REVIEW

Safe discharge: an irrational, unhelpful and unachievable concept

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Emergency doctors often decide whether to advise hospital admission or discharge by assessing whether a decision to discharge home is considered safe. This implies that hospital admission may be recommended on the basis of exceeding an arbitrarily defined risk of adverse outcome, rather than weighing the potential benefits, risks and costs of hospital admission. This approach is likely to lead to irrational decision making, unnecessary hospitalisation and unrealistic expectations regarding risk. Instead of using the concept of a safe discharge, we should take a more rational approach to decision making, weighing the benefits, risks and costs of hospitalisation against a default option of discharge home. Hospital admission should be recommended only if the expected benefits outweigh the risks and can be accrued at an acceptable cost. Guidelines should be developed using this approach and used to promote and support rational decision making.

Deciding whether to advise hospital admission or discharge home is a frequent challenge for emergency doctors. Decision making in this situation is often guided by the desire to achieve a ''safe discharge'' and avoid the risk of a discharged patient experiencing an adverse event. The consequence of this approach is that if a safe discharge cannot be achieved then the patient must be admitted to hospital. In this article I argue that aiming to achieve ''safety'' in this way is irrational, unhelpful and unachievable, and propose an alternative approach to decision making.

WHAT DO WE MEAN BY SAFE DISCHARGE?

Safe discharge seems to be a relatively commonly used, but poorly defined term. The concept has been used in studies of acute gastrointestinal haemorrhage,[1] drug overdose,[2 3] chest pain,[4 5] head injury,[6] fractured sternum,[7] asthma,[8] syncope,[9] seizures[10] and hypertension.[11] Although safe discharge was often presented as a goal of management in these studies, it was not usually defined or quantified. If a level of risk was quantified in the outcome measures, then it was not usually justified.

Safety is the absence of risk. As it is impossible to completely exclude risk, we presumably aim to reduce risk to an acceptable minimum when we aspire to safely discharge our patient home. In determining the level of risk we are prepared to accept (on the patient's behalf), we will take into account both the probability and likely severity of an adverse event. We are likely to accept only a low probability of a serious event, such as death, but a higher probability of a less serious event, such as an untreated fracture.

With the obvious exception of death, adverse events occurring after the patient has been discharged home may still be amenable to treatment if they are brought to medical attention soon enough. In these cases the risk associated with discharge home will be mediated by other factors, such as the patient's decision to seek further care, and may be measured in terms of the opportunity to achieve a satisfactory outcome lost by delaying appropriate treatment or in terms of the avoidable discomfort experienced by the patient.

PROBLEMS WITH THE CONCEPT OF A SAFE DISCHARGE

Problems arise as soon as we attempt to define or quantify what we mean by safe discharge. If we will accept only a low probability of an adverse outcome, then achieving a safe discharge may be impossible and the only option will be to admit all patients. Many patients admitted to hospital with common complaints such as chest pain[12] or minor head injury[13] will receive no benefit from admission. This represents a substantial waste of the patient's time and healthcare resources, and leads to problems associated with high bed occupancy, such as emergency department overcrowding.[14] Conversely, by accepting a threshold for risk, albeit small, it is inevitable that some discharged patients will experience an adverse outcome. Having defined their discharge as safe, we risk raising unrealistic expectations of a risk-free environment. This may lead to mistrust and a desire to blame when this unrealistic expectation is not fulfilled.

Determining a threshold for risk entails balancing the small likelihood of an adverse outcome after discharge against the substantial likelihood of an unnecessary admission. Yet it is rarely clear how this judgement is made, whose values are used in decision making, or how risks and benefits are weighed. Explicit, rational decision making is unlikely in these circumstances.

If we are concerned about the safety of discharge home, should we not also be concerned about the safety of hospital admission? Hospitals are dangerous places, particularly for older people and those with chronic illness. Hospital-acquired infection may be fatal,[15] and

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bed rest (a typical consequence of hospital admission) has no evidence of benefit and may slow recovery or cause harm.[16]

Hospital admission is a medical intervention. As a general principle, we should intervene only if we have a reasonable expectation that intervention will be, on balance, beneficial. Ideally, we should also have some scientific evidence to support this expectation. The concept of the safe discharge seems to have reversed this principle. We have decided that we will intervene (ie, admit to hospital) unless it can be shown that no intervention (ie, staying at home) is safe.

WHERE HAS THIS CONCEPT COME FROM?

If the concept of the safe discharge is irrational, unhelpful and unachievable, then where has it come from and why is it used? There are several possible explanations. Firstly, it is possible that our desire for a risk-free environment has led to unrealistic expectations from clinicians and patients. Rather than accept that occasional adverse events are inevitable, we look to apportion blame at every opportunity. In these circumstances it is not surprising that clinicians try to avoid being made personally responsible for adverse events by recommending hospital admission.

In this respect, the threat of litigation is often put forward as an explanation for ''defensive'' medical behaviour.[17] Without diminishing the importance of this as a factor in promoting the idea of a safe discharge, it is worth considering whether we are too ready to accept litigation as an external threat that is beyond our control. Medical experts, including specialists in emergency medicine, have a key role in the legal process that culminates in a verdict of negligence. If that medical opinion is based on the misconception that safe discharge is a rational and achievable aim, then it is not surprising that clinicians may find it difficult to defend their actions when adverse events occur.

If clinicians are too ready to recommend hospital admission, then perhaps patients are too ready to accept this recommendation. There can be few circumstances in which we would agree to something as inconvenient as hospital admission without being offered some expectation of benefit. Patients who choose to discharge themselves from hospital against medical advice may not always be treated with sympathy and understanding, but if hospital admission is uncomfortable, inconvenient, a potential risk to health and carries no measurable benefit, then perhaps they are simply behaving rationally.

Finally, diagnostic uncertainty is a common problem. Ideally, we aim to reduce uncertainty by using tests, but these are not always available and do not display perfect diagnostic performance. In these circumstances, rather than explain this diagnostic uncertainty to patients it may be easier to arrange hospital admission in the hope that someone else will resolve the problem. Further diagnostic testing may well be appropriate, but do patients need to await this in hospital if they will not benefit from admission?

AN ALTERNATIVE APPROACH: HOSPITAL ADMISSION AS A MEDICAL INTERVENTION

An alternative approach to decision making consists of viewing hospital admission as a medical intervention and applying the principles of decision analysis.[18] This leads us to take the following approach:

1. As a general rule, we should intervene only if there is a good reason to do so. The default position should be to recommend discharge home.
2. Hospital admission should be recommended only if we expect that it will be beneficial. We should consider what elements of care can be provided only in hospital, what evidence we have that these elements of care are beneficial, whether the benefits outweigh the risks of admission and whether the net benefit justifies the costs of admission.
3. Other factors that may be influencing decision making should be identified and dealt with appropriately. Clinician concerns about the threat of litigation could be considered by producing guidelines that promote discharge home in circumstances where hospital admission is unlikely to be beneficial. Unrealistic patient expectations could be dealt with by improved communication. Concerns about diagnostic uncertainty could be dealt with by outpatient or emergency department testing. In this respect it should be conceded that recent developments, such as the clinical decision unit or observation ward, offer an alternative to the admission versus discharge dichotomy described in this article.
4. We should at all times be honest and open about the limitations of healthcare and medical certainty. We cannot ensure a risk-free environment or resolve every element of uncertainty. Guidelines should recognise the limits to our ability to modify risk and resolve uncertainty. These limitations should be communicated to patients.

ACHIEVING CHANGE

Decision making needs to be changed at community level, because powerful factors inhibit change at the individual clinician–patient level. Clinicians recognise that advising discharge home places a burden of responsibility on them that may be absolved by advising hospital admission. Uncertainty regarding their individual knowledge and difficulty applying empirical knowledge to an individual patient will dissuade them from assuming this responsibility—an approach that is reinforced by legal and regulatory threats. Furthermore, estimating risks and benefits will be challenging, particularly for the inexperienced clinician, and communicating these risks to the patient will be time consuming.

Change at the community level, when guidelines and standards are developed, is more feasible. Guidelines should be based on systematically collected scientific evidence,[19] applied to a typical population. This process offers the ideal opportunity to weigh the benefits, risks and costs of hospital admission. Guidelines should recommend hospital admission, or medical intervention in general only if there is reasonable evidence that the benefits outweigh the risks and can be attained at reasonable cost. If no such evidence exists, or if there is substantial uncertainty regarding the probability of benefit, then discharge home should be recommended, regardless of whether it might be considered safe or not. Hence there is no place in this process for estimating what is an acceptable risk of an adverse outcome before deciding whether admission or discharge is appropriate. It does not matter whether the risk of adverse outcome is 1 in 10 or 1 in 10 000, hospital admission should be recommended only if there is evidence that it will modify the risk of adverse outcome at a reasonable cost. By developing guidelines in this way, we will provide individual clinicians leeway to make rational decisions, without being driven by the need to achieve a safe discharge.

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