Evidence Review

Safety Huddles:

Measuring effectiveness

Key messages

- Safety huddles can be an effective method in reducing risk, highlighting potential issues before incidents occur and fostering a positive and pro-active safety culture in healthcare environments.
- The evidence also suggests that the equitable design of safety huddles, which should be multi-professional and free from fear/blame, has a positive effect on teamwork and the outlook and attitude of the workforce, which in turn improves patient safety and experience.
- In terms of measuring effectiveness, the majority of research has relied upon comparing data prior to and after the implementation of safety huddles, alongside qualitative data examining staff views and opinions. Often the data outcomes are tailored to the effects the service aimed to produce (e.g. less falls alarms, reduction in violence, reduction in catheter-inducted UTIs etc). There does not appear to be currently any specific standard means of assessing effectiveness.
- Individual organisation-based studies generally report positive outcomes, particularly in regards to improved communication and reduction of harmful incidents
- Most of the evidence to date is generally of small scale. A recent systematic review on the subject highlighted the need for more research and analysis, including proposing a taxonomy and standardised measures which may better allow findings to be compared to build a more robust evidence base.
- Although general themes and features occur across safety huddles, they must be adaptable and flexible to the needs of the service/team conducting them; studies have highlighted that the attitude of members, reducing barriers to attendance, and positive leadership is key to effective huddles.









You asked

I am wondering if it is possible to access a literature search and perhaps some documents via yourself I am thinking about a review of safety huddle effectiveness within the Mid Mersey Division to enable us to ensure consistency and evidence impact Steve tells me his is not aware of anything done by the organisation so I am wondering if there is any literature externally which provides any evidence of review of effectiveness and impact and perhaps a process previously used to assess this.

REF: 20211108

The Evidence

1. Franklin BJ, Gandhi TK, Bates DW, Huancahuari N, Morris CA, Pearson M, et al. Impact of multidisciplinary team huddles on patient safety: a systematic review and proposed taxonomy. BMJ quality & safety 2020;29(10):1-2.

This systematic review examined the evidence concerning the implementation, design and outcome measures of safety huddles in healthcare settings. The review found that the general themes arising from the literature found safety huddles to report a positive impact in healthcare teams on improving patient care and safety. However, peer reviewed analysis and evidence of effectiveness is in its "earliest stages" and remains an emerging field. To this end the authors propose a "taxonomy and standardised reporting measures for future huddle-related studies" to improve the evidence base and allow studies to be more easily compared between one another.





2. Croke L. Safety huddles improve patient safety and quality of care. AORN J 2020;112(5):P11-P13.

This feature article draws on the existing evidence-base to highlight the positive effect safety huddles can have in healthcare settings. The author provides examples from the literature demonstrating the positive impact huddles can have on improving multi-disciplinary communication and improving patient safety and highlights the ways in which Safety Huddles can be adapted to differing team needs/circumstances but still retain the core elements of their effectiveness and best practice including identifying who should attend, key areas of discussion and clear methods for follow up and resolution.





3. Lamming L, Montague J, Crosswaite K, Faisal M, McDonach E, Mohammed MA, et al. Fidelity and the impact of patient safety huddles on teamwork and safety culture: an evaluation of the Huddle Up for Safer Healthcare (HUSH) project. BMC health services research 2021;21(1):1038.

This paper describes the implementation of the Huddle Up for Safer Healthcare (HUSH) project, designed to scale up the use of patient safety huddles in three UK NHS trusts, over five hospital sites. A "multi-method developmental evaluations" was undertaken over a three year period to examine the implementation and effectiveness of the project. The review found that attitudes towards the effectiveness of huddles was generally positive and reported that "consistent improvements occurred including: briefings being seen by staff as common, the culture making it easy to learn from others' errors and the overall patient safety grade assigned to units by staff". The review also highlighted barriers to effectiveness and areas for concern, such as the need for improved follow-up/debrief of harm since last huddle, and the need for consistent buy in and engagement from staff. Overall the authors found that safety huddles were a positive and effective method of improving teamwork, communication, and promoting a safety culture in busy hospital environments and "the cost of supporting the huddle are small compared to the savings per harm".





4. O'Sullivan OP, Chang NH, Njovana D, Baker P, Shah A. Quality improvement in forensic mental health: the East London forensic violence reduction collaborative. BMJ open quality 2020;9(3).

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A quality improvement project was implemented aiming to reduce inpatient violence in a secure mental health setting in London. A "change bundle" which included "safety huddles, safety crosses and weekly community safety discussions" was tested for effectiveness and implementation and the impact of these were assessed over time. Overall the authors reported reductions in both physical and non-physical violence, and statistically significant reductions in violent incidents on some wards. The authors suggested that, in addition to the statistical findings, the change prompted cultural shifts on the wards themselves towards a more open and collaborative approach.



5. *Mersey Care Author* Gray T. Safety huddle in a community nursing setting. Br J Community Nurs 2020;25(9):446-450.

In this article, Gray outlines the implementation and use of safety huddles among district and specialist nurses, allied health professionals, administrative staff, community matrons and healthcare assistants in the community setting, providing case examples and drawing on existing evidence concerning the format and aims of safety huddles. They also highlight the perceived barriers to safety huddles such as staff time and the importance of adapting them to the individual settings (such as including the SBAR reporting tool alongside them) and finding ways to retain their effectiveness while improving efficiency.





 Pearl L, Using Safety Huddles in mental health (violent and aggressive incidents) the experience of Bradford and District Care Trust.
 Improvement Academy. Undated.

https://improvementacademy.org/our-impact/programme-casestudies/

This case study, published by the Improvement Academy, describes the roll out of safety huddles in a mental health trust on adult acute wards. The data demonstrates progress towards the reduction of violent incidents and also discusses involving patients in safety discussions and making them understand the value of safety huddles.



7. Montague J, Crosswaite K, Lamming L, Cracknell A, Lovatt A, Mohammed MA. Sustaining the commitment to patient safety huddles: insights from eight acute hospital ward teams. Br J Nurs 2019;28(20):1316-1324.

This paper reports on a follow-up study which looked at the sustainability of safety huddles over time in 8 acute hospital wards which had implemented huddles 2 years prior, through a combination of unannounced visits, interviews and focus group data. The authors report how safety huddles developed and adapted over time, and noted that key elements to their sustainability included "a high degree of belief and consensus in purpose, adaptability and determination".





8. Melton L, Lengerich A, Collins M, McKeehan R, Dunn D, Griggs P, et al. Evaluation of Huddles: A Multisite Study. Health Care Manag 2017;36(3):282-287.

This paper reports on a longitudinal study over three months which examined the use of safety huddles across seven hospitals. The data collected found that over 90% of staff viewed huddles as having a positive impact in improving communication, usefulness of information and helping issues or potential concerns to be resolved in a timely manner. Observations and records concerning the content of the huddles found that significantly more information sharing than problem solving occurred in the huddles, but "when problems were identified that could be resolved, they were resolved in a timely manner." The huddles were also perceived to foster a greater sense of community among staff and a more positive workplace atmosphere.



9. Noelck M, Velazquez-Campbell M, Austin JP. A Quality Improvement Initiative to Reduce Safety Events Among Adolescents Hospitalized After a Suicide Attempt. Hospital pediatrics 2019;9(5):365-372.

This paper describes the implementation of safety huddles as part of a quality improvement initiative alongside "the development of [a] Pediatric Behavioral Health Safety Protocol [and] standardization of the patient safety search" in an inpatient psychiatric setting. The authors found that following the implementation of these elements there was a substantial reduction on the average number of Serious Safety Events.





10.Aldawood F, Kazzaz Y, AlShehri A, Alali H, Al-Surimi K. Enhancing teamwork communication and patient safety responsiveness in a paediatric intensive care unit using the daily safety huddle tool. BMJ open quality 2020;9(1).

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A paediatric intensive care unit utilised a daily safety huddle tool (part of TeamSTEPPS) to improve communication within the service and between leadership and frontline staff. This paper reports that over the period of April – December 2017, compliance with the daily safety huddle increased and a recorded 340 safety issues were address. The authors also highlighted common trends in safety issues, with the majority relating to infection control or medication errors- arguably recording the trends as well made it easier to identify reoccurring problems and plan ways to reduce these in the future.



11.Menon S, Singh H, Giardina TD, Rayburn WL, Davis BP, Russo EM, et al. Safety huddles to proactively identify and address electronic health record safety. Journal of the American Medical Informatics Association: JAMIA 2017;24(2):261-267.

This US study examined the use of safety huddles between clinical and administrative staff to both discover what types of electronic patient health record safety concerns were uncovered by this approach and to evaluate the use of safety huddles "as a strategy for identifying and learning" about these issues. The paper describes the structured format to the safety huddle and conducted a content analysis of the resulting notes. The review of huddles highlighted common themes and issues that affected safety, the authors also suggested that the 'blame free' cultures created by safety huddles which developed over time created a supportive, more communicative workforce, and a more pro-active approach to concerns or problems.





12. Dewan M, Wolfe H, Lin R, Ware E, Weiss M, Song L, et al. Impact of a Safety Huddle-Based Intervention on Monitor Alarm Rates in Low-Acuity Pediatric Intensive Care Unit Patients. Journal of hospital medicine 2017;12(8):652-657.

REF: 20211108

Although focussed on the very specific setting of PICU, this paper describes the review of a structured safety huddle approach in reducing unnecessary alarms and rates in the 24 hours following a huddle. The intervention included the introduction of a script into team huddles, and facilitation was randomised by the involvement of a member of the research team. Overall the study found that while both the intervention and control patients experienced less alarms over time, those in the intervention group were more likely to have their parameters adjusted and the authors found that integrating a data-based discussion into huddles was a safe and effective way of improving care and reducing unnecessary alarms



13. Guo M, Tardif G, Bayley M. Medical Safety Huddles in Rehabilitation: A Novel Patient Safety Strategy. Arch Phys Med Rehabil 2018;99(6):1217-1219.

This paper reports on the implementation of safety huddles in a Brain and Spinal Cord Rehabilitation programme for adults. This paper examined outcome measures over 7 months of the huddle system being implemented and interestingly found that of the patient safety issues identified in the huddles themes arose which "differed from information gathered from the 23 organization's pre-existing patient safety monitoring strategies". The paper also reported a reduction in adverse events during the implementation of the safety huddles, with more patient safety issues being raised "compared to physician's meetings at baseline" many of which could have led to significant patient harm had they not been picked up.





14. Brass SD, Olney G, Glimp R, Lemaire A, Kingston M. Using the Patient Safety Huddle as a Tool for High Reliability. Joint Commission journal on quality and patient safety 2018;44(4):219-226.

This paper describes the implementation and the development of a checklist tool for patient safety huddle meetings in a community hospital in Los Angeles. "The Documentation Tools are completed by the frontline nurses or nurse case managers in the morning before the Patient Safety Huddle" for review and to help highlight key aspects that should be raised. This paper provides details concerning the tool and their implementation as well as the specific design of the huddle.



15.Cropper DP, Harb NH, Said PA, Lemke JH, Shammas NW.

Implementation of a patient safety program at a tertiary health system: A longitudinal analysis of interventions and serious safety events. Journal of healthcare risk management: the journal of the American Society for Healthcare Risk Management 2018;37(4):17-24.

This paper describes the introduction not solely of safety huddles but of a new safety programme based on "7 essential elements: (a) safety rounding, (b) safety oversight teams, (c) safety huddles, (d) safety coaches, (e) good catches/safety heroes, (f) safety education, and (g) red rule". The paper describes the format and roll-out of these elements to create a more engaged safety culture in the organisation.



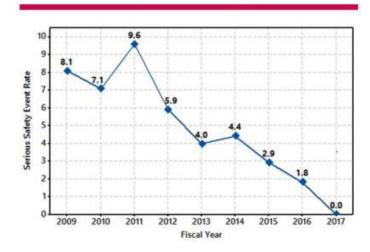
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Figure 2:

Serious Safety Event Rate per 100,000

Adjusted Patient Days Plus Long-Term

Care Days Over the Course of 9 Years (a steady decline is noted that paralleled several safety milestones implementation)



Using data from prior to the initial roll-out as a baseline, the authors report a decline in serious safety events in line with the programme's adoption.





16.Mena Lora AJ, Ali M, Krill C, Spencer S, Takhsh E, Bleasdale SC. Impact of a hospital-wide huddle on device utilisation and infection rates: a community hospital's journey to zero. Journal of infection prevention 2020;21(6):228-233.

REF: 20211108

This community hospital (US) setting implemented "a hospital-wide Daily Interdisciplinary Safety Huddle (DISH) with infection control and device components" and compared outcome data on several key measures, particularly around the use of catheters, before and after implementation. Overall the results showed a correlation following the huddles' implementation and reduced device utilisation ratios, and substantial decreases in catheter-associated UTIs and central line-associated bloodstream infections.





17. Hayes J, Lachman P, Edbrooke-Childs J, Stapley E, Wolpert M, Deighton J. Assessing risks to paediatric patients: conversation analysis of situation awareness in huddle meetings in England. BMJ open 2019;9(5):e023437.

This paper analysed the transcripts of huddles from paediatric wards in four English hospitals, to examine how huddles proceed in practices and the ways in which staff identify risks. The reviewers found common terms used within teams to identify both concerns and potential concerns (ones to watch) and assessed how staff discussion in huddles negotiated these

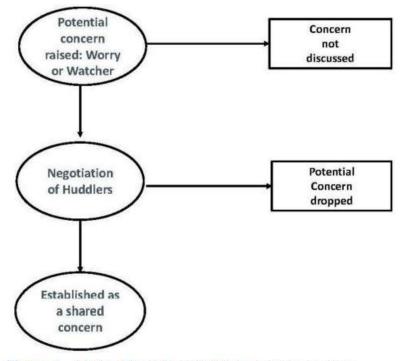


Figure 1 Methods used to establish shared concerns.

concerns.

The authors found that those involved in the huddles ""used the meetings to go beyond standardised indicators of risk to identify relative risk and movement in patients towards deterioration, relative to the last huddle meeting and to their usual practices." The authors also noted that despite the aims of huddles to be open spaces where all could speak, senior staff were often most vocal and hierarchy was implicit in the way conversations progressed, which they highlighted as a tension against the ideals of the huddle process.





18. Allen JA, Reiter-Palmon R, Kennel V, Jones KJ. Group and organizational safety norms set the stage for good post-fall huddles. Journal of Leadership & Organizational Studies 2019;26(4):465-475.

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This study consisted of a longitudinal survey including a sample of 2-6 healthcare works who completed assessments prior to the implementation of post fall huddles, at the time of implementation and three to six months later. This study is interesting as it notes that from the workers' perspective, the effectiveness of the huddle in establishing organisational a and group "safety norms" relied more heavily on huddle leader behaviour than other literature suggested. It highlights the importance of huddle design from a leadership perspective in order for huddles to be effective.



19.Castaldi M, Kaban JM, Petersen M, George G, O'Neill A, Mullaney K, et al. Implementing Daily Leadership Safety Huddles in a Public Hospital: Bridging the Gap. Qual Manag Health Care 2019;28(2):108-113.

This paper describes a slightly different approach to safety huddles than most of the literature. In this setting, Leadership Safety Huddles were designed not for individual wards but in a wider organisational leadership setting in which departments were represented at a hospital-wide huddle designed to put safety culture as a top priority to be addressed hospital-wide. The authors found that the multidisciplinary nature of the huddles and the focus on communication throughout the organisation improved several outcome measures for patients, improving several services in the hospital.



20.Fencl JL, Willoughby C. Daily Organizational Safety Huddles: An Important Pause for Situational Awareness. AORN J 2019;109(1):111-118.

REF: 20211108

This paper provides an introductory overview and practical implementation examples to the use of Safety Huddles, discussing how they can be effective in improving communication, situational awareness and fostering good patient care and a positive safety culture among teams.



21. Foster S. Implementing safety huddles. Br J Nurs 2017;26(16):953.

This expert opinion piece provides a helpful brief overview concerning the aims of the use of safety huddles in ward environments in which Foster notes that the implementation of safety huddles may lead to improved patient safety by allowing a more holistic approach in which, rather than task allocation, staff are given the opportunity to discuss patient needs and improve communication among the team.



22.Little J. Learning through "huddles" for health care leaders: Why do some work teams learn as a result of huddles and others do not? Health Care Manag 2014;33(4):335-341.

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Although a slightly older article, and less concerned with measuring the effectiveness of safety huddles specifically, this article describes a literature review which sought to explore why some teams learned from huddles and others did not, suggesting key barriers to effective huddle set-ups including: communication style, team and member engagements and lack of equitable and open dialogue between members. The article also offers some suggestions for how leaders might approach huddle design to encourage effectiveness.



Indicative search strategy

Safety huddles, safety rounds, healthcare team,

Sources searched

PsycInfo, Medline, HMIC,

A structured public domain search for unpublished research.

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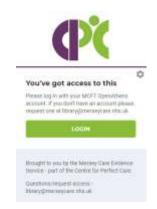


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Clinical decision making tool and app



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