

## Disease Management As an Evolving Role for Respiratory Therapists

In an era in which disease management is becoming an increasingly common intervention for the care of individuals with chronic diseases, a new role as disease manager is emerging for allied health providers. According to the Disease Management Association of America, disease management is defined as:

... a system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant. Disease management supports the physician or practitioner/patient relationship and plan of care; emphasizes prevention of exacerbations and complications utilizing evidence-based practice guidelines and patient empowerment strategies; and evaluates clinical, humanistic, and economic outcomes on an ongoing basis with the goal of improving overall health.<sup>1</sup>

Our premise in this editorial is that respiratory therapists (RTs) are uniquely positioned to assume the role of disease manager for respiratory conditions. At the same time, we consider and articulate opportunities to improve RTs' candidacy for this role.

The skills necessary to be an effective disease manager include:

1. Content expertise (ie, in the context of respiratory case management, knowledge of the underlying conditions and of the treatments used for these respiratory conditions)
2. Ability to implement protocols to guide patient care, as disease management often involves protocol use
3. Close interaction with the managing physician (eg, in the case of respiratory case management, close interaction with the managing pulmonologist, internist, anesthesiologist, primary care physician, and/or other provider)
4. Expertise in interacting with patients, including managing group sessions and group teaching.

Indeed, exercising these skills aligns closely with the components of disease management according to the Disease Management Association of America:

1. Population identification processes.
2. Evidence-based practice guidelines.
3. Collaborative practice models to include physician and support-service providers.
4. Patient self-management education (may include primary prevention, behavior modification programs, and compliance/surveillance).
5. Process and outcomes measurement, evaluation, and management.
6. Routine reporting/feedback loop (may include communication with patient, physician, health plan and ancillary providers, and practice profiling).<sup>1</sup>

Consideration of RTs' preparedness and expertise in these roles indicates several obvious strengths, as well as opportunities to enhance RTs' candidacy for the role of disease manager.<sup>2</sup>

Regarding strengths, RTs' training and experience support their having special expertise in the clinical conditions for which respiratory disease management is undertaken, especially asthma, chronic obstructive pulmonary disease (COPD), and interstitial lung disease. RT expertise in respiratory medications and interventions (eg, supplemental oxygen, bronchodilators, and chest physiotherapy) obviously recommends them to the role of case manager.

Given the ample use of protocols in disease management, RTs' clear-cut familiarity with and use of respiratory care protocols also position them well for disease management.<sup>2</sup> As a measure of the prevalence of protocol use across the full spectrum of respiratory care (ie, hospital care, long-term care, and home care), Gaylin et al<sup>3</sup> reported in a survey of 471 RTs, clinical supervisors, and administrative supervisors, culled from the database of the American Association for Respiratory Care, that 98% of respondents were currently using respiratory protocols. Also, the Association's 2005 Respiratory Therapist Human Resources Survey reported that 89.7% of 3,000 RTs surveyed had delivered care via protocol and that 72.8% of their hospitals were providing care through at least one respiratory care protocol.<sup>4</sup> As further evidence of RTs' enhanced competence in implementing protocols, observations by Browning et al<sup>5</sup> on ordering arterial blood gas tests in the intensive care unit, both before and after implementing a protocol, indicated that RTs were more likely

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to order arterial blood gas tests appropriately than were other intensive care providers.

Another feature that especially recommends RTs for the role of disease manager is their close interaction with the physicians whose patients will be included in respiratory case management programs (eg, pulmonologists, internists, anesthesiologists, primary care physicians, and intensivists). Because medical directors of respiratory care are frequently physicians in these same specialties (who may even be involved in RT hiring decisions), a close working relationship between the managing physician and the RT is deeply entrenched.

Finally, as clinicians who care for and regularly interact with patients about their symptoms and about treatment recommendations, RTs are well-suited to the clinical interactive role of disease manager. Furthermore, formal training about interacting with patients, including clinical assessment, interviewing skills, and physical examination, are amply represented in respiratory care curricula and in basic textbooks of respiratory care.<sup>6</sup>

Taken together, these features of RTs' training and practice certainly recommend them strongly for the role of disease manager. At the same time, review of the criteria for skilled disease management identifies some subjects in which RTs' skills can be further enhanced for the disease manager role. For example, an important component of disease management interventions is providing self-management education to enable patients to monitor their symptoms at home and initiate appropriate treatment if there is a change in symptoms. Therefore, disease managers need to be able to assess the patient's social support and home needs, provide self-management education, and understand methods to give patients the self-confidence to undertake these self-management behaviors. Also, disease management frequently involves conducting group meetings with patients. Because meeting management has not fallen within the traditional scope of respiratory care practice or training, this represents an opportunity for curricular and training enhancement for RTs. Related skills in team-building, meeting facilitation, and conflict management are important as well and should be within the "toolbox" of the effective respiratory disease manager.

In the context that RTs are attractive candidates for respiratory disease managers, what is the reported experience of RTs as disease managers? First, to the extent that implementing respiratory care protocols involves many aspects of disease management, RTs' roles as assessors and implementers of care demonstrate important disease management experience. Furthermore, to the extent that respiratory care protocols have been shown to be effective in enhancing the allocation of care,<sup>7-11</sup> which is a primary goal of disease management, RTs' experience is well-demonstrated. Beyond

implementing respiratory care protocols, RTs have demonstrated experience in other disease management roles. For example, as certified asthma educators (a role achieved by approximately 900 individuals to date), RTs function as disease managers. Also, RTs have served as disease managers for patients with COPD. For example, in a randomized clinical trial that examined a disease-specific self-management intervention supervised by health professionals, Bourbeau et al<sup>12</sup> found that the disease management intervention (with home visits and instruction) conferred substantial benefit by lowering the rate of hospital admissions for COPD exacerbations. Specifically, hospitalizations for COPD exacerbations were reduced by 39.8% in the intervention (disease management) group, compared with the usual physician-care group. Also, admissions for other health problems were reduced even more. RTs served as the disease managers in 2 of the 7 centers participating in that trial, further demonstrating their capability for this role.

Disease management opportunities for RTs are likely to grow in the near term. For example, a recently approved multicenter Veteran's Affairs cooperative trial (Bronchitis and Emphysema Advice and Training to Reduce Hospitalization [BREATH]) proposes a hospital-based disease management strategy to avert hospitalization due to COPD exacerbation.<sup>13</sup> In this randomized controlled trial, which will compare usual physician care with a comprehensive management intervention (focusing on providing an action plan for antibiotics and corticosteroids in the event of an exacerbation, and hospital-based instruction by disease managers), discussions during the planning of the trial focused on the characteristics of the ideal allied health provider to serve as disease manager. The planning group, consisting of the principal investigators, consulting pulmonologists, behavioral scientists, pharmacists, and biostatisticians, endorsed RTs as the preferred candidates for disease managers in the trial. On this basis, the final study protocol specified RTs as the disease managers.

Overall, on the basis of RTs' training, experience, and knowledge, we believe that RTs are ideal candidates to serve as respiratory disease managers. The need for disease managers to have competence in self-management education, behavioral theory, meeting management, and team-building underscores opportunities for curricular growth within respiratory care training that will further enhance RTs' candidacy. Finally, given the growth in disease management as America ages and as we explore new strategies to care for growing numbers of affected individuals, the need for disease management will grow. Thus, we believe that respiratory disease management represents another expansion of RTs' scope of practice and we encourage attention to the additional training in respiratory

care curricula that will optimize RTs' candidacy for these roles.

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