

Strategies for Managing Medical Emergencies in Forensic Psychiatry

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Introduction

Who?

According to an inpatient census, published by the Scottish Government in 2019, there were 488 patients receiving Forensic Mental Health Services in Scotland.

Why?

Although small in number, these patients have a dis-proportionately high burden of physical disease in addition to their challenging mental health needs.

It is recognised by the Resuscitation Council (UK) that mental health facilities should be able to respond to medical emergencies with adequate skill and equipment. This is especially important given the distance that many psychiatric facilities are from secondary or tertiary medical facilities. Given the relative rarity with which such events can occur, however, this issue can often be overlooked.

When?

The vulnerability of this patient group to COVID-19, and an outbreak which occurred onsite, however, highlighted the importance of a rapid and effective medical response to critically unwell patients.

Where?

NHS Lanarkshire Community Forensic Mental Health Team and Caird House, Hamilton. Caird House is an adult, mixed-gender, 27 bed low-secure inpatient Psychiatry facility comprising two wards: Iona and Gigha.

How?

We used audit and quality improvement methodology to assess the ability to respond to medical emergencies at a Forensic Psychiatry inpatient and community site in NHS Lanarkshire.

Aims:

1. Establish suitability of current equipment in Forensic Psychiatry in NHS Lanarkshire
2. Assess staff confidence and ability to provide emergency medical care
3. Develop an appropriate strategy to improve provision of equipment, training and patient care for medical emergencies

Methods

- PDSA model for Quality Improvement

Plan

- Develop, implement and audit a co-ordinated response to medical emergencies within Forensic Psychiatry in NHS Lanarkshire

Do

- Established a multidisciplinary Short Life Working Group
- Developed a new Standard Operating Procedure (SOP) for the response to medical emergencies and a checklist for emergency equipment that should be held onsite
- Established a training programme for staff delivered by the Resuscitation Officer for NHS Lanarkshire
- SOP submitted for approval by the local clinical governance group

Study

- Conducted an audit to compare available equipment with the local NHS Lanarkshire Guidelines for Primary Care
 - Criteria included:
 - Suitability
 - Availability
 - Quality
- Survey amongst the staff to gain their views, and establish subjective levels of confidence and preparedness regarding medical emergencies

Act

- Aim to re-audit the equipment and staff responses in 1 year

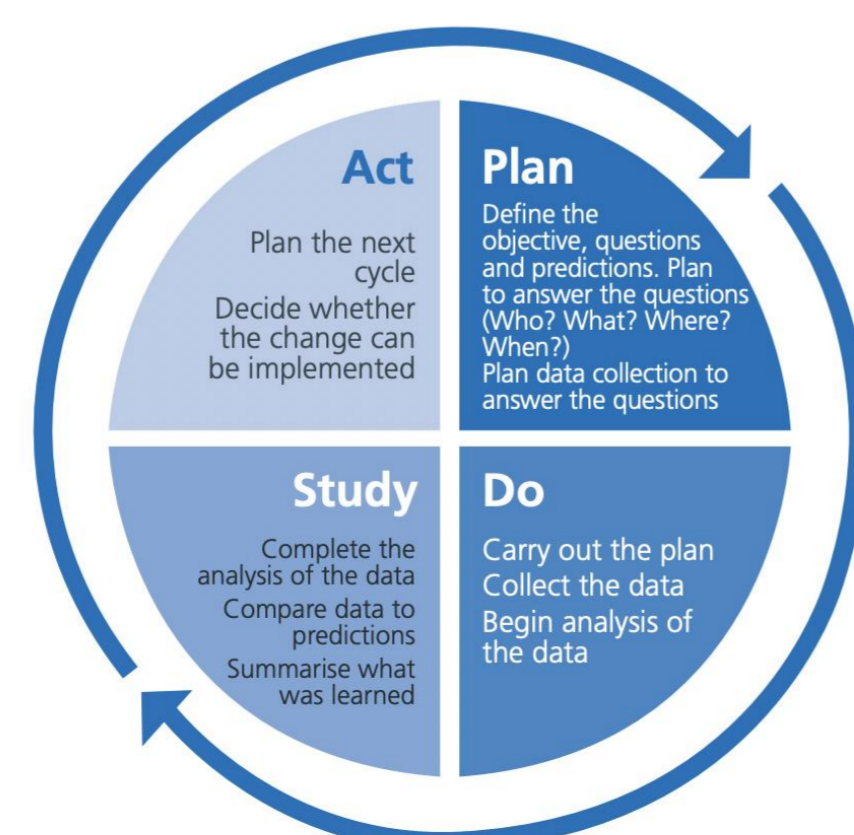
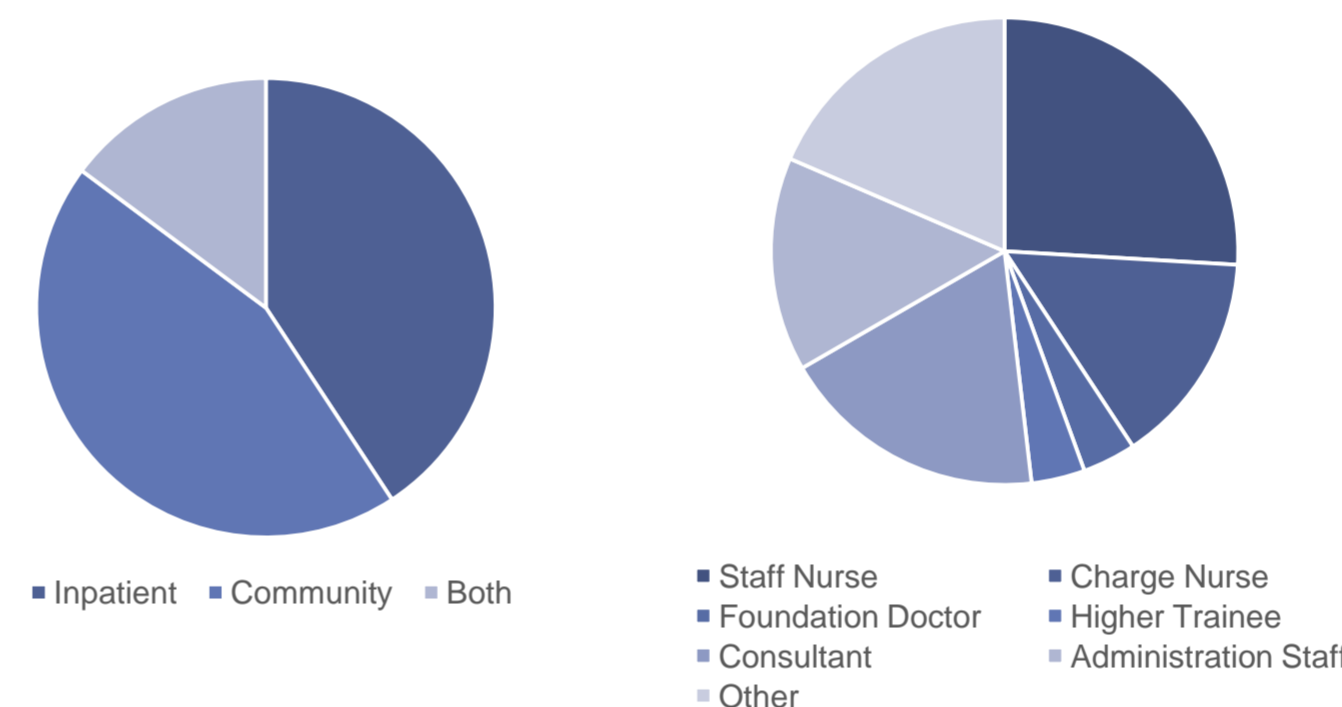


Figure 1. The PDSA (Plan, Do, Study, Act) model for Quality Improvement

Results

- The audit of the equipment demonstrated that the equipment onsite was not in line with NHS Lanarkshire guidance. There were a number of items that were out-of-date, incorrect in formulation, or inappropriate for the clinical area.
- There were 27 responses to the survey of staff. Respondents were evenly distributed across community and inpatient services, and comprised all disciplines within the service.



- Fewer than half of medical and non-medical staff felt comfortable assisting, within their professional competency, in the range of medical emergencies suggested by the Primary Care guidelines.

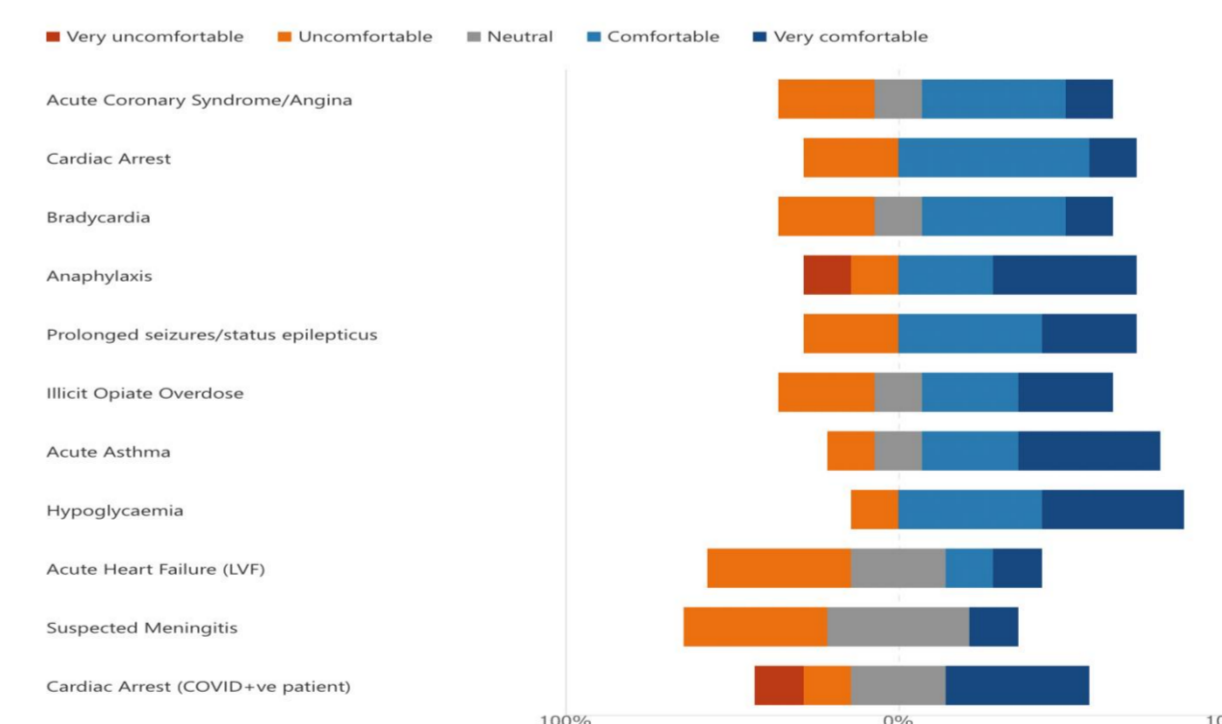


Figure 4: Medical Staff



Figure 5: Non-medical staff

- Confidence in clinical skills such as venepuncture, performing an ECG and administering IV medication or fluids was also low.

- 78% of respondents felt that they would feel comfortable in these scenarios if further training was provided, in particular role-play or simulation.

Outcomes from the SLWG:

1. Standalone community and inpatient Psychiatric units should be able to offer basic emergency medical care above the level of BLS, but only while awaiting an ambulance
2. Bespoke SOP to detail competencies expected of all staff
3. Protocols provided as part of "grab bags" for pre-agreed scenarios
4. Regular training updates should be delivered to all staff
5. Practical skills should only be taught if likely to be used regularly e.g. venepuncture but not venous cannulation
6. Regular audit and review of medical equipment should be undertaken and defibrillators provided in all clinical areas

Conclusion

There is a lack of clear and bespoke protocols for the management of medical emergencies in Forensic Psychiatric Services in Scotland. Further quality improvement work is ongoing in NHS Lanarkshire to improve training, equipment and guidance to this end.

Impact of COVID-19

- Outbreak of COVID-19 at Caird House, Hamilton in December 2020
- Confined to Iona Ward with 12 patients testing positive
- Challenging patient group due to enduring mental illness with possibility of violent behaviour, and concerns regarding adherence to isolation and social distancing
- Possibility of rapid and significant deterioration in clinical condition
- Complex transfer process to hospital (if required)
- Provision of oxygen limited onsite
- Survey of staff and audit of equipment highlighted minimal clinical interventions and investigations could be supported onsite
- Ability to record observations and oxygen saturations as usual
- Plan to monitor closely and maintain onsite (as per community advice) and transfer to hospital if oxygen requirement developed
- No patients required transfer to offsite medical facilities and all fully recovered
- Vaccinations provided onsite following outbreak

References

1. Figure 1. NHS England and NHS Improvement, Plan, Do, Study, Act (PDSA) cycles and the model for improvement [Online]. Accessed 12/10/2021. Available from: <https://www.england.nhs.uk/wp-content/uploads/2021/03/qsir-plan-do-study-act.pdf>.

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