

Clinical Paper

Developing a Communication System During the COVID Crisis for the Relatives of Critically Ill Patients

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Introduction

Communication was tested in many ways during the coronavirus disease (COVID) crisis of 2020, with the most profound effects felt amongst the relatives of those patients who were in hospital, particularly those patients in intensive care where the patient themselves is unable to communicate with their family for various reasons. The Nightingale hospital COVID Intensive Care Unit (ICU) was set up in Belfast in response to the COVID threat. During its period of operation, a total of 47 patients were admitted and cared for within this ICU. 5 of these patients unfortunately died during their hospital stay. Due to the restrictions in place during this time, visitors were not permitted to see their critically unwell relatives in hospital. This was an extremely distressing reality that our patients' relatives faced and for the most unfortunate ones, they didn't get to say goodbye to their loved ones in the way that they usually would do in hospital. It is well recognised that good communication is crucial in healthcare, especially when it comes to the critically unwell. Incomplete communication with family members can have a hugely negative impact on the family¹ and increases complaint rates². There are many psychological effects of critical illness on family members and effective communication plays an important role in ameliorating these effects.

The Nightingale hospital was also an extremely challenging new working environment for staff. Altered shift patterns and the wearing of personal protective equipment (PPE) made communication frustrating for them. Staff were unable to provide daily communication with family via their usual methods therefore innovative solutions were required to overcome this problem. In an effort to ease work burden on the intensive care staff and more importantly to ensure that families were being adequately communicated with, we formed a unique phenomenon to our trust in what became known as 'The Family Communications Team' (FCT). It consisted of three anaesthetic trainee doctors working from a remote site that was separate to the ICU to provide daily communication with patient relatives. A rapport was formed with patients' relatives and they were supported as best possible on their emotional journey. This report shows how this communication system was effective and how it helped to ease the suffering of those families who were the most severely affected during the COVID crisis in Northern Ireland.

Initial challenges

When the decision was made that there was a role for FCT to update relatives of the patients in the COVID ICU there were many issues that needed to be addressed before commencing. These included how the FCT would access the clinical information without adding to the clinical team's workload at an already stressful and busy time when one of its main aims was to reduce their burden. The FCT needed to access information in a timely manner so that relatives were not waiting until late at night for phone calls. There also needed to be a system in place for adequate documentation of the communication provided. As well as these issues, there was also initially a concern regarding staffing numbers and whether the team would be suitably equipped to cover a service over seven days a week.

Following several discussions and suggestions it was decided that 'Microsoft Teams' would be a useful platform to use. The NHSx Website was an excellent reference for COVID Information Governance advice with regards to video conferencing, using third party applications and working from home. It confirmed that due to unprecedented times it allowed for different ways of working as long as due care regarding encryption was taken.³ The use of Microsoft Teams has been endorsed throughout the Belfast Trust since the outbreak of the pandemic. It enabled local and remote access to a series of live documents that could be edited and archived as necessary. This meant that the FCT were able to access clinical information as it was being updated continuously without needing to disturb the clinical team.

As the FCT service was commenced at the beginning of the outbreak, we were unsure of patient numbers and how many people would be required to staff the FCT to sustain the service, especially since the Nightingale unit could potentially accommodate 200 patients if required. The service was initially set up as a group of three anaesthetic registrars who due to pregnancy were working non-clinically during the pandemic in accordance with guidance. The service was also discussed with a number of other specialities

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who had staff working non-clinically and had offered to help out. However, it soon became clear that prior knowledge of working in ICU would be required to interpret the patient information and adequately explain this to the relatives. Fortunately, due to numbers remaining fairly low in Northern Ireland during the initial wave of COVID-19 we managed to sustain the service with just three members of staff.

Method

The clinical team were using Microsoft Teams for their handover document which was updated continuously by the doctors throughout both day and night shifts. Following the daily consultant ward round the clinical team were also completing a brief relative communication template. This document used a code to outline the patient's trajectory over the previous 24 hours and summarise any key points. (Appendix 1) As the FCT were able to access both the clinical handover and the relative communication template documents together this ensured that up to date information was being provided to families. With the added benefit of the team consisting of anaesthetic doctors, the team were able to apply their own knowledge and experience to each patient, discuss the likely trajectory for the patient and answer specific questions. The FCT were also available on a daily basis via telephone for staff in the ICU regarding any patient issues or information that the staff wanted families to know. This worked both ways, as families were able to leave messages with the FCT for example often family members would thank nursing staff especially for their care and attention.

When patients were admitted to the COVID ICU a prompt script for the initial conversation to relatives was used to explain to them what to expect with regards to communication and updates whilst their relatives were in ICU. This outlined that they would get one phone call to one relative every day. The FCT explained there would be a small team of doctors working in the communications team and that we were all used to working in intensive care however at this time were not looking after their relatives directly. Instead we were working closely to support the ICU team and gather all the relevant information to pass onto the relatives. We would also be in a position to feedback any issues to the clinical team. It was clearly stated that if their relative had any sudden deterioration or change in condition between the daily updates that a member of the clinical team would contact them directly in the interim. After each daily discussion with relatives, a summary of the conversation was documented into a table on the relative communications document and this was then archived on a weekly basis as a record of what information had been discussed and any queries that were raised by the families. These archives have since been printed out and filed as hard copies in the patients' notes as a record of the communication that took place with their relatives.

Ongoing challenges

One of the main challenges faced during the process was

communication with non-English speaking families which required the use of interpreters. Initially we used the Health and Social Care Northern Ireland (HSCNI) Interpreting services and booked an interpreter to come to the office in person. Using speakerphone, we were able to communicate with these relatives. However, as calls were covered from home at the weekends, we found it easier to use the Big Word service and conference calls for communicating with these families.

Another challenge were video calls. As time progressed and patients were in the unit for increasingly prolonged admissions the hospital acquired some tablet devices. The Intensive Care Society suggested considering video call communications.⁴ This brought its own challenges, both logistically and ethically. It was impossible for unconscious patients to consent to this and it was difficult to control who had access to the video calls at the relatives end and whether they could be recording them to share with others. Patient dignity needed to be maintained on these calls as well as respecting the confidentiality of other patients in nearby beds. It was even more difficult to facilitate this for the non-English speaking relatives without the use of interpreters and the clinical team were unable to communicate on the calls as they were in full PPE. The commonly used platform 'Zoom' is not formally encrypted, however a standard operating procedure was drafted to enable video calls to take place for relatives using this App. The option of video calls was mentioned to families during their daily update and using an email address they provided to us we agreed to try and facilitate a video call if the clinical team were available. The FCT advised relatives to speak so the patient could hear familiar voices. Communication from the clinical team would be very limited due to PPE therefore the FCT would phone the relatives back after the video call to answer any questions they may have after seeing their relative in intensive care.

Collecting Results

A short questionnaire was sent via email to patients for the attention of their relatives at approximately 6 weeks following hospital discharge. (Appendix 2) These email addresses were provided by patients after a consent process. The results and feedback from these questionnaires have been used to evaluate this service alongside the personal experience of the FCT and feedback from the clinical team.

Results

Out of the 47 patients that passed through the Nightingale COVID ICU, 43 patients' families were communicated with using the FCT. For those 4 families that didn't receive communication, their relative was admitted and discharged from the ICU before the set-up of the FCT. They were communicated with by other means, but this proved suboptimal as is demonstrated in our results.

The response rate for the questionnaire sent to relatives following hospital discharge had a 60% response rate. This



questionnaire didn't go to those families whose relatives had died in ICU, as we didn't have access to their email address and didn't want to ask for it as we felt that would have been insensitive. Of those who responded, 91% rated the standard of communication received from the FCT as 'good' or 'very good' compared to 33% who did not receive communication by the FCT. 68% of the respondents felt that the communication they received from the FCT helped them to understand their relatives stay in ICU a 'great deal' whereas none of the relatives answered this response when they were not communicated with by the FCT. 59% of relatives felt that communication by the FCT helped them cope a 'great deal' better with their relatives stay in ICU.

Any comments given were positive (some examples are displayed below). The FCT received positive feedback on an almost daily basis from families that were extremely thankful for communication updates. When this praise was passed on to nursing staff it helped morale in what were extremely challenging and uncertain working conditions. It was obvious from the documentation of the daily discussions that the team built a rapport with families and they felt supported at a difficult time. When these patients were all followed up at a virtual 6 week follow up clinic, several of them commented on how pleased they were that their families had received excellent communication and were comforted to know that their relatives were being updated daily during their ICU stay.

Examples of comments received from families:

'The phone calls were very detailed letting us know fully the situation and helping us to understand all that was going on. We were able to ask questions and felt we were getting the answers we needed.'

'I appreciated the consistency that I spoke to the same doctor every day'

'Communication was good and explanations given in plain language, also questions were answered or addressed immediately. Thank you all'

'We would like to thank Dr.X from the bottom of our hearts, she helped our family through the most difficult period that we have ever experienced'

'The anxiety I had was unbearable but thanks to Dr X I somehow managed to cope just about and continue being strong for the rest of our family'

'The doctors were amazing, ringing me every day with a detailed update. They explained things in simple terms when I didn't understand and no question was too much or too silly for them. I genuinely can't thank them enough for the support and time they gave me'

Examples of comments received from patients:

'My wife and son received great updates on my progress. The team always portrayed a very caring attitude. Receiving updates at the same time every day was important'

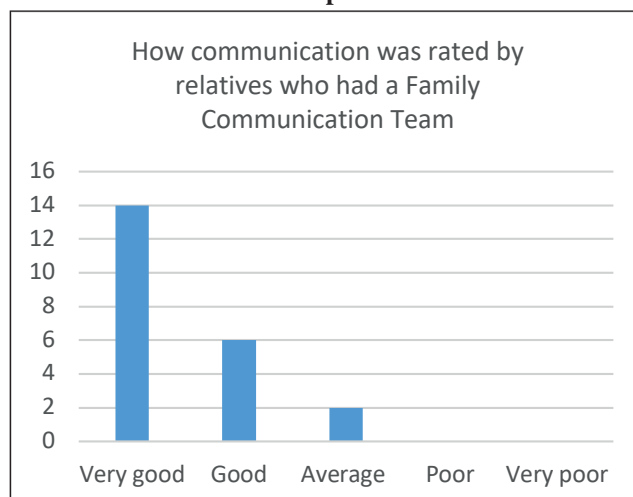
'She found the family updates extremely useful and she was very grateful for the regular and compassionate calls'. (patients commenting on his wife's experience).

'She developed a relationship with the doctor. It gave her hope' (patient commenting on his wife's experience)

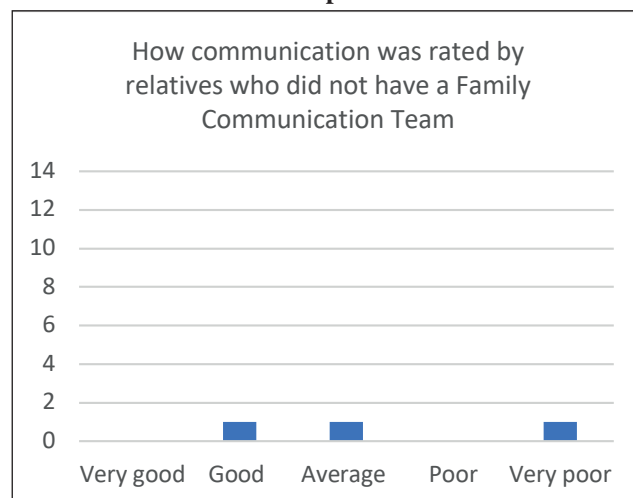
Results

Graphs 1 and 2 shows how families rated the communication they received whilst their relative was in intensive care.

Graph 1



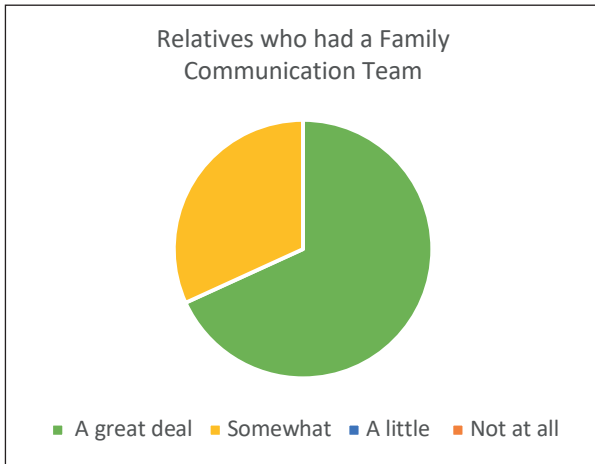
Graph 2



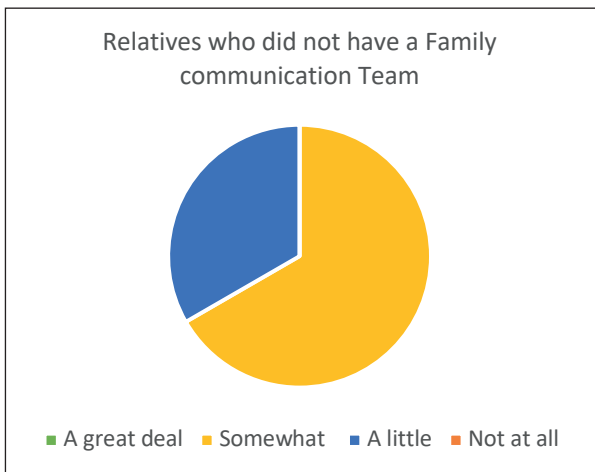
Graphs 3 and 4 shows how the communication families received helped them understand their relative's stay in intensive care better.



Graph 3

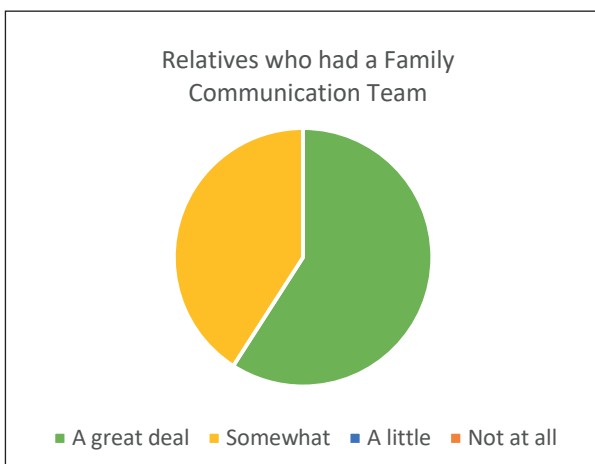


Graph 4

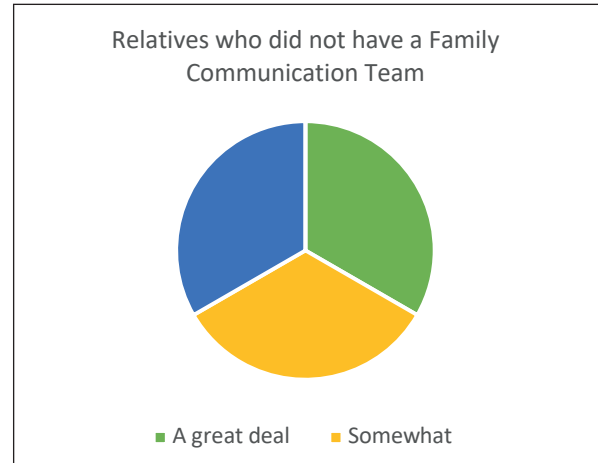


Graphs 5 and 6 shows how the communication families received helped them cope with their relative's stay in intensive care better.

Graph 5



Graph 6



Discussion

The severe restrictions put in place for hospital visiting during the COVID crisis, meant that there were limited options for families as they could not visit hospital. Furthermore, usual communication via telephone to families from the clinical staff was made more challenging due to staff workload and the wearing of Personal Protective Equipment (PPE). This unique situation created ethical grey areas when it came to communicating and updating the patients relatives⁵. Guidance on information governance states that in circumstances such as these, it may be more harmful to patients not to share information than it is to share it⁶. After addressing these many challenging, the formation and delivery of the FCT within the Nightingale ICU eased workload of the clinical staff and kept relatives informed to the best of our ability at the time. When feedback from the relatives who did receive communication from the FCT was compared to those who didn't, we feel that there is a clear benefit shown from the use of the FCT and the feedback has been overwhelmingly positive.

The benefits of the FCT were many, to both the relatives and the staff working in the unit. There was an understanding for these families that it was very difficult and unusual not being able to visit their relatives. The FCT dedicated significant time explaining things to the relatives and listening to their concerns. It was also appreciated that the clinical team were wearing PPE at all times in the unit so were unable to answer phone calls from relatives looking for updates. We anticipated this would not only be frustrating for staff but would certainly add to relatives' anxiety when they couldn't get through on the phone to someone with knowledge of their loved one. Knowing that they would get a call at a similar time each day helped to reduce the volume of calls into the unit and allowed the clinical team to concentrate on their clinical workload. It also meant that as opposed to relative led updates on patients by calling into the unit at any time of day or night, they instead were receiving a more comprehensive overview of the last 24 hours and as a result they were better informed overall. Lastly, as documentation was able to be accessed via Microsoft teams it meant that



infection control was adhered to, which further reduced risk of spread to patients and staff.

From the doctors who were providing the communication, they overall felt that they were contributing to an important service and felt that what they were doing was making an impact. Despite this, communication was certainly emotionally challenging at times and there were difficult discussions that took place via telephone. Recognising that these challenging and emotive discussions could take their toll on the individual after continuous exposure⁷; the members of the FCT were able to reflect on these conversations together and support each other as needed.

As a small team of three doctors making up the FCT we were initially wary of the same person providing the communication to the same relatives everyday but we soon found that the relatives appreciated the continuity of care. They found it reassuring to get a phone call at a similar time each day from the same person and we were able to build up a good rapport with them as some patients were in ICU for many weeks. The relatives commented if we were off a day that they were glad to have their 'usual doctor' back and often the communication was as much about giving them someone to listen to their concerns and have a chat in general about how they and the rest of the family were coping. Being part of the FCT we have learnt many new skills and have experienced first-hand the impact that providing personal communication can have on relatives who are going through very difficult situations. We realised the importance of providing attention to detail to each individual family and showed compassion by being mindful of the difficult circumstances they were facing.

Challenges faced during the process of running the FCT were dealt with accordingly, with the main one being the use of interpreters. The Big Word Interpreting service is used widely by the health service and is available 7 days a week. This allowed the FCT to communicate daily with relatives and we were reassured that they were being communicated with in the appropriate language. The calls generally took longer, as was expected with a three-way conversation and there were several times that the FCT were left feeling uncertain as to whether relatives truly understood what was happening. The only way to try and alleviate this concern was repetition of information and trying to ascertain from the interpreter whether they felt that relatives understood what we were saying. There were a few occasions when these relatives appeared to have picked up information wrongly and we are still unsure if this was due to the interpreters providing the information or due to a lack of understanding on the relative's part. It is evident that the use of interpreters for communication in healthcare results in an alteration of linguistic features such as content, meaning and reinforcement. Overall, this will inevitably mean conversational loss⁸. The FCT tried to reduce this as best as possible, but it still had its faults. Phone calls with the use of interpreters was problematic at times despite our best efforts and it was difficult to form a rapport with these relatives.

Despite the many challenges encountered with the video calls they proved to be some of the most rewarding interactions throughout the whole process. Feedback from the relatives on the phone call following the video call was always very positive and they took much comfort from seeing their relative and being able to speak to them even if they were not able to communicate back to them. Video calls were also used on occasion for those patients who were seriously ill and not expected to survive and gave relatives a chance to say their goodbyes. This proved a very emotional experience for everyone involved but the families thanked us for the opportunity to do this at a time when there was no hospital visiting allowed even in end of life care.

An area of weakness that was identified from the feedback received was that it didn't include those relatives of patients who died in the ICU during this time and one could argue that it would have been these families that would have been most useful to hear from. However, as the nature of this project was never for the doctors' gain, it was felt insensitive and unnecessary to ask these families to answer a questionnaire at what is undoubtedly an extremely upsetting time for them. We did not contact families after death as we felt this needed to be done by someone who was aware of the bereavement services available for families to access.

Despite telling the relatives the feedback form was for ICU communication some of the comments received implied that the relatives had scored the questionnaires on communication during their relative's entire hospital stay. This was difficult for relatives as they were not offered a forum to feedback opinions on communication outside of ICU. This further highlights the impact of the quality of communication received by relatives and its bearing on their overall experience whilst their loved ones are in hospital. Verbal feedback received at the ICU follow up clinic informed us that many relatives felt let down by the quality of communication once their relative left ICU so overall the results may have been more positive.

After showing the benefit of this system, we hope that it will be potentially be employed again in future, especially if another pandemic were to arise but potentially there is a place for a system like this in the normal ICU setting.

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Appendix 1

Critical Care Communication Bulletin Date

I – Improving P – Progressing S – Stable C – Cause for Concern D – Deteriorating

Patient Name	Progress	Information for Relatives

Improving: Doctors would hope to hope to transfer him/her to a ward over the next few hours.

Progressing: Making progress and requiring less support from the breathing machine.

Stable: Stable for now, but still requiring the breathing machine and high concentrations of oxygen

Cause for concern: Giving the doctors concern as he/she is not making the progress they would have hoped to see, despite full support for his/her condition. All possible treatment is continuing, and he/she is being reviewed by the doctors regularly.

Deteriorating: Requiring increasing support to maintain Resp/CVS; doctors concerned about progress. Eg needs high concentrations of oxygen, his/her circulation is failing, needs strong drugs to maintain his/her blood pressure. All possible treatment is continuing, and he/she is being reviewed by the doctors regularly. If there is any further deterioration, they will contact you directly before the next bulletin.

Appendix 2

Communication Feedback

Your experience of communication during your relative's intensive care stay.

1. Did you receive daily updates from the family communications team? (6th April onwards)
 - Yes
 - No
2. How would you rate the communication that you received while your relative was in intensive care?
 - Very good
 - Good
 - Average
 - Poor
 - Very poor
3. Did the communication you receive help you understand your relative's stay in intensive care better?
 - A great deal
 - Somewhat
 - A little
 - Not at all
4. Did the communication you receive help you cope with you relative's intensive care stay better?
 - A great deal
 - Somewhat
 - A little
 - Not at all
5. Any additional comments?

We greatly appreciate you taking the time to complete this and hope your feedback can help to improve this service.

