

The COVID-19 Remote Inpatient Support Team: Creating a New Service in the Era of Coronavirus

Dr. Bruce Owen, Dr. Jonathan Richardson, Dr. Joe Thorne, Ms. Rachel Bryce
Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust

Abstract

The COVID-19 pandemic was a source of unique challenge for Mental Health Inpatient Services. Along with all other sectors of healthcare and wider society, a significant number of Mental Health inpatients contracted the virus.

It was noted by infection prevention and control teams within the CNTW Trust that inpatient teams' confidence in managing acute COVID-19 infections varied considerably. In January 2021, during the second wave of COVID-19, additional support was proposed via a virtual support team. The proposal was to provide support to staff over the weekend, when MDT support for COVID-19 positive patients would be less readily available.

Within 48 hours of the proposal being put to 'Gold Command', the COVID-19 Remote Inpatient Support Team (CRIST) was operational. It comprised working age and old age consultants, psychiatry Speciality registrars and senior nursing colleagues. We present an evaluation of the CRIST team and lessons learned from its development.

Introduction

People with mental illness suffer from increased co-morbidities compared to the general population, including increased levels of obesity, cardiovascular disease and respiratory disease (Newcomer et al 2007). The rates of smoking are higher in mental health patients (Cook et al 2014). Although, as in the general population, the majority of patients suffered from mild to moderate symptoms only, some specific challenges were present in the inpatient psychiatric population. Specific challenges included:

- Difficulties in concordance with self-isolation amongst certain patient groups
- Predominance of Mental Health nursing staff, who may be less familiar with treatment of physical health problems
- First on call junior medical staff with limited previous experience of psychiatry
- Widespread difficulty of increased staff absences, both medical and nursing due to illness or enforced isolation.

CRIST operated by convening a list of all COVID-19 positive inpatients within the Trust on the day of review. The team would meet virtually via conferencing software each morning on the weekends and divide the positive patients between the team. The team would then call round each ward with positive patients and discuss the patients individually with a member of the ward team. A proforma was devised to guide the discussion. The CRIST clinician would ensure an appropriate management plan was in place, discuss any concerns that the ward team may have and offer clinical advice in terms of physical health or psychiatric management. If the patient was unwell, in terms of either psychiatric or physical symptomology, or in any way was presenting with challenges to care, a separate MDT was convened. This would include the CRIST team, at least one member of the ward team, and where possible the on call junior doctor for the site.

Results

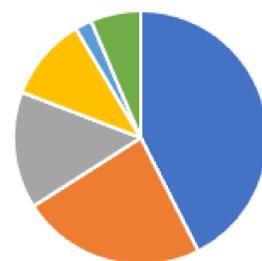
CRIST was initially operational for a period of seven weekends, mirroring the period of peak inpatient infections. Over the time in which CRIST was operational, 61 individual patients were reviewed, with 190 patient discussions (most patients were reviewed more than once).

Of the 61 individual patients reviewed by CRIST, 45 were documented sufficiently to allow retrospective review. This likely reflects differing clinician practice in documentation in the initial weeks of CRIST operationality (see Lessons Learned from CRIST). A service evaluation of the Rio documentation was completed to assess the impact of the CRIST service upon clinical outcomes.

Of the 45 patients reviewed:

- 5 (11%) of patients were referred for an MDT with the CRIST team and ward staff
- In 10 (22%) of cases it recommended that physical review be conducted by the on call SHO; these cases included poor oral intake, shortness of breath and hypotension
- 24 (56%) of patients had their management plans actively changed as a result of CRIST review; these changes included changes to frequency of physical observations, changes to frequency of nursing observations, introduction of food/fluid charts, recommendation of face to face physical review, and in one case recommendation of transfer to the acute physical health hospital
- In 39 (87%) of cases staff were informed about specific relevant local policies and guidance to aid with the management of the patients, this guidance was within the COVID-19 physical health workbook. This live document was developed by CNTW and contains regularly updated policy regarding COVID, as well as pragmatic advice relating to the physical and psychiatric management of COVID-19 positive patients on mental health wards

Outcome of CRIST reviews - management



- No changes to management plan
- Increased physical observations
- Food and fluid chart introduced
- Medical review recommended
- Transfer to acute hospital
- Bloods recommended

Staff Survey

In the weeks following the implementation of CRIST a survey was conducted amongst clinicians who had contributed to the CRIST team, as well as ward staff with whom the CRIST team had spoken. We searched the Rio records of patients whose clinical teams had been contacted by CRIST and contacted the staff members who had spoken to CRIST directly. We sent a link to an anonymous SurveyMonkey survey, which contained a variety of multiple choice and free text responses. We received 13 responses.

- 100% (n = 13) felt that at CRIST had been a useful service.
 - Of the free text responses, all included some iteration of there having been an increased feeling of extra support
- Of those who spoke to the CRIST team, 90% felt that the conversations with CRIST led to increased confidence in the management plan of the patient in question
- In terms of suggested improvements, one member of staff commented that the CRIST reviews could be somewhat time consuming when there were reduced numbers of staff on the wards

A separate SurveyMonkey survey was completed for staff who had taken part as active members of the CRIST team. The members of staff again overwhelmingly felt that the service had been useful and that the conversations they had had with staff, both individually and as part of the MDT, had been instrumental in contributing to patient management plans regarding COVID.

Lessons learned from CRIST

Services can be set up quickly

The pandemic necessitated a fast moving response to challenges faced on the ward. A normal protocol for setting up such a service would involve multiple proposal documents and planning committees. In a fast evolving situation such as COVID-19, where policy may be changing on a daily basis, it was beneficial to act with speed and innovation. As a result, the proposal document was short, focused and highlighted the need to move quickly. Colleagues with the experience and availability to work the first weekend were contacted via email, and a team was put together. The team was operational within 48 hours of its proposal to Gold Command.

Services can evolve quickly according to need

Although an expedited planning phase may lead to initial "teething problems", it allows a service to be flexible and change its working practices according to problems which may arise during its initial stages. Most significant problems are "unknown unknowns" which may not be identified by multiple planning meetings.

An example within the CRIST experience included a lack of consistency regarding documentation in the first week of operation. Introduction of simple tools such as a proforma guide for contact and logistical support for ward staff so they were expecting CRIST contact dealt with these problems swiftly as they arose.

Lessons learned from CRIST (continued)

Input from experienced clinicians out of hours can lead to significant and measurable change to patient management

Over half the patients discussed with CRIST had some aspect of their management plan changed. Changes included changing frequency of physical observations, implementing food/fluid charts in patients with decreased oral intake, implementation of Emergency Healthcare Plans and recommendation for review by the on call medical team.

Although inpatient teams and on call junior doctors have access to supervision out of hours, the availability of a full MDT including clinicians with experience in treating COVID positive patients led to tangible and measurable benefits in terms of patient management.

Simple innovations can have significant benefits on staff feeling supported

In both informal feedback and later formalised feedback via the review tool, "feeling supported" was the most significant recurrent theme. This was the case in both the complex cases which were discussed at MDT, but also the more apparently straightforward cases where contact with CRIST did not necessitate any changes to the existing management plan. The COVID-19 pandemic led to an expectation that staff quickly became proficient in managing the consequences of an illness in which they had no prior knowledge or training. New policies were introduced rapidly, and often quickly superseded by new policies and guidance as the evidence and best practice guidelines emerged. In many cases this has led to a feeling of a lack of support amongst workforce staff in many settings, including mental health. The existence of a team with which to discuss COVID-19 related queries, particularly in an Out Of Hours situation where access to medical staff may be less immediate may lead to staff feeling more secure in management plans and clinical decision making.

Virtual conferencing platforms can be transformative in involvement of senior support in Out of Hours situations

Virtual conferencing platforms such as Microsoft Teams have become widespread across healthcare during the pandemic. They are used extensively for MDTs and are likely to continue to be widespread as we move forward from COVID-19 in the future. They are used extensively within CNTW as a platform for meetings and eliminate the need for travel time and unnecessary face to face contact within the context of COVID. Their use in Out of Hours working is however minimal. Support from second and third on call clinicians is primarily via the telephone. Use of Microsoft Teams in the context of CRIST allowed clinicians to meet remotely from home at the weekend, negating the need for travel time and providing support to junior trainees. This role could be expanded in the future to provide, for example, face to face morning briefings between on call teams on different sites and face to face supervision with junior staff.