

This paper was originally published in Archives of Disease of Childhood; Education and Practice:

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Archives of Disease in Childhood - Education and Practice Published Online First: 14

November 2018. doi: 10.1136/archdischild-2018-315991

<https://ep.bmj.com/content/early/2018/11/13/archdischild-2018-315991>

Fifteen Minute Consultation: Safety Netting Effectively

The incidence of life-threatening illness in children is at an all-time low while presentations and admissions to hospital increase (1). Health care professionals who have first contact with children and young people have a challenging job in judging who needs referral to secondary services and who can continue to be safely managed out of hospital. While the vast majority of children presenting for medical assessment have minor illnesses requiring little or no intervention diseases evolve and early symptoms and signs may be very non-specific. Analysis of primary care records and retrospective questionnaires showed only half of meningococcal disease was detected at first presentation to primary care physicians (2). However, as evidence suggests that serious illness can superimpose on self-limiting infection (3) not all returning patients could, or should, have been treated at first presentation. Given delayed or missed diagnoses can lead to catastrophic personal, societal and financial consequences at the point of discharge the advice given the families and carers is of critical importance.

Safety netting has likely always occurred but was only formally described in medicine in 1987 (4). In the UK, it is a National Institute for Health and Care Excellence (NICE) quality standard defined as “oral and/ or written information on what symptoms to look out for, how to access further care, likely time course of expected illness and, if appropriate, the uncertainty of the diagnosis” (5).

When children are seen in a hospital setting, they are often discharged with safety net advice. In theory, optimal education of parents during their index presentation should equip them with confidence and knowledge empowering them to manage their child at home unless ‘red flag’ symptoms or complications develop.

Unnecessary re-presentation is a controversial and divides opinions. Parents need to feel empowered to re-present if concerned and not feel like they are being perceived as “time wasters”. If the safety net of when to re-present fails, being able to re-present for further explanations/ assessment is an essential additional safety net in itself. Initial safety netting fails by one of three mechanisms:

1. It was not given
2. It was poorly delivered, or understanding was not checked
3. It was insufficient

Re-presentation rates are increasingly being used as a quality metric to the point of affecting hospital payments in America. Due to the large variability in readmission rates between hospitals, a certain proportion is deemed preventable. However, defining ‘preventable’ is varied and unclear. The necessity for a child re-presenting may be perceived very differently

by different parents but there will also be significant variation between medical professionals. Having higher rates of re-presentations has the potential to distract attention from sicker children requiring more urgent care and pitching safety netting appropriately is therefore extremely challenging.

Here, we explore the pros and cons of the various methods of safety netting as families have described a need for a range of approaches (6).

Face to Face/ Verbal

The majority of safety netting occurs verbally and integrating advice as part of a consultation has the benefits of catering for the individual patients, addressing specific concerns and checking understanding. Parental and health professional interpretation can vary significantly and being able to pick up on verbal and nonverbal cues is extremely useful. For example, if a parent were to exclaim, “Thank goodness, it’s just a chest infection, the GP said it was pneumonia”, clarification would be possible. Likewise, a viral diagnosis can, in some family’s perception, appear to trivialise a child’s illness and leave parents frustrated. With effective communication skills (which include listening) ideas, concerns and expectations can be fully explored and addressed.

Parents can find information overwhelming for a variety of reasons (table 1), including:

- Content (if too complex)
- Amount of information (if too much)
- Use of jargon
- Delivery speed (if too fast)

Effectiveness of verbal safety netting is determined by rapport, bias (of both health professionals and parents), social gradients and level of experience of the assessing professional. Language barriers and health literacy will also determine understanding of information. What would be considered perfect safety netting for one family may be completely ineffective for another; one size does not fit all (7). Being adaptable, flexible and innovative in ensuring understanding is therefore essential to effectively safety net verbally. The environment in which safety netting occurs face-to-face is also an important consideration. One British study found only a third of parents attending an Emergency Department knew what to look for when discharged (8). Hospitals can be noisy, scary places for those unfamiliar with them and at the point of presentation parents will likely be sleep-deprived and stressed. Methods therefore need to be employed to optimise the verbal safety netting process. Using teach-back methodology, whereby parents repeat back information given to them, may help improve understanding and reduce re-attendance but again relies on expert communication skills.

Written Information and Leaflets

The Department of Health in the UK states that high quality information leaflets should be given in addition to verbal advice, although “high quality” is not clearly defined (9). Having a point of reference for verbal explanations for families to refer to during times of uncertainty can be reassuring. Written patient information has been shown to be beneficial including improving confidence, reducing parental anxiety, reducing recovery time, improved hospital care satisfaction, reduced readmissions and improved adherence to discharge plans (7). The generation of written safety materials by individual units can improve the knowledge and education of staff which likely augments verbal explanations. Regional resources have the advantage of avoiding duplication and providing the same, consistent message, ideally transcending primary, secondary and tertiary care but may negate the upskilling of local units from having generated the material themselves.

Written information has to be accurate but also easy to read and understand. The addition of illustrations or cartoons has been shown to improve understanding and satisfaction supporting a move away from the standardised trust documents historically portrayed as bland and uninteresting (10). Leaflets in different languages can provide safety netting when interpreters are not readily available and in some instances, whilst far from the ideal, may be the only safety netting method possible. However, it seems inevitable that if leaflets are produced in the 20 most commonly locally used languages, the next patient will only speak the 21st making it an almost Sisyphean task to keep leaflets in multiple languages up to date and relevant.

Audio-visual/ Videos

Although there is some evidence that certain populations (for example, the travelling community) may not interact well with this, videos have the potential to provide effective safety netting to those with low literacy who may not comprehend written information (6). Demonstration of concerning clinical signs with examples, is superior to a verbal or written description and would work well in cases such as bronchiolitis when signs of respiratory distress could be displayed. However, for children presenting with atypical symptoms, there is a risk of patients slipping through the net. Content of videos would need to be carefully balanced to not terrify parents into coming back unnecessarily whilst ensuring that necessary re-presentations still occur within a timely manner.

Videos would also have the advantage of being transferable and reusable with minimal environmental footprint, something that should be considered in every modernisation initiative in the NHS.

Internet, Social media, Websites and apps

There has been a significant rise in the use of the Internet in health-seeking behaviours. However, the quality and accuracy of information has been found to be variable and recommended websites, such as those ending in “.edu” or “.gov” were deemed too complex by parents (11, 12).

Without clearly signposted resources, online information can heighten parental fears and anxiety through inaccurate or inconsistent advice, or an overwhelming amount of information (13). Despite dramatically increased use, some parents and carers still do not have reliable internet access. Effort needs to be made to minimise methods that may worsen health inequality for those at highest risk.

Vetting the quality of information available online is challenging but creation of communities of practice to provide sources of information could be further explored. For many medical mothers, the “Physician Mums’ Group UK” on Facebook has become a primary source for advice and information. There is a wealth of balanced advice which has essentially been peer-reviewed albeit in an unorthodox fashion. The potential benefit of translating this into a public resource would need to be balanced against risks that information about specific cases may not be generalisable and full physical assessment does not occur.

The use of apps for a source of parental information has been utilised in South-West England with the Handi app. Modern technological advances like this should be encouraged whilst ensuring that the most vulnerable families are not indirectly experiencing inferior care.

Prevention and General Education

There is no doubt that public health and charity-led initiatives to highlight the features of conditions can be beneficial. Having a foundation of understanding and knowledge is likely to augment any subsequent safety netting that takes place.

With evolving viewing behaviours, future initiatives may rely on YouTube or streaming sites charitably agreeing to include public health information alongside the formal corporately sponsored advertisements.

Opportunistic education delivery to families could also be expanded. Utilising time spent waiting in Emergency Departments or GP practices with educational videos, posters, infographics are all potential ways to do this.

Education of the young people themselves is vitally important and health professionals should be involved in formulating a structured PSHE curriculum working together with schools and teachers.

Conclusion

Safety netting can be considered an art. Although there are some general rules (table 1), there is no golden recipe to deliver the perfect verbal advice and like many aspects of paediatrics, necessitates a deepened skillset to adapt to every individual circumstance. Verbal advice alone is also insufficient but signposting to additional resources needs to be individualised - one size does not fit all. Paying lip service by adding “come back if you’re worried” to all discharge summaries may make the healthcare professional feel a bit better but is unlikely to significantly alter the family’s behaviour. There are many examples of poor safety netting (table 2).

The general population sit somewhere on a normal variation bell-shaped curve for worrying. In order to capture those with a more relaxed tendency, safety netting will have to be pitched to inexorably have some unnecessary re-attendances. Most would agree we need safety netting to be more sensitive than specific. With the financial constraints with the NHS, unplanned re-attendances are likely to be increasingly scrutinised and used a quality indicator akin to some private healthcare systems. Safety netting functions to allow people to safely manage at home but re-attend in a timely manner should the need arise and extreme caution is required to find the correct balance. There is a balance that needs to be found taking into consideration the chance of underlying pathology and the concerns expressed by parents/ carers (figure 1).

Ongoing resource development needs to ensure those at highest risk are considered and the reduced literacy, health literacy and technology access associated with deprivation do not further health inequality in the UK.

Safety Netting Aspect	Good Safety Netting	Poor Safety Netting
Tone	Measured, reassuring & open	Judgemental, overly firm in delivery

Pace	Normal	Fast
Amount of information	Just right (enough to cover natural course of illness & concerning features to look out for)	Too much or little information
Jargon	Not used	Used
Language	First language +/- interpreter	Not first language & no interpreter
Environment	Quiet, private	Noisy, not private
Rapport	Good	Poor
Personalised & responsive to verbal/ non-verbal cues	Yes	No
Supplementary information/ signposting	Yes	No

Table 1: Aspects of good and poor safety netting

Case 1

You are a ST4 in general paediatrics and have been asked by your consultant to discharge and give safety net advice to the parents of a 3-month-old previously well infant with bronchiolitis who was feeding well with normal oxygen saturations and no significant respiratory distress on day 3 of their illness. Parents are from Eastern Europe and are the nurse reports they are very anxious.

How would you approach this?

- Ensure you are in a quiet, private area
- Establish language skills and arrange interpreter if necessary
- Establish what the family have already been told/ understand

- Avoid using jargon
- Explain what bronchiolitis is, its natural course, what to look out for and contact details if worsening. This needs to be clear about what normal features of illness are and what are the features which would require parents to return.
- Establish understanding of explanation
- Offer opportunity for questions & ensure you've addressed all ideas, concerns and expectations
- Supplement verbal information with written +/- or other safety netting resources

Need for Speed

During busy periods, the ever-growing number of patients to see and jobs to do undoubtedly impacts on our abilities to remain task-focussed. Rushing the verbal safety netting process may not adequately describe the expected natural course of the illness or miss covering salient features to watch for. This could result in ongoing parental anxiety, unnecessary health-seeking behaviour or even delay in necessary re-attendance.

Overwhelming Parents with your Impressive Knowledge

As medical professionals who have studied for years, we have acquired a vast array of differential diagnoses for every presenting symptoms. Meticulously listing the signs and symptoms of each of these may increase rather than alleviate parental anxiety.

Assumption Pitfalls

Assuming parental knowledge about medical illness is dangerous and it is much better to revise and repeat than to miss things completely.

Learning Environment

When giving safety netting advice, you are effectively giving a mini tutorial. Think about the environment in which you best learn and try to recreate this for the family. Imparting safety net advice in a busy waiting room with screaming babies, noisy toys and the prying eyes of everyone around should be avoided.

Preconceived judgements

It is easy to see how preconceptions about paediatric presentations can arise. It is important to recognise that parents bring their children for medical assessment because they are worried something is wrong. Conflicting advice confounds the worry and confusion. The goalposts of evidence-based medicine are constantly moving and not all professionals will be up to date with every single paediatric condition. Dismissing or criticising previous advice risks harming the relationship and trust between the family and that practitioner but also with you. Be careful in how you address this. A child with normal observations whose parents are convinced is seriously unwell needs to be assumed to be seriously unwell until proven otherwise.

Table 2: Examples of poor safety netting

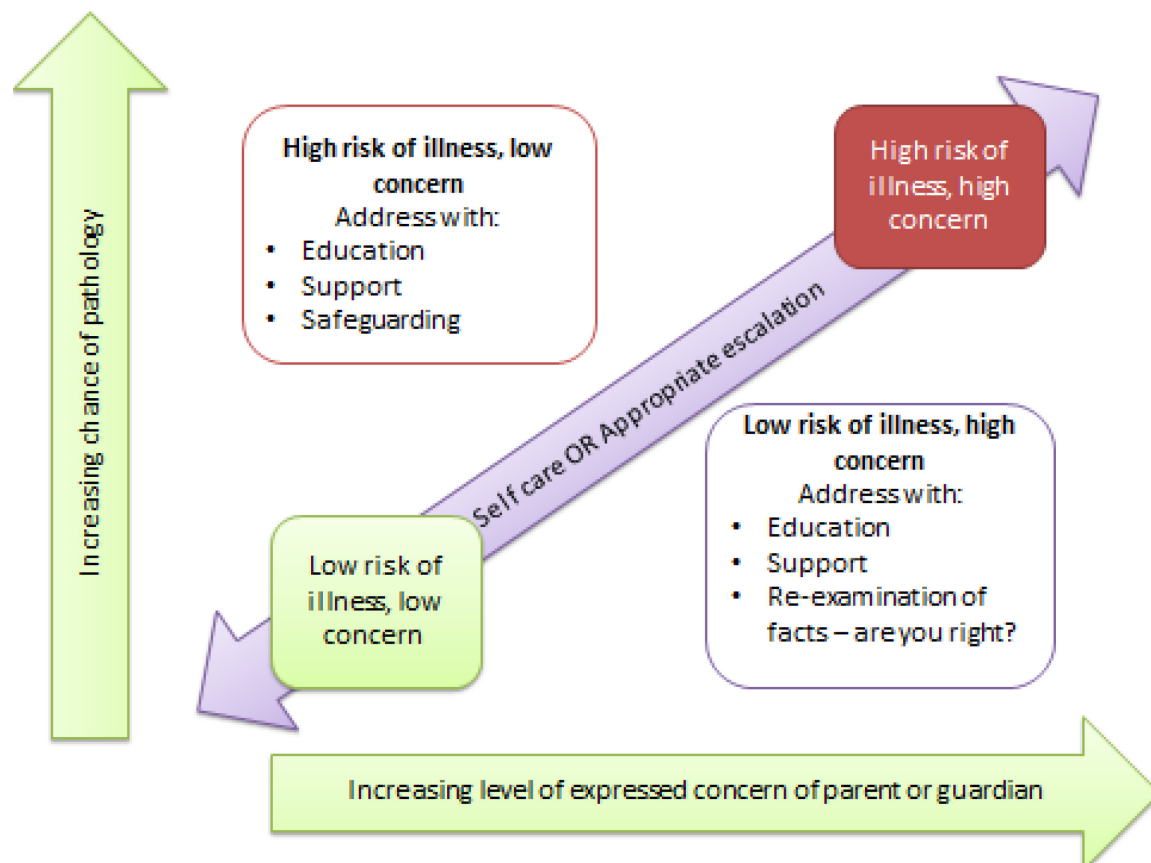


Figure 1: Relationship between chance of pathology and level of expressed concerns by parent/ guardian

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