

## Guest editorial

# Tackling avoidable hospital admissions: improving or compromising quality?

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Reducing potentially avoidable unplanned hospital admissions is a priority for many healthcare systems. For example, in the United Kingdom (UK), the National Health Service (NHS) *Outcomes Framework for 2012/13* includes rates of unplanned hospitalisation for chronic and acute conditions in adults and children among its targets.<sup>1</sup> The latest Health at a Glance Report from the Organisation for Economic Cooperation and Development (OECD) highlights the variation in unplanned hospital admission rates for asthma, chronic obstructive pulmonary disease (COPD) and uncontrolled diabetes across OECD member countries.<sup>2</sup> Such admissions are deemed avoidable by management in primary care, although the proportion of these admissions that could be avoided is unclear.<sup>3</sup> Management in primary care includes the prevention and management of chronic disease and acute management of illness or exacerbations. The underlying hypothesis is that hospital admission rates serve as a proxy for access to, and the quality of, primary care.<sup>4</sup> The UK features about half way up (or down) the OECD ranked list – not one of the worst offenders, but certainly not a model of excellence. This is despite the incentivisation of chronic care management for these diseases by the Quality and Outcomes Framework (QOF), introduced to the NHS in 2004.

The utility of the QOF as a true marker of the quality of primary care is debatable, the majority of measures focus on processes rather than outcomes of care. However, there seems to be some correlation between QOF scores and admission for chronic conditions in primary care. Dusheiko *et al* found that family practices with better quality of diabetes care had fewer emergency admissions for short-term complications of diabetes over time; after controlling for national trends in admissions, improvements in quality in a family practice were associated with a reduction in its admissions.<sup>5</sup> Similar associations have yet to be shown for other conditions, e.g. respiratory conditions and coronary heart disease.<sup>6,7</sup> Other markers of quality, e.g. access to primary care, have been associated with reduced risk of admission.<sup>8</sup> However, much more powerful associations with population, demographic

factors and hospital supply factors have consistently been demonstrated.<sup>9</sup> It appears the quality of primary care may be associated with avoidable admissions, but population factors such as deprivation play a much larger role in explaining the variation in avoidable admission rates across practices.

A national focus on reducing avoidable admissions is not limited to the UK. In a recent edition of *The New England Journal of Medicine*, Joynt and Jha highlight the importance of preventable re-admissions for US policy makers.<sup>10</sup> They suggest that re-admissions may be a poor marker of hospital performance as only a small proportion of 30-day re-admissions can be deemed to be preventable by the hospitals themselves. They go on to summarise evidence suggesting that patient populations and community resources (including primary care) are ‘the primary drivers of variability’ in relation to re-admissions. Although there appears to be an element of both primary care and hospital providers blaming each other in the studies around avoidable admissions, it is clear that population factors are a major contributor to variance in potentially avoidable admission rates. This is not an excuse for healthcare systems not to engage with the problem, but it highlights a reason for the lack of success of many interventions to reduce unplanned admissions and re-admissions.<sup>9</sup>

A poorly focused and ill thought through policy to reduce potentially avoidable admissions has a potential to compromise the quality of care on a number of fronts. First, it is unclear what constitutes an avoidable admission.<sup>3</sup> Second, the impact of comorbidities or social circumstances influences the need for an admission that the primary clinical condition may not merit. In addition, many emergency admissions are not for long-term conditions, but are for symptoms, e.g. abdominal pain.<sup>3</sup> It is easy with the benefit of hindsight to classify these as avoidable, as the NHS Directory of Ambulatory Emergency Care for Adults does.<sup>11</sup> However, without access to diagnostic technology or expertise, diagnoses can be difficult and indeed the best practice pathway may require these interventions – currently only deliverable in the hos-

pital setting. Finally, the need to balance risk plays a significant role in clinician decision making. For example, admissions for acute exacerbation of COPD are deemed to be avoidable and are the target of many admission avoidance programmes and feature in the NHS Outcomes Framework for 2012/13. Guidance from the National Institute for Health and Clinical Excellence on management of COPD provides clear criteria for hospital admission including the presence of one or more of: severe shortness of breath, inability to cope at home, general deterioration or presence of significant comorbidities.<sup>12</sup> Those who work in clinical practice will recognise each of these as common features of an exacerbation of COPD. We therefore have a real dilemma where quality of care for the patient, which should be paramount, is being defined in very different ways. On the one hand, the practice will receive data from the local health authority, primary care trust or insurance company at the end of the month highlighting the number of unplanned admissions and encouraging (even threatening) that numbers should be reduced. On the other hand, best practice dictates that unwell patients are admitted and treated appropriately.

There is nothing new in this dilemma, balancing risk and resource use is an old challenge for the NHS and for other healthcare systems with finite resources. However, the focus on reducing avoidable admissions highlights the problem in the acute situation when patients are at their most vulnerable. One major issue is that there are very few evidence-based interventions to reduce avoidable admissions.<sup>9</sup> The interventions that have evidence supporting them are those that perhaps reflect more traditional qualities of primary care such as patient education, continuity of care and advanced care planning. Short-term 'quick fixes' focused on one disease do not seem to work, we need to ensure the system supports excellent quality of care across the primary/secondary care interface and provides timely and appropriate social care for the most vulnerable in society in a consistent manner.

## REFERENCES

- 1 Department of Health. *The NHS Outcomes Framework 2012/13*. London: Department of Health, 2012. [www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/documents/digitalasset/dh\\_131724.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_131724.pdf)
- 2 OECD. *Health at a Glance 2011: OECD indicators*. Paris: OECD Publishing, 2011. [www.oecd.org/health/health\\_ataglance](http://www.oecd.org/health/health_ataglance)

- 3 Purdy S, Griffin T, Salisbury C and Sharp D. Ambulatory care sensitive conditions: terminology and disease coding need to be more specific to aid policy makers and clinician. *Public Health* 2009;123:169–73.
- 4 Starfield, B, Shi L and Macinko J. Contribution of primary care to health systems and health. *The Milbank Quarterly* 2005;83:457–502.
- 5 Dusheiko M, Doran T, Gravelle H, Fullwood C and Roland M. Does the quality of diabetes management in family practice reduce unplanned hospital admissions? *Medical Care* 2011;46:27–46.
- 6 Purdy S, Griffin T, Salisbury C and Sharp D. Emergency respiratory admissions: influence of practice, population and hospital factors. *Journal of Health Service Research and Policy* 2011;16:133–40.
- 7 Emergency admissions for coronary heart disease: a cross-sectional study of general practice, population and hospital factors in England. *Public Health* 2011; 125:46–54.
- 8 Bankart M, Baker R, Rashid A *et al*. Characteristics of general practices associated with emergency admission rates to hospital: a cross-sectional study. *Emergency Medicine Journal* 2011;28:558–63.
- 9 Purdy S. *Avoidable Hospital Admissions: what does the research evidence say?* London: King's Fund, 2010. [www.kingsfund.org.uk/go.rm?id=21704](http://www.kingsfund.org.uk/go.rm?id=21704)
- 10 Joynt K and Jha A. Thirty-day readmissions – truth and consequences. *New England Journal of Medicine* 2012; 366:1366–9.
- 11 NHS Institute. *Directory of Ambulatory Emergency Care for Adults*. NHS London: Institute for Innovation and Improvement, 2010.
- 12 National Institute for Health and Clinical Excellence. *Chronic Obstructive Pulmonary Disease (CG101)*. London: NICE, 2010. [www.nice.org.uk/nicemedia/live/13029/49399/49399.pdf](http://www.nice.org.uk/nicemedia/live/13029/49399/49399.pdf)

## PEER REVIEW

Commissioned; not externally peer reviewed.

## CONFLICTS OF INTEREST

None.

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