Supported self-management case history

Looking beyond the disease

In the third in our series of snapshot case vignettes aimed at illustrating self-management opportunities Dr Iain Small brings you the case of Gerald. Three healthcare professionals have provided their feedback on the case. How would you respond?

Gerald

Gerald is a 74-year-old retired joiner with COPD, ischaemic heart disease, osteoarthritis and diverticular disease. He is a widower who lives alone on the third floor of a 1950s block in a large post-war housing development in a Scottish city. His son works off shore and his daughter emigrated to Australia in the 1980s.

Gerald has stated repeatedly that he wishes to remain in his own home until he dies and is reluctant to accept social work intervention. He has capacity.

Gerald is currently boarded out in a specialist surgical ward in the local teaching hospital near his home, having been admitted with an acute exacerbation of COPD. He has been in hospital for 6 days and has responded well to antibiotics and oral corticosteroids. He no longer requires supplementary oxygen and 2 days ago he agreed with his consultant that he can be discharged home.

This morning Gerald is breathless again. He has expressed concerns to junior medical and nursing staff that he doesn't think he will be well enough to go home, but his discharge will be going ahead as planned.

- What steps need to be taken in preparation for Gerald's discharge from hospital?
- What factors are likely to influence the likelihood of an early re-admission to hospital?
- What potential harm might Gerald face in the future?

Response

Vikki Knowles, Respiratory Clinical Lead, Surrey

Gerald clearly has many issues and the team would need to ascertain what his wishes are for the future and also Gerald's understanding of his condition. Issues to address would include whether he wished for active treatment and readmission into hospital in the future or would he prefer a palliative care approach with a ceiling of treatment which may involve referral to the hospice with the aim of avoiding admission in the future. Any decisions arising from this discussion would need to be communicated to all the HCP involved in Gerald's care so they are aware of his wishes and any advance care plans in place are documented.

Gerald would need an OT assessment prior to discharge and, although recognising Gerald's reluctance for social work intervention, arrange a discussion around consideration for a temporary package of care if it was felt to be appropriate, which can be re assessed once Gerald is home. It might also be appropriate to discuss the provision of an emergency call system in case of falls.

The respiratory team need to ensure the COPD discharge bundle[1] has been completed and Gerald has been referred to the community respiratory team. They should consider whether Gerald would be suitable to attend pulmonary rehabilitation once he

is home and discuss how this would help him and, if it was deemed appropriate, how it could be organised.

Gerald will need a home visit to be arranged immediately post discharge to assess how he is coping by the community respiratory team, possibly in conjunction with the community matron. Where such services don't exist, consideration of who else could support him should be given.

The respiratory team should liaise with community matron and frailty multi-disciplinary team (MDT) to ensure that they are aware of Gerald's imminent discharge and are aware of the support currently being organised. Locally the respiratory team attend the Community Matron's MDT virtual ward meetings and complex patients like Gerald are brought here to discuss issues as they arise and plan solutions for any issues which are identified.

A follow-up appointment may be required to assess home oxygen needs once Gerald is stable, but this can be in conjunction with community respiratory team home visits.

Finally, the respiratory team needs to ensure that the GP and practice staff have been updated on the plans in place and updated following the home visit. Locally we would update the paramedics' computerised notes system which provides access to Gerald's relevant medical history such as baseline oxygen saturations, lung function and his documented wishes should he call the emergency services following discharge.

Reference

1. https://www.brit-thoracic.org.uk/document-library/audit-and-quality-improvement/cap-and-copd-care-bundle-docs-2016/copd-discharge-care-bundle/

Response

Hetal Dhruve, Pharmacist, London

What steps need to be taken in preparation for Gerald's discharge from hospital?

Prior to discharge, inhaler technique and adherence to medication should be checked, ensuring the patient is able to use the prescribed device. A systematic review including 144 studies with a total of 54,354 people found that the frequency of 'poor' inhaler technique was high for all inhaler types, and those who are not able to use their inhalers correctly are at increased risk of poor control of their symptoms.

Self-management generally refers to the "individual's ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition". Self-management interventions have been shown to improve quality of life, reduce dyspnoea and reduce respiratory-related and all-cause hospital admissions. Although the evidence for the provision of self-management plans and rescue packs is conflicting in COPD, when used appropriately they have been shown to reduce hospital admissions.

Pulmonary rehabilitation (PR) is a very well-evidenced intervention supporting self-management in COPD and is recommended in guidelines. The BTS suggests that all patients hospitalised for acute exacerbation of COPD should be offered PR to commence within 1 month of discharge. PR has been shown to improve quality of life and to significantly reduce hospital admissions with a number needed to treat of 4.

Smoking cessation is one of the most important interventions for those with COPD; if Gerald is a current smoker, smoking cessation advice should be given supported with pharmacotherapy.

What factors are likely to influence the likelihood of an early readmission to hospital?

Non-engagement in treatment can lead to an early readmission to hospital. It is therefore of upmost importance that the patient is engaged in his own care. Evidence suggests that, by supporting patients to be actively involved in their own care, treatment and support can improve both outcomes and patient experiences.

Additionally, post discharge the GP practice should ensure that Gerald is up to date with his vaccinations. Current NICE and international GOLD guidelines on management of COPD recommend the pneumococcal and an annual influenza vaccination.

Patients with COPD/IHD co-morbidity have worse outcomes than those with only COPD or IHD, with a significantly increased risk of adverse events and mortality. His treatment will need to be optimised.

Although the underlying pathology of COPD is initially confined to the lungs, many patients may also experience emotional and psychological disorders which are quite often overlooked. Studies have consistently documented strong links between COPD and depression; a meta-analysis of 16 studies showed that COPD

consistently increased the risk of depression, with an estimated 40% of patients affected by severe depressive symptoms or clinical depressions. This can lead to malnutrition, deconditioning and non-engagement of treatments, increasing the likelihood of further hospital admissions.

What potential harm might Gerald face in the future?

Gerald lives on the third floor of a 1950s block and may struggle to climb stairs if there is no lift available or it is out of order.

The disease trajectory of COPD can be difficult to predict; the dying phase may continue for many years along this trajectory or patients could die during an acute exacerbation. Gerald will need ongoing care and may need palliative care as end of life approaches. On this admission, Gerald required NIV which is a marker of someone who may require palliative care. Gerald has repeatedly vocalised he wishes to remain in his own home until he dies; this should be recognised and services and provisions put in place. The family should also be informed.

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Department of Health. Consultation on a Strategy for Chronic Obstructive Pulmonary Disease (COPD) in England.

Response

Deirdre Siddaway, Respiratory Nurse Specialist, Suffolk

- Embedding and promoting self-management into every contact: Gerald.
- Gerald faces many challenges on his discharge from hospital, not least the risk of readmission.

Follow-up after discharge

GOLD (2018)[1] recommend follow-up within 1 month of discharge then after a further 3 months – but Gerald may require additional support. We would need to work in partnership with him, to formulate a plan to support his aim to stay at home and prevent readmission.

Smoking cessation (if applicable)

Research has shown that the risk of acute exacerbations of COPD is reduced if the patient no longer smokes.[2] He may be more motivated to stop smoking after an acute admission. We must take every opportunity to support patients in attempts to quit. Very Brief Advice takes 30 seconds (see NCSCT for more information and NICE, 2018).[3,4]

Vaccination

Annual flu and single pneumovax will help to reduce the risk of respiratory tract infections.

Pulmonary rehabilitation (PR)

We should encourage Gerald to attend PR as soon as possible (hopefully he was referred prior to discharge). Particular benefit is gained if attending within 4 weeks of admission, which can reduce readmission and mortality[5] and increase his confidence in managing his condition and exacerbations.[6]

Optimising medication

Following GOLD (2018) will enable stratification of future risk.[7] This allows us to appropriately prescribe inhaled corticosteroids (although not everyone with COPD needs an inhaled corticosteroid, this would be appropriate for Gerald following admission). Checking inhaler technique is essential (inhaling slow and steady for pMDI/quick and deep for DPI inhalers). The UK Inhaler Group provides excellent guides for us to follow.[8] Use of tools like the COPD Assessment Test (CAT)[9] enables us to assess the impact of COPD on Gerald's life and how it changes over time.

Self-management and rescue pack

We must provide Gerald with the knowledge and ability to manage future exacerbations. Use of self-management plans and rescue pack (antibiotics and oral steroids) can enable prompt treatment of exacer-

bations. His management plan should clearly explain when these are required (increased dyspnoea, sputum volume, sputum purulence), how to take them (prednisolone may not be required with every exacerbation; GOLD 2018).[1]

Non-pharmacological management of dyspnoea

The 'Breathing Thinking Functioning Model' – the Cambridge Breathlessness Intervention Team (see PCRA video clip[10]) – gives us tools to help reduce the negative impact on George's life by addressing the vicious cycle of dyspnoea. The use of a handheld fan may also help George to manage his feelings of breathlessness.

Differential diagnosis

Coronary heart disease (frothy sputum, peripheral/pulmonary oedema, orthopnoea) or heart failure (paroxysmal nocturnal dyspnoea) could be causes of dyspnoea rather than an acute exacerbation of COPD. We know that fatigue, anxiety, depression and slow recovery from exacerbations are seen with comorbidities.[11]

Multidisciplinary team (MDT)

Gerald is reluctant to accept social work intervention. We will work with him to encourage acceptance of support (Integrated Care Team/COPD Team/Community Matron).

End of life

Gerald has said that he wishes to die at home. Working with him and other members of the MDT will be key to enabling Gerald's wishes to be achieved, especially with limited social support. For more information see papers by Dean[12] and Kocchar.[13]

We know that acute admission rates are 60–90% higher in the most deprived areas compared with more affluent areas.[14] Working with Gerald to support his self-management will help to reduce this likelihood.[15]

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Comments and summary from the editor

Dr Iain Small, Editor *Primary Care Respiratory Update*

I am grateful to our three responders for looking at Gerald's problems from their own perspectives. There are common themes that come through; medication review and inhaler technique, pulmonary rehabilitation, and exploring/consolidating the patient's understanding of their condition- all of which are key elements of supported self management. In addition, Vikki reminds us that a team approach extending far beyond the traditional boundaries of primary care will be needed to help Gerald to escape from the cycle of dependency and incapacity that is emerging, and is inevitably leading back to the acute ward.

Hetal reminds us to consider co-morbid conditions as a potential cause for Gerald's symptoms, whilst Deirdre's advice to explore other strategies to deal with breathlessness also encourage us to think beyond the problem in front of us.

Finally, considering the whole patient pathway regardless of where Gerald might lie on it helps us not to forget smoking cessation, differential diagnoses, and to prepare for palliative and end of life support, even before it may be needed.