'Hands-off' during handover!

Iedema R and Ball C (2010) NSW Ambulance/Emergency Department Handover Project Report. Sydney: NSW Health & UTS Centre for Health Communication. (http://centreforhealthcom.org/wp-content/uploads/2011/05/Amb-ED_Report_Online.pdf)

This study, which is a before and after intervention study (described as a 'videoreflexive ethnography'), examines ambulance staff to emergency department (ED) handover in two centres in New South Wales in Australia.

In the first stage of the study, participants were involved in one of 10 focus groups where members of the Centre for Health Communication (CHC) worked with participants to explore the complexities and challenges encountered during patient handover.

The next stage involved observation of handovers which included video-recording 73 handovers (33 at one hospital; 40 at the other). This data was analysed looking for emerging similarities and/or differences focusing on both verbal and non-verbal communication patterns; duration of handover etc.

In the pre-intervention observations in 93% (68) of cases the ED staff asked questions during the handover, with 38% (26) asking questions about issues that had already been covered by the paramedic. In 67% (49) of cases the paramedic repeated information during handover. Handover time varied according to factors such as severity of patients' condition (higher category triage appeared to have longer handover times than non-urgent patients), or seniority of the paramedic (more senior grades took longer). The amount of eye contact appeared to influence handover time, with less eye contact culminating in longer handover times.

The next stage involved reflexive focus groups looking at edited footage of handovers and the preliminary analysis of the data. These activities combined with reflexive feedback from staff working in these areas enabled the development of a model for handover known as IMIST-AMBO.

This comprises: Identification, Mechanism/Medical complaint, Injuries/Information about complaint, Signs, Treatment & Trends, Allergies, Medications, Background, Other issues).

Three additional factors were identified as important to accompany this protocol: an interruption free zone; 20 seconds of 'Hands off/eyes on' where eye contact is deemed as essential between the two parties and receiving staff were asked to

minimise patient/equipment handling (unless it was time critical as in cardiac arrest) to allow them to focus on the content of the paramedics' handover; and clinical leaders in ED need to be more easily recognisable which could be achieved by wearing a different coloured uniform.

This system was then introduced to all paramedics exposed to the EDs of the two participating hospitals. The CHC worked with ambulance educators and ambulance services to provide training and feedback to the paramedics; in addition posters and pocket sized laminates outlining the protocol were introduced into the ambulance service. In total 373 staff were trained (108 ED clinicians; 220 paramedics; 45 paramedic educators).

Post-intervention evaluation was achieved by video-recording and analysing 63 handovers; and by distribution of a brief Likert style survey to ED clinicians.

The post-intervention analysis showed: a reduction in the number of questions being asked during handover from 93% to 41% with less repetition of information; improved sequencing and ordering of handover information; a reduction of time spent on handover (in some cases) with an increase in information being delivered (partly due to the decreased number of interruptions); increased eye contact which the authors suggest is indicative of a higher level of shared attention.

Recommendations from the study include: adoption of a standard protocol for handover which should be used in all hospitals so that prehospital staff do not have to change their approach according to the hospital; investment in education so that all staff engaged in this type of patient handover receive development; an emphasis on handover protocols in curricula for student paramedics and trainee ED clinicians so that the process is familiar from the start.

This is an innovative study where the participants were actively engaged in the development of a standardised handover framework/instrument to implement into their practice.

Limitations include a lack of generalizability which is common within qualitative studies; however the findings clearly have transferable elements which could be relevant to the UK. Further research is required to investigate whether development and/or adoption of similar frameworks would improve the quality of this important component of the patient's care while being transferred from prehospital to inhospital care in UK settings.

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