Barnsley Hospital NHS
NHS Foundation Trust

Summary of TeamSTEPPS pilot (Human factors / team training)

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Introduction

Many incidents. Claims and complaints involve poor communication and team working as a contributory factor or a root cause. Currently team training is not mandatory for NHS staff and many people assume staff already know how to work well as a team. TeamSTEPPS® (Team Strategies and Tools to enhance Performance and Patient Safety) is a well known and respected Team training model. It focuses on four key skills to improve patient safety: communication, leadership, situation monitoring and mutual support. Team Training has been shown to improve team efficiency and improve outcomes for patients (Hughes et al 2016). The patient safety lead secured approval from the Executive Team to pilot team training on two wards. The patient safety lead had undertaken the TeamSTEPPS® Master Trainer course (and the other two faculty members had registered to complete it during the pilot).

The intervention

During a six week period (May – July 2016) fourteen x 2 hour teaching sessions were scheduled.

There were two different sessions which were run:

Session A – Communication and Leadership Session B – Situation Monitoring and Mutual Support

The two wards involved were a medical ward (stroke) and a surgical ward

Before the sessions started the faculty met with the lead nurses on both wards to secure support. Both lead nurses were very engaged and supportive. The faculty also met with lead therapists on the medical ward and the two consultants. The surgical ward was covered by a large group of doctors and they were all emailed information explaining the project. Support was also gained from the heads of nursing and clinical directors for each ward. Staff on the two wards were asked to complete a baseline patient safety culture survey and a TeamSTEPPS® Teamwork Perceptions Questionnaire.

Staff were emailed a pdf copy of the TeamSTEPPS® pocket guide.

Results (including outcomes of the project)

The baseline safety culture survey had a poor response with only 10 responses from the stroke ward and 6 from the surgical ward. The Teamwork Perceptions Questionnaire also had a poor response, with 11 and 7 respectively. Reports on the safety culture were generated by AQuA (Advancing Quality Alliance), but as the return rate was very low the confidence intervals for the responses was

very wide and it is therefore difficult to draw any firm conclusions from the data. The reports were shared with the lead nurses.

The attendance at the sessions was also low and for three sessions nobody attended. In total 20 staff from across the two wards attended training (see appendix 1 for the breakdown of staff)

Attendance from the medical ward was highest (14 staff) and amongst those who attended 10 were therapy staff (physiotherapists and occupational therapists). Two ward clerks attended from the surgical ward. No medical staff attended any of the sessions. The faculty discussed some issues surrounding this with junior doctors on the ward and maintained email correspondence with the medical leads for the departments. Lack of knowledge about sessions, clinical commitments and uncertainty of value were issues raised, although these were not formally explored.

Staff who attended the sessions completed an evaluation form (provided in the TeamSTEPPS® package) which asks attendees to rate the sessions ' Poor', 'Good' or 'Excellent'. The overwhelming responses were in the excellent and good categories. Attendees were also asked for their comments about what changes they would make to their practice as a result of the session. Most respondents said that they would try and use closed loop communication, a readback for any handovers and explore how a debrief could be implemented into their daily work. (See appendix 2 for full comments from the sessions).

After the last teaching session, the faculty met with both lead nurses to give them feedback on the project including the evaluations from staff, and to explore how the tools and techniques could be embedded into practice. As there had only been 6 attendees from the surgical ward and they had all attended the situation monitoring and mutual support sessions, the faculty concluded there would be very little opportunity to embed this into practice. The medical ward had a greater number of attendees, with more of them attending the communication and leadership sessions which corresponded with the feedback about testing tools in practice, where most had identified closed loop communication, use of readback for handovers and introducing a debrief. Posters were produced around the key tools the ward had identified that they wanted to test out. The staff were also interested in having a copy of, a self check test (for vulnerability to making an error) called the three buckets method (Reason). This was not part of Team STEPPS® but had been incorporated alongside the I'MSAFE self check. The lead nurse and lead therapists on the medical ward were asked to champion the tools and techniques by encouraging staff to try them. They were asked to do this by mentioning the tools at handovers and role modelling use of the tools. The faculty provided posters of the techniques for the ward.

Outcomes

The plan was to carry out a follow up patient safety culture survey six months after the teaching sessions. However the Trust has decided in the meantime to undertake a Trustwide culture survey in December 2016 so this will probably be too soon to see any difference from the survey in May. The survey in May also had very small numbers so will not be a good comparison. The faculty will look at falls and pressure ulcers prior to and after the pilot to see if there is any improvement. The faculty have been guided by the Kirkpatrick Model of evaluating educational initiatives. This advises evaluation on 4 levels

Level 1- Reactions. Did staff enjoy the training and think it would be useful.

Level 2 - Changes in knowledge, skills and attitudes. Do staff have new knowledge and skills after the training and has it changed their attitudes. The faculty were planning on repeating the Teamwork perceptions questionnaire but the pre intervention response was too low to allow a meaningful post training comparison to be made.

Level 3 –Behaviour. Have staff implemented the tools and techniques into practice – have they changed their behaviour. It is currently too early to say. In the near future the faculty will ask staff on the medical ward to see if are using the tools and techniques.

Level 4 Outcomes - has the training produced any change in important organisational safety metrics – falls, pressure ulcers.

Barriers and challenges

The biggest challenge was enabling staff to be released from the wards to attend the sessions. This was due to high acuity on the wards. The two wards were busier than usual during the pilot.

The timing of the sessions (1.30 – 3.30pm) may have been a factor as staff on an early shift who attended had their record keeping to complete on return to the ward, and sometimes if staff on long days attended then early staff were unable to leave until the staff at the session retuned. The faculty asked lead nurses what the key barriers were to attendance and a summary is provided in (Appendix 3).

Discussion and conclusions

On reflection, asking staff to complete two surveys at the start of the pilot (patient safety culture survey and a teamwork perceptions questionnaire) was too much of a burden and the information in both is similar. In future only the patient safety culture survey will be used as a pre and post measure as this does include aspects of teamworking. Paper copies were used which may have influenced the low return rate, and this also meant faculty had to upload the data manually for analysis. In future a survey monkey electronic version will be used and data will go direct to AQuA for analysis.

The two faculty who were intending to complete the TeamSTEPPS® Master Trainer module were both busier than anticipated and did not manage to complete the course during the pilot. As some sessions had no staff attend, this was not effective use of faculty time, or of rooms in the education centre.

Although we had senior leadership support to test out TeamSTEPPS, there was no resource in terms of backfill of staff and training was not made mandatory. The faculty used the TeamSTEPPS® slides and made some changes. The slides are American and some of the content on reflection needed further adjustment for a UK audience. Numbers who attended were small usually only 2 staff which made it more difficult to use interactive exercises. Due to small numbers very few sessions had interdisciplinary groups which is the preferred method for training staff about teamwork.

The faculty and senior leadership in the Trust need to consider how best to deliver team training going forward. Some possible solutions have been outlined in the recommendations.

Although we have no data showing improved outcomes, we do have positive evaluations of the training and some evidence (see below) of staff having tried to embed the tools into practice after the training. The pilot has introduced staff to team training concepts and has raised awareness of this important topic within the Trust. Faculty will need to monitor if any of the training is successfully transferred into practice and sustained over time. The pilot will generate discussion about the most effective way to introduce team training.

Feedback from Medical Ward (two months after the training)

Lead Nurse - If it has been a really awful shift we tend to have a bit of a debrief at the end of the shift. I have displayed the posters on the ward and I have heard staff commenting about them. I tend to use closed loop communication daily and when taking results over the phone and handover, I always use read back.

Lead Occupational Therapist - We are pleased to report that we are using the closed loop method and the bucket self monitoring technique. We ensure we hand over information to colleagues at the end of each day. We do this on an informal basis, as we have worked together as a therapy team for a long time. We found the training useful to consolidate our knowledge and as an opportunity to reflect upon our practice.

Recommendations

There is growing evidence that Team Training can save lives (Hughes et al 2016, Neily et al 2010). It is estimated that a 5% performance improvement in teamwork could potentially yield approximately 5000 lives saved per year in the USA and save millions of dollars. Many of our incidents complaints and claims feature poor communication and team working.

The vision of team driven safety must become aligned to the Trust's strategy and goals and teamwork behaviours must become embedded into the culture of the organisation. The Trust needs to communicate its vision for the role of team working in achieving safety and quality.

- Mandatory Training: Trusts do not have control over which topics are statutory but they do have choice about the topics that are mandatory and team training could be included alongside infection control, and basic life support. Team Training can save lives and there is very good evidence to support the argument that all staff should receive it (Hughes et al 2016, Neily et al 2010). If team training cannot be mandatory in the same way as infection control or manual handling then it should at least be part of Section 2 Mandatory Training and part of the Trust Training Plan. A weekly 2 hour session will be scheduled. After staff have undertaken face to face training then annual refreshers for clinical staff and biannual for non clinical can be undertaken online. An introduction to team working is now also part of the clinical induction for new staff.

- A Trust Strategy for human factors should be produced which will include a section on team training. This will outline our commitment to team training and use of the tools and techniques from TeamSTEPPS®. It will explicitly describe how we communicate with each other in the Trust – we will use closed loop communication and read-backs for handovers for example. We will use daily debriefs and we will share our mental models with each other.

Appraisals should mention team working and it should be included it in our courses like ALERT, BLS and in our management training programmes (Aspiring talent / Ascending Talent). We should consider how teamworking can be included in our recruitment, selection and promotion of staff.

- A Trust policy for communication and team working should also be produced. For all other topics we think are important we have SOPs, guidelines or policies e.g. handwashing, so in the same way we should have one that clearly tells staff how we should communicate and work in teams. Training in team working is only the first step and by itself is unlikely to permanently change behaviour. Having a strategy and policy will help ensure the tools and techniques taught in the training are used in practice on a daily basis.

- Leadership at all levels must provide support to ensure staff are rostered to attend team training in the same way they are for other mandatory training topics.

- The Trust will need to encourage more staff to train to become human factors – team trainers and coaches (by undertaking the free online TeamSTEPPS® Master Trainer course).

- An annual patient safety culture survey carried out across the Trust will be one measure of the impact of making Team Training mandatory supported by a wider human factors strategy and a policy for communication and team working. The baseline survey will be carried out in December 2016.

- The training slides (TeamSTEPPS®) should be adapted further to meet the needs of a UK audience. Faculty should include more interactive activities and if possible include aspects of simulation. When the Trust appoints a Simulation Lead this person should advise on using simulation in the training.

References

Hughes A, et al (2016) Saving Lives: A Meta-Analysis of Team Training in Healthcare. Journal of Applied Psychology DOI: 10.1037/ap10000120

Neily J, et al (2010) Association between implementation of a medical team training programme and surgical mortality. JAMA 304: 15, 1693 – 1700

Appendix 1 Staff attending the training

Surgical Ward

Staff group	session
Staff Nurse	Situation monitoring & mutual support
Auxiliary	Situation monitoring / mutual support
Staff Nurse	Situation monitoring / mutual support

HCA	Situation monitoring / mutual support
Ward Clerk	Situation monitoring / mutual support
Ward Clerk	Situation monitoring / mutual support

Medical Ward

Staff group	session
Physio	Leadership / communication Situation monitoring / mutual support
Physio	Leadership / communication Situation monitoring / mutual support
Nursing (Sr)	Situation monitoring / mutual support
Physio	Situation monitoring / mutual support Leadership / communication
Physio	Situation monitoring / mutual support Leadership / communication
Physio	Situation monitoring / mutual support Leadership / communication
Therapy ass	Situation monitoring / mutual support Leadership / communication
Auxiliary	Leadership / communication
Nursing (LN)	Leadership / communication
OT	Leadership / communication
OT	Leadership / communication
OT	Leadership / communication
Staff Nurse	Leadership / communication
OT	Leadership / communication

Appendix 2

TeamSTEPPS summary of evaluation comments

What changes will you make in your practice as a result of the session(s)

I will attempt to use some of the tools within practice –i.e. use closed loop and read back

To use readback / closed loop communication. To think about having more regular huddles and a debrief. To ensure all members of the MDT introduce themselves

Self reflection as a team leader. Consider debriefs and how they could be successful

An increased awareness of communication difficulties. Awareness of using closed loop theory in ensuring effective communication

Debrief – in a structured manner at the end of each shift

Requesting a read back after handovers

Try to be more aware of helping team members and actively seeking ways to do so

I will try to relay my knowledge to other staff

I will look at my own practice and look at including readback in my day to day work. Maybe give some bullet point handouts. Found it very interesting

Post ward round debrief – recommend

Discuss workload and other factors and debrief at end of day especially with rotational staff

Being more self aware. Increase good communication

Readback focused on and make sure information is understood. More debriefing even if informal. Handout of bucket diagram

Have more debriefs and focus on clear communication

How can the sessions be improved?

As a team leader attending with my team members I'm unsure whether we all felt comfortable enough to discuss in enough detail? Should team leaders attend separately in future?

more role play and group discussions to feedback ideas on service improvements

Fantastic course and excellent idea for all MDT members to attend! Please make this course mandatory

I thought everything was relevant and can't think how it could be improved

more case studies can relate to practice

Handouts so we can remember

I think the booklet / handout guide will be really useful

Very interesting

Good use of resources

I found the activity interesting

(Speakers) Excellent by both persons involved

Appendix 3

Difficulties releasing staff to attend

1. Staff work double shifts and so have to have a lunch break around 13.30, which leaves the ward short, sometimes 3-4 staff can be on doubles.

2. Other staff are booked on Mandatory training etc which at the moment takes priority. (maybe this training should be added to the mandatory training list)

3. The ward is always busy and staff are finishing their paper work after handover, which impacts on them leaving to do the training. They don't want to have to return to the ward after the training to complete documentation.

4. Staff are highlighted but then something happens on the ward and they can not be released. If the staff member is running a team of patients, being away from the ward for 2 hours means that they will have to catch up on 2 hours when they return.