community settings, we established an 'acute frailty unit' (AFU) within one AMU.<sup>2–5</sup>

Patients in the AFU have access to all usual care (including the MDT), but have an increased nursing ratio, and some specialist geriatric input. Despite limited resources, we have been able to show some clinically important trends toward improved process outcomes compared to historical controls (also frail older people):

- increased discharge rates (AFU 9% v
  5% AMU) odds ratio 1.4 (0.8–2.3),
  p=0.17
- mean difference in length of stay for AFU patients -0.5 days, p=0.6
- equivalent 90-day readmission rates (historical control 36% (32–47%), AFU 36% (29–56%)).

While these data lack sufficient precision, or indeed the robustness of a controlled trial, they do point to potentially useful new ways of addressing acute care of frail older people.

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### Alcohol and hospital readmission (3)

Shalchi et al are to be congratulated on their paper on hospital readmission rates (Clin Med October 2009 pp 426-30). This concentrated on the medical factors which might have influenced readmission and thus contrasts with previous work which derives from the same catchment area and the same hospital, albeit 20 years earlier.1 Their definition of 'readmission' was within a period of two weeks, whereas we reported on readmissions up to three years. Our sample was limited to those aged 75 or more. Our objective was to assess the effects of a social service run 'care attendant' scheme in which the health concepts of rehabilitation – a planned withdrawal of support - were melded with the need for care. The service was provided by Harrow Social Services trained care attendants incorporating the rehabilitation ethos.<sup>2</sup>

Like Shalchi et al, we found that common medical diagnoses at the initial episode were cardiorespiratory, but that readmission was reduced in the care attendant group. Likewise, older patients were more likely to be readmitted as emergencies. Those patients whose original admission was an emergency were more likely to be readmitted as an emergency. Emergency admissions were significantly more likely for elderly patients living alone.

Shalchi *et al* did not detail the nature of the social support post discharge. However, specific care assistant (as currently named) support targeted at frail elderly emergency admissions, particularly if living alone, would probably be cost effective as our scheme saved money by reducing readmissions even though the scheme provided potential support for many who were not at risk. Care assistants could check that medication was taken appropriately, for example.

Although the scheme was reproduced elsewhere, it was withdrawn by Harrow Social Services at the end of the controlled trial as the savings accrued to the NHS while the investment was made by Harrow Social Services (the monies in fact being spent on other community care projects needing care attendants in the borough).<sup>3,4</sup>

The lessons learned then were that:

- 1 Hospital and social services had to have trusting relationships.
- 2 Joint funding across health and social services was appropriate (utilised by the community-based hospital discharge scheme<sup>2</sup> and the care attendants supporting younger people<sup>4</sup>).
- 3 Social support after discharge utilised the rehabilitation approach facilitating optimal independence at home thus reducing readmissions.

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# In response – additional support to high-risk patients can reduce hospital readmissions

We have been heartened by the response to our article, particularly the letters published above. These emphasise our conclusions, highlight further areas of concern and provide solutions for their management.

The term 'readmission' is poorly defined. Whereas we limited our readmissions to a period of up to 14 days, Woodard and Conroy considered all patients readmitted within 30 days, and Frank felt three years was a suitable time period.

Nevertheless, it is clear from our data, as well as those cited by our colleagues in response, that readmission is more likely in patients with complex care needs. Frank showed that readmission is more likely in those living alone, while Woodard and Conroy echo our findings that readmission is more prevalent in frail older patients, who generally have increased lengths of stay. Heydtmann introduces a further important group – those admitted with alcoholic liver disease. It is distressing to read of such high readmission and mortality rates in this cohort.

Our article discussed the merits of a multidisciplinary approach in caring for high-risk patients, who have been shown to benefit from adequate discharge planning and aftercare initiatives.<sup>2,3</sup> We read with interest Woodard and Conroy's description of an acute frailty unit, which will likely improve the standard of care provided to older patients, and we await with further data from their experience.

Patients at risk of readmission have been shown to be older and sicker with less social support than other inpatients. They have medical, psychological and social needs that are complex and significant. Our ageing population means the size of this cohort will only increase. Caring for these patients requires a multidisciplinary, holistic approach that seamlessly coordinates care across diverse locations.

As well as adequate medical provision, further investment in effective discharge planning and aftercare strategies, such as the care attendants scheme discussed by Frank,<sup>4</sup> will need to be implemented. This will require better cooperation between the medical profession and social services, as well as the political will to implement this change. The challenge is significant, but the reward is happier, healthier patients.

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### Quality of care

Editor – I am moved by Professor Allan's elegy to bygone NHS virtues of 'calm caring and gentle pace of clinical life...and all the time in the world to deliver compassionate care' (*Clin Med* October 2009 p 407). One's immediate instinct would be to say 'Ah, but times have changed' – only to find the Editor extolling the same high level of care in a hospice in present-day England.

One can attempt to blame the unforeseen rise in the level of patients seeking emergency medical care and requiring acute hospital admission; the physical limits to what one can do with an outmoded hospital infrastructure; inadequate handover mechanisms; over-politicisation and micro-management of the delivery of patient care; and the list goes on.

I wish to argue that this regrettable gear shift in patient care is in no small part due to a disenfranchised clinical workforce in general. We are urged to explore new ways of working and improve efficiency in order to provide care for an ever increasing number of patients by a depleted workforce. Of course efficiency must be increased, but a workforce that is plagued by low morale and a poor sickness record is in no position to do such a thing.

I plead with our clinical leaders and politicians to work hard to re-energise our clinical workforce. The professional hierarchy must no longer delay tackling the sickness record in the NHS head-on, improve staff recruitment and retention, reward those who work hard, retain good senior nurses on the ward rather than an automatic channel to management and reempower ward senior nurses (can we stop calling ward sisters or matrons 'ward managers'?).

A new hospital can address many of the shortcomings mentioned by Professor

Allan. But a caring environment is still a numbers game: a small handful of nurses, however good they may be, cannot emulate the level of care recalled in the editorial when asked to look after a busy ward of more than a dozen of the infirm. Likewise, a dizzying day-to-day shift of a medical team provides only fragmented care. Things must be going wrong when I found myself presenting the case history of every patient on a Monday morning ward round to my foundation doctors and registrar who had all come back from various leave and shifts, and that was not the August changeover! How do we restore the firm structure and team spirit in the shadows of the European Working Time Directive and budget cuts without increasing the number of doctors? I do not think we can. We create rotas of complex shifts for our doctors, and that is what they will continue to be, shift workers.

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## Applications of pharmacogenetics: importance in the treatment of diabetes

Editor – It is with interest that I read the recent article by Munir Pirmohamed (*Clin Med* October 2009 pp 493–5). The article explained how genotype testing might guide drug choice. I would like to highlight how detection of individual gene mutations is being used to influence drug therapy within the specialty of diabetes.

The realisation that some forms of diabetes occur as a result of monogenic mutations has allowed clinicians to optimise patient therapy by choosing drugs that are more likely to overcome the consequences of particular mutations.

Mature Onset Diabetes of the Young (MODY) is an inherited form of diabetes that often presents before the age of 25 years. Identification of genes causing MODY has allowed alternatives to insulin treatment to be offered to patients. Hepatocyte nuclear factor  $1\alpha$  (HNF- $1\alpha$ ) and glucokinase mutations are the most common causes of MODY. HNF- $1\alpha$