Keeping sick children in hospital SAFE from harm

Emeritus Professor **Alan Glasper**, from the University of Southampton, discusses the quest by the Royal College of Paediatrics and Child Health to improve safety and reduce preventable deaths in UK paediatric units.

In June the Royal College of Paediatrics and Child Health (RCPCH) published a suite of resources developed through the Situation Awareness for Everyone (SAFE) programme. Led by the RCPH, this was a 2-year project held in conjunction with 28 hospitals including Great Ormond Street Hospital for children. The resulting resource pack (RCPH, 2016a)is primarily designed to offer children's units ways of enhancing their collective missions of protecting sick children from potential harms perpetrated by unrecognised clinical deterioration, among others. The SAFE resource pack has the primary aims of improving communication, building a safety-based culture and delivering better outcomes for children and young people, especially those in hospital.

Background

As recently discussed (Glasper, 2016) the National Institute for Health and Care Excellence (NICE) has published a guideline on recognition, diagnosis and early management of sepsis (NICE, 2016). This guideline (NG51), which included specific advice for monitoring sepsis in sick children, came about after a series of highly publicised failures in the NHS to spot deteriorating children who were actually suffering from fatal undiagnosed sepsis (Glasper, 2016)

It is important to stress that the use of early warning tools such as the Paediatric Early Warning Score (PEWS) or the Newborn Early Warning Score (NEWS) have helped improve the earlier identification by health professionals of the deteriorating sick child. In particular the use of newborn early warning assessment tools has been shown to be helpful in delivering enhanced care to babies at potential risk of deterioration and the use of paediatric care bundles or algorithms such as Sepsis Six have been shown to improve patient outcomes (Daniels et al, 2011).

Despite this, the RCPCH believes that more robust systems are needed to prevent unnecessary child morbidities and mortalities from preventable sequelae. It estimates that up to 2000 deaths occur each year when compared to the best-performing countries in Western Europe. This equates to around five child deaths a day and it is little wonder that the RCPCH aspires to give healthcare staff access to the correct tools and techniques which can, if used properly, save the lives of children who might otherwise unnecessarily deteriorate (RCPH, 2016b).

Parents fear for the lives of their children and have done so since the dawn of time. Even in recent times hospital-acquired infections such as MRSA have likewise caused fear of contagion among the families of sick children in hospital. Dr Charles West has been attributed with the development of Great Ormond Street Hospital's mission statement: 'The child, first and always' still the mantra behind medical innovations in children's healthcare today (Festini and Glasper, 2016). Florence Nightingale, who corresponded with West during the early years of the hospital, wrote in her *Notes on Nursing* that children:

> **'They are affected by the same things [as adults] but much more quickly and seriously.'**
>
> ***(Nightingale, 1860)***

The SAFE resource pack

The SAFE programme was designed to reduce preventable deaths and error occurring in the UK's paediatric departments. The programme's aims were to:

- Reduce avoidable error and harm to acutely sick children by 2016
- Improve communication between all health professionals involved in a child's care as well as families to ensure treatment is consistent and of the same high standard regardless of postcode or class
- Close the disparity in health outcomes for children in the UK compared with other countries as well as between children's care and adult care
- Involve parents, children and young people to be better involved in their children's/own care. (RCPH, 2016b)

This resource pack has been designed to help health professionals help implement the SAFE programme at the ward, hospital or NHS Trust level. The pack consists of six discreet sections, which together form a safety template. These are:

- Quality improvement
- Patient safety culture
- Structured communication
- Recognising deterioration
- The 'huddle'
- Evaluation and spread.

This column will address structured communication, recognising deterioration and the huddle, the primary elements that underpin the SAFE initiative.

Structured communication

The RCPCH recognises that in-depth reviews of serious incidents have shown that poor levels of communication in the handover of child details have contributed to these incidents and that improved strategies of communication can improve care. Therefore prior knowledge of the precise information needed about a sick child is the key to effective communication where the full set of information is available to

underpin all decisions about the child. This facilitates members of the multidisciplinary team expressing their views and making meaningful contributions to the conversation. It is vital that all staff understand why breakdowns in communication occur and that individual members of the team are not afraid of speaking up for fear of retribution.

To help this process the SAFE initiative recommends the use of communication tools such as Situation, Background, Assessment, Recommendation (SBAR) and Concern, Uncomfortable, unSafe, Stop (CUSS) (RCPH, 2016c). CUSS is a technique that uses a graded assertiveness approach to communicating when raising a concern regarding an instruction or process.

SBAR is sometimes expanded to ISBARD, and is a technique to foster good communication:

- Identify—yourself and the patient
- Situation—what is the problem
- Background—information to contextualise the problem
- Assessment—your clinical assessment and prediction
- Recommendation—what you think should happen
- Decision.

Recognising deterioration

The RCPCH has shown that one of the prime elements in tackling the rates of avoidable deaths in sick children is a failure to recognise and fully respond to signs of deterioration

To ensure that staff more fully recognise deterioration and therefore respond in a timely and effective way, the RCPCH recommends the use of Paediatric Early Warning Scores/Systems (PEWS). Such scoring systems aggregate scores from a range of observations, and the higher the score the earlier an intervention is needed. Thus an early intervention may prevent further deterioration and the need to escalate a child's care either to a high-dependency or paediatric intensive care unit (RCPH, 2016d)

Additionally the RCPCH recommends the use of the RECALL tool (Rapid Evaluation of Cardio-respiratory Arrests with Lessons for Learning), which was developed at Great Ormond Street Hospital for children to facilitate real-time analysis of deterioration by asking a number of key questions after a child deteriorate. Runnacles et al (2013) developed and used the RECALL tool to develop a culture of learning, which has subsequently helped the clinical teams to more appropriately respond to the need for recognition and escalation in critically ill children

The huddle

Huddling is at the heart of the SAFE programme and the 'huddle' is the specific intervention that coordinates the primary aspects of the situation awareness (RCPH, 2016d). Huddling is the vehicle that delivers the prime mission of ensuring that all information about a patient is shared effectively, especially that which pertains to the identification of the sickest patients as well as those who staff and parents are concerned about. Huddle membership should include all members of the multidisciplinary team who might have insight into the particular needs of a sick child. In my capacity as a specialist advisor for the Care Quality Commission I have sat in on and observed how huddles operate in practice and I have seen how huddle members such as a play specialist can make a real contribution to the safety discussions. As the core intervention of the SAFE initiative, the huddle proactively facilitates the complete sharing of all pertinent information about each child by all who have a vested interest in the welfare of these children.

Conclusion

There is no doubt that the SAFE initiative instigated by the RCPCH is going to save lives and it should be embraced by all health professionals who provide care for sick children. However, the care that sick children receive in hospital is only ever as good as the hardworking members of the team who deliver that care. Worryingly a survey of paediatricians carried out between January and March 2016 by the RCPCH has shown that the concerns of those responsible for organising safe paediatric services for children in hospital about safe staffing levels are fully justified and that acute service provision for children remains under considerable strain across the UK (RCPH, 2016e). **BJN**

Daniels R, Nutbeam T, McNamara G, Galvin C (2011) :The sepsis six and the severe sepsis resuscitation bundle: a prospective observational cohort study. *Emerg Med J* **28**(6): 507-12. https://dx.doi.org/10.1136/emj.2010.095067

Festini F, Glasper EA (2016) The contribution of Dr. Charles West to the development of contemporary health care for sick children. *Comprehensive Child and Adolescent Nursing* **39**(2): 84–93. http://dx.doi.org/10.1080/24694193.2016.1184053

Glasper A (2016) Recognising and responding to the early signs of sepsis. *Br J Nurs* **25**(15): 874-5. https://dx.doi.org/10.12968/bjon.2016.25.15.874

KEY POINTS

- In June 2016 the Royal College of Paediatrics and Child Health published its SAFE Resource Pack. SAFE is the acronym for Situation Awareness for Everyone
- The use of early warning tools such as the Paediatric Early Warning Scores (PEWS) or the Newborn Early warning Scores (NEWS) have helped improve the earlier identification by health care professionals of the deteriorating sick child
- More robust systems are needed to prevent unnecessary child morbidities and mortalities from preventable sequelae
- Structured communication, recognising deterioration and the huddle are the primary elements that underpin the SAFE initiative
- Huddling is the vehicle that delivers the prime mission of ensuring that all information about a child is shared effectively, especially that which pertains to the identification of the sickest patients

Kleebauer A (2014) Nurses trial 'huddle' technique that aims to improve communication. *Nurs Stand* **29**(5): 10. http://dx.doi.org/10.7748/ns.29.5.10.s9

Nightingale F (1860) *Notes on Nursing: What it is and what it is not*. http://tinyurl.com/2cfsk (accessed 24 October 2016)

Royal College of Paediatrics and Child Health (2016a) S.A.F.E Resource Pack. http://tinyurl.com/zvhebck (accessed 19 October 2016)

Royal College of Paediatrics and Child Health (2016b) Introduction to the S.A.F.E Resource Pack. http://tinyurl.com/z65gczg (accessed 19 October 2016)

Royal College of Paediatrics and Child Health (2016c) SAFE 3: Structured communication. http://tinyurl.com/hr3x4nh (accessed 19 October 2016)

Royal College of Paediatrics and Child Health (2016d) SAFE 4: Recognising deterioration. http://tinyurl.com/zok836c (accessed 19 October 2016)

Royal College of Paediatrics and Child Health (2016d) SAFE 5: The huddle. http://tinyurl.com/h3lymxr (accessed 19 October 2016)

Royal College of Paediatrics and Child Health (2016e) Concerns for child health as paediatric units struggle to fill rotas. News release 16 August. http://tinyurl.com/hnlevv2 (accessed 19 October 2016)

Runnacles J, Chapman S, Lachman P (2013) G119 RECALL (Rapid Evaluation of Cardio-Respiratory Arrests with Lessons For Learning): developing a tool to learn from paediatric arrests. [Abstracts from Royal College of Paediatrics and Child Health, Annual Conference jointly held with 6th Europaediatrics, 5–8 June 2013, Glasgow] *Arch Dis Child* **98**(suppl 1): A56 https://dx.doi.org/10.1136/archdischild-2013-304107.131