Home care in respiratory therapy

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Home care is the provision of equipment and services in the residences of clients and families who require rehabilitation for their acute or chronic needs (1). Home care can include residential care, community care and hospice/palliative care. Generally, the mission of providing home care to clients with respiratory disease is to improve survival, decrease morbidity, encourage independence and self-management, and improve quality of life. For clients with terminal respiratory disease, the focus of care is on pain management and psychological comfort, making dying as comfortable as possible. Overall, the goal of home health care services is to mitigate total health care expenditures, primarily by reducing acute care hospital stays (2).

The most common patient group with respiratory illness that requires home health care services are individuals with chronic obstructive pulmonary disease (COPD). Patients with paralytic syndromes also have significant respiratory care needs. Studies show the need for home health care services in patients with cystic fibrosis as it pertains to receiving home oxygen therapy. Traditionally, home care services in respiratory therapy mostly included oxygen therapy and airway management/tracheostomy care (3). Over the past 20 years, however, there has been an increase in the rate in which other respiratory therapy interventions are being used in the home, including mechanical ventilation or continuous positive airway pressure therapy for the treatment of obstructive sleep apnea (3).

All patients with COPD or paralytic syndromes are not necessarily suitable candidates for home care services. Patients who are discharged requiring home health care must demonstrate complex medical needs or have comorbidities of COPD and chronic heart failure (4). Each organization should have clinical practice guidelines for assessing patient readiness for hospital discharge. Included in the assessment is an analysis of individual patient respiratory needs and the suitability of the home environment. The best way to address the needs of home care individuals requiring respiratory therapy services is to approach it using a patient-centred and family oriented model (2). Using this design, the provision of care starts within the context of the patient as the focus, and the home care service provider, such as the respiratory therapist, as the visitor in that environment.

Individuals managed in the home require a variety of specialists to be involved in their care, and a patient requiring home health services for respiratory care will have an interdisciplinary team involved in the management plan. Generally, the expectation is that home health service providers are able to assist patients with daily treatment of respiratory disease, identify and understand complications and educate on the safe use of respiratory equipment. Jeppesen et al (5) provide additonal information regarding provincial Ministry of Health eligibility criteria for home oxygen therapy. Respiratory care services provided in the home setting are not traditional, and there are several advantages and disadvantages. Improvements to quality of life, positive behavioural changes and reduction in hospital stays are all advantages to home health care. Some of the disadvantages are related to burden of care, home setting suitability and the availability of funding.

There is an assumption that patients living with chronic respiratory disease gain an advantage when being managed in the community or from their own homes. The ingrained general belief of health care providers is that discharging a patient from a hospital setting to a community or their home is beneficial (6). Patients with COPD receiving home care have reported improvements in health-related quality of life, which includes functional status, symptoms and overall health perceptions. There has also been evidence supporting positive health behavioural changes that arise as a result of home care respiratory therapy (2). After only a modest amount of education in disease pathology and medication, patients receiving regular visits from a respiratory therapist have a greater rate of smoking cessation compared with patients not receiving home respiratory therapy (2). Other lifestyle changes that have been documented as a result of COPD management using home care services include energy conservation strategies, which help cope with exacerbations, relaxation and breathing techniques, and regular exercise (7).

Hospitals are very expensive health care settings, and an important goal of home care programs is to reduce the number of patient hospital stays and acute care admissions (6). Interventional studies and randomized control trials have reported a reduction in total hospital days with home care models when treating patients with respiratory disease, except for those being treated for lung cancer (2). The reduction was based on the type of respiratory impairment that was affecting the patient. Although results are mixed when determining the reduction of hospitalizations and length of hospital stays, the majority of cases showed a reduction in hospital length of stay (2).

Although the positive aspects of respiratory therapy in a home care setting appear obvious, there are still insufficient data showing the efficacy of home care being useful or even cost effective (8). The disadvantages of home care may not be extensive, but they exist and certainly are worth mentioning. Home care costs have been rising over the past 40 years and the increase is indicative of an augmented focus on home care services (3). Although home care costs have been rising, hospital costs have not been falling, as one would assume. In Canada, there is a significant variation in the funding allocated toward home care (3). There exists a need to request funding from provincial and federal initiatives to examine the financial disparities. The differences result in access inequalities to home care services throughout the country.

The home is a place where one can choose to live comfortably, safely and healthily. If an individual qualifies for home care services, then he or she is entitled to be granted the ability to utilize the services as required. Home care involves a complex range of services and professionals. Patients and family members are also important members of the health care team, and this must be taken into account when considering the care plan of patients being treated outside the hospital environment. There is significant concern regarding the possible burden placed on family and friends involved in the supportive network and care team of the patient (9). Although the degree to which strain placed on the informal care providers varies, little information

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is available regarding the measure to which burden of care is distributed from the hospital to the patient, family and community (9). The standard modern home was not designed with the intention of creating an environment that would enable safe and effective health care. Therefore, the home setting can actually become an unsafe or hazardous place for both the client and any providers involved, including the health professional or family members (2).

To prevent dangerous incidents or events, respiratory therapists play a vital role in educating patients and family members in the safe use of oxygen therapy equipment and medications. It takes a full understanding of respiratory therapy to facilitate a smooth transition between care in hospital to that of management in the home. There is a call for more dedicated and passionate respiratory therapists who are willing to undertake the task of being involved in the community setting. Supporting the heart and pulmonary health of patients with respiratory disease and ensuring cardiorespiratory stability is highly gratifying. Working in the home care setting requires solid patient assessment skills and expert knowledge in oxygen therapy and equipment. Critical care skills are truly applied in a home environment where less-invasive patient monitors are available.

Comfortable death may be a valuable area for future study (10). Respiratory therapists are often among the final health care professional in contact with a terminally ill patient, and much of the support not only pertains to physical comfort, but also to psychosocial management. Further efforts may be invested into training registered respiratory therapists how to recognize symptoms of psychosocial distress in the final stages of a patient's life and how to make a referral to the most responsible physician.

In conclusion, it is recommended that respiratory therapist-based home health care services be expanded. Alternatively, provincial reimbursement/coverage of these services should be increased. In time, it becomes clear that the level of trust developed between the home care service client and the respiratory therapist is invaluable. A strong bond can be formed... and it is worth it.

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