Pulmonary rehabilitation in country South Australia—a breath of fresh air

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Establishing the Program

In 2009 Country Health SA Local Health Network funded 13 country hospitals to implement the Better Care in the Community program, a key health reform model encouraging a shift of resources and services from in-hospital to primary or community settings. A primary focus of this program is to reduce the number of potentially avoidable admissions, and decrease length of stay in hospital, for patients with diabetes, cardiac or respiratory conditions. Sites were selected for inclusion based upon their significant number of separations for the three target conditions, with additional consideration given to those sites that provide services to a large number of Aboriginal people.

In the early days of the Better Care in the Community program there was an emphasis on identifying clients with a history of high hospital utilisation and referring them to the Better Care Coordinator for ongoing support, case management and care coordination between service providers. As the local Better Care in the Community programs evolved, the number of clients requiring ongoing support for chronic respiratory conditions also grew. In response to this growing client group many of Better Care facilitation sites established a dedicated respiratory nurse role as part of their local strategy.

As the number of clients who would benefit from participating in pulmonary rehabilitation grew, local sites began negotiations with managers, allied health staff, GPs, practice nurses, visiting respiratory specialists and other health providers to determine the benefits of establishing a local program.

While the benefits of participating in pulmonary rehabilitation are well recognised\textsuperscript{1}:

- enhances health related quality of life and self efficacy
- improves exercise performance
- improves mental health
- reduces breathlessness
- reduces health utilisation,

few country residents in South Australia participated in pulmonary rehabilitation as access to programs close to home was limited.

To address this, multidisciplinary teams providing pulmonary rehabilitation programs were established in 11 locations across country SA between 2010 and 2012.

Client outcomes

Clients with a history of high hospital utilisation for respiratory related admissions are identified upon presentation to Emergency Department or admission to hospital and referred to the respiratory nurse for further assessment, and encouraged to participate in pulmonary rehabilitation. Referrals are also received from local general practitioners.

The pulmonary rehabilitation program consists of eight weekly sessions including group education and supervised exercise components.

A number of baseline indicators, including 6 minute walk test, are recorded prior to commencement of the program and again at the end of the program to measure improvement. Clients also recorded their duration of exercise and appropriate clinical indicators at each session attended.
In addition to monitoring clinical indicators, pulmonary rehabilitation coordinators work closely with clients to identify factors which are likely to increase risk of unplanned admissions and helped clients to develop strategies to reduce the likelihood of these risk factors impacting on their health. Examples include anxiety, social isolation, financial or transport issues, carer stress, learned behaviour, dependency on health service, stress, disease progression etc.

During 2011-12 approximately 250 clients participated in a pulmonary rehabilitation group, with about one third of these participants continuing to attend exercise maintenance groups. Data collected by group coordinators demonstrates improvements in fitness and clinical indicators, improved quality of life and a reduction in unplanned hospital presentations or admissions for this cohort of clients.

Supporting a skilled workforce and building capacity
Respiratory nurses in country health units provide a variety of roles including comprehensive respiratory assessment, client education, inpatient reviews, case management, lifestyle coaching and support, care planning, care coordination with other health care providers, outpatient clinics, supporting visiting respiratory physicians, and conducting home oxygen reviews.

CHSALHN supported 11 respiratory nurses to attend a 5-day intensive course improving their knowledge and skills to deliver high quality pulmonary rehabilitation programs and associated clinical services. Most respiratory nurses in country hospitals work in isolation - often being the only respiratory nurse employed in the local health service. These positions need to be supported with skills training to develop and build high quality and consistent respiratory services across country SA. Participation in this training resulted in the development of a peer network amongst these nurses.

CHSALHN has recently employed a Lead Respiratory Nurse to further support staff providing respiratory services and assist in the development of consistent, quality, evidence based respiratory programs across country SA.

Country respiratory nurses regularly link by teleconference on a monthly basis to explore ways to improve client care and implement consistent assessment tools across the program. In doing so monitoring and evaluating improvements and outcomes for clients with respiratory conditions can be readily shared.

Finding space
One of the greatest challenges was ensuring health units had the staff, skills and adequate space to provide the program, as some of the physiotherapy gyms in the health units could only accommodate a small number of people at any one time.

As not all sites had the space to run groups in existing physiotherapy gyms, some chose to negotiate dedicated time at the local community/private gym and subsidise the cost for clients. In return private gyms have offered participants significant discounts on full year gym membership which has resulted in most clients continuing to attend the gym beyond the life of the program. This model has had significant benefits for both the consumer and the private business in these locations.

Another health unit chose to rent a shed in an industrial complex which they converted into a gym and activity space. This gym is supervised by the physiotherapists and occupational therapists from the health unit, and is now utilised by a variety of clients participating in rehabilitation, group education or peer support groups.

A client story
Mrs A is a 57 year old lady who has chronic obstructive pulmonary disease (COPD). During the past year Mrs A has had many hospital admissions with length of stay ranging from 2 to 18 days, and her longest period out of hospital being two weeks. The local Better Care in the Community Coordinator met Mrs A while an inpatient and invited her to participate in pulmonary rehabilitation.
Mrs A requires portable oxygen, weighs 110kg, and has been confined to her home for most of the last year. Her son brought her along to the group but she was not engaged and did not want to use any of the exercise equipment. She missed a couple of weeks but by the end of the program she was joining in with the group and approached the coordinator to ask if she could repeat the program. The coordinator was keen to have her involved again.

At the commencement of the next group Mrs A managed to walk on the treadmill for one minute. With the support of the group coordinators Mrs A steadily progressed and at the end of the eight week course was exercising ten minutes on each piece of equipment. Eight months later Mrs A continues to attend the pulmonary exercise maintenance group once a week, has lost over 30kg, is not dependent upon portable oxygen and is back driving her car and visiting her grandchildren. Mrs A still has COPD, requiring many medications and regular monitoring and management, but has not had an admission to hospital since January 2012. Through attendance at pulmonary rehabilitation, and ongoing support and care coordination provided through the Better Care in the Community program Mrs A has dramatically improved her quality of life.

**Conclusion**

While client engagement in these programs has improved the health of many, resulting in reduced hospital admissions and/or length of stay, more significantly it has provided participants with opportunity to form friendships and networks, reduce social isolation, and support to regain their lives and independence, despite their chronic condition.

A number of consumers who have completed pulmonary rehabilitation have returned as advocates for the program and provide peer support to other participants and are actively involved in promoting the benefits of the program to other people with chronic respiratory conditions.

The employment of dedicated respiratory nursing roles and the establishment of multidisciplinary teams providing pulmonary rehabilitation at country health units have improved access to timely information, support and coordination of care for clients with chronic respiratory conditions. The establishment of quality respiratory related services in country South Australia has led to improvements in local service capacity, positive partnerships with general practice and the building of multi-disciplinary teams working closely with visiting specialists and providing ongoing support and care for people with respiratory conditions.

**Recommendation**

Establish sustainable service frameworks and clinical governance structures to ensure continuity of services, such as respiratory, in rural areas.

This recommendation has come about as some of our services are dependent on tenuous links with metro services and the ‘good-will’ of visiting specialists. Some regions receive no specialist support at all while others receive services from a variety of sources (private and public). What is required is a more formal arrangement between metro and country services to stand the test of time and changes in personnel etc. Also this needs to recognise the importance of building workforce and service capacity (nursing and allied health) in country locations to provide quality services to local communities with links to tertiary services and specialists for timely advice and expertise.

**References**