehabilitation (PR) is an evidence-based therapeutic option for patients with chronic respiratory diseases, particularly COPD. PR has been shown to reduce the number of hospital days for patients with COPD, acute COPD exacerbations, and hospital readmissions, which are clinical endpoints with a high impact on quality of life and health care costs.1 Additionally, multiple studies have demonstrated that PR is equally or more cost-effective than tiotropium or long-acting bronchodilators, which are mainstays of current COPD treatment.2

Access to PR and Implications on Justice

Despite its many benefits, PR is severely underutilized, with only approximately 3% of Medicare beneficiaries with COPD receiving PR.3 This is particularly true among vulnerable populations; white race, higher socioeconomic status, insurance plans with higher reimbursements rates, and proximity to urban areas are associated with increased PR use.4 During the periexacerbation period of COPD in particular, the efficacy of PR on recovery, survival, and readmission is more dramatic, yet its inaccessibility is even more pronounced.5

A health inequity is a difference in a health outcome between population cohorts caused by avoidable systemic structures rooted in racial, social, environmental, or economic injustice. Decreased access to PR services represents a health inequity because its absence from treatment of certain populations may prevent the attainment of full health potential. In addition, because a principle of justice includes the fair distribution of health care resources, the inequitable access to PR has important ethical implications. Here, we discuss how the discrepancy in distribution of PR fails three established frameworks for justice (Table 1).6

Egalitarianism, the first bioethical framework for achieving justice in health care, is based on the principle that all individuals are equal and therefore should have identical access to resources. An egalitarian approach to resource allocation would support a strict distribution of equal value, regardless of one’s attributes or characteristics. Putting this theory into practice would encourage first-come, first-serve, or random selection policies for resource distribution. PR is distributed currently in a manner that fails an egalitarian framework due to nonequal access to PR among different population cohorts.

A utilitarian approach to justice emphasizes maximizing overall benefits and “saving the most lives possible.” In contrast to the egalitarian model, utilitarianism focuses on managing distributions to maximize outcomes, creating the greatest good for the greatest number of people. The benefit of a utilitarian approach is clear: by focusing on outcomes, resources can be used most effectively. The utilitarian approach is optimized with the use of triage (for example, the use of a system that categorizes patients into groups based on their likelihood of benefit so that PR resources can be allocated to ensure the best clinical outcomes for the highest number of people). Poor access to PR means that outcomes are not maximized currently for patients with COPD; therefore, it fails the utilitarian model.
A third approach, distributive justice, mandates that resources be allocated to those with the greatest need in a manner that does not infringe on individual liberties. This requires sensitivity to societal inequity, which is a factor absent from consideration in egalitarianism and utilitarianism. Although egalitarianism ensures that all people have equal access to resources, distributive justice incorporates equity into the distribution decision by mandating that more resources be distributed to individuals with greater need. This approach targets not only inequalities but inequities in health outcomes. To allocate PR in a manner consistent with distributive justice, it should be provided to patients with the most significant underlying disease.

Under our current system, utilization of and access to PR fails all three principles of justice. Additionally, inequities in PR access may worsen during and after the COVID-19 pandemic, because patients lose employer-based insurance in the context of rising unemployment and survivors of COVID-19 with chronic lung disease contribute to increased demand for PR.

**Amending PR Reimbursement to Improve Access and Achieve Justice**

Although many factors contribute to the low and unequal use of PR, poor reimbursement presents a significant barrier to increased adoption. Because the benefits of PR from a patient and societal perspective are not aligned with reimbursement, the current system helps fewer people and exacerbates health inequities. To promote access to PR, we must focus both on how to improve reimbursement under current payment systems and how to advocate for new payment models that incentivize cost-effective care.

First, we recommend reforming and increasing PR reimbursement. Under our current payment system, PR is reimbursed under a bundled 1-hour payment code, G0424. The current reimbursement for G0424 varies but is less than one-half the reimbursement for cardiac rehabilitation (approximately $56 vs $117 for 1 hour of treatment) and considerably less than many other outpatient services. To bolster PR reimbursement, advocates have encouraged hospitals to ensure that the charge submitted for code G0424 is accurate relative to the charges listed for other services on the charge master and that the full cost of services is listed in cost reports submitted to US Centers for Medicare and Medicaid Services (CMS), because these impact the determination of future payment rates. Ultimately, if hospital administrators were to set more appropriate charge rates for PR services, then the national average charge for PR would increase, Medicare payment for each unit of G0424 would rise correspondingly, and PR reimbursement would match that of other outpatient services such as cardiac rehabilitation. This would ultimately incentivize more widespread use among health systems.

Second, we recommend that CMS extend their recent coverage of pulmonary telerehabilitation beyond the current pandemic and that this coverage apply to center-based, home-based, and web-based telerehabilitation. Center-based links a larger center to PR at one or more remote sites; home-based allows patients to undergo supervised rehabilitation in their own homes; and web-based permits PR on mobile phone and web applications to take place for patients anywhere. These various platforms have demonstrated similar benefits to in-person center-based PR in patients with COPD. Because travel, transport, and location have been identified consistently as barriers to uptake and completion of PR, CMS continuing coverage of telerehabilitation would help expand long-standing access to PR, particularly in rural areas that currently are underserved disproportionately. It is worth acknowledging that these models are still works-in-progress, and standards do not yet exist that mandate effective and necessary components of the center-based, home-based, and web-

### Table 1: Frameworks of Justice and Current System Failures

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<tr>
<th>Ethical Framework</th>
<th>Overarching Premise</th>
<th>Current System Failure</th>
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<tbody>
<tr>
<td>Egalitarian</td>
<td>Treat people equally</td>
<td>Only patients with insurance that offers higher reimbursements for PR are offered PR as viable treatment.</td>
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<tr>
<td>Utilitarian</td>
<td>Maximize benefits</td>
<td>Poor access to PR means that outcomes currently are not maximized for patients with COPD.</td>
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<tr>
<td>Distributive</td>
<td>Treat those in greatest need</td>
<td>Vulnerable populations (characterized by skin color and socioeconomic status) have disproportionately less access to PR than white and wealthier counterparts.</td>
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based platforms. Ongoing research will be important to continue to optimize the components and outcome measures before widespread adoption of the various telecommunication platforms.

Finally, we recommend moving from fee-for-service to value-based payment models in health care. This shift would incentivize the use of low-cost and highly effective therapies such as PR. Encouraging more providers to adopt systems such as shared savings or capitated payments allows providers to explore cost-effective processes that yield the best outcomes, rather than relying on face-to-face services to generate a bill. Such a paradigm shift in our payment schemes undoubtedly would make PR more financially viable, particularly given its impacts on costly COPD endpoints, such as hospital length of stay and readmissions.

Conclusions
Our recommendations would not only lead to economic savings, but also would lead to ethical benefits with more equitable care for patients, regardless of background, race, or socioeconomic status. In fact, justice and moral decency is unlikely to be achieved without modifications in the country’s health care economics. Fortunately, PR represents an achievable means to provide affordable and high-quality care to more individuals, especially those from non-white and less affluent communities that have been affected disproportionately by COPD, COVID-19, and other respiratory conditions. Our proposals for payment reform are necessary to ensure the continued and increased adoption of PR and to help transform US health care into a system that achieves justice for historically marginalized patients. This is one small, but important, step in paving the future for equitable resource allocation in health care.

References