

# Cardiopulmonary Resuscitation discussions in patients with frailty undergoing Surgery

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## INTRODUCTION

A quarter of people who are treated by the in-hospital resuscitation team for a cardiac arrest will survive to point of hospital discharge<sup>1</sup>. It has been demonstrated that frailty is a predictor of worse outcomes in patients receiving CPR for a cardiac arrest<sup>2</sup>. Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) is an advanced medical decision, aimed at preventing harm where CPR is considered futile.

## Aims

To reduce the burden of inappropriate CPR with surgical specialties and to improve the conversations we are having with patient's and their relatives around this

## Methods

Data collection was done one one day in March, June and September 2024 across three surgical wards. Patients were included over the age of 65 and with a Rockwood Clinical frailty score over 5. A retrospective review of whether discussions with patient and/or next of kin was done. Below is the table demographics.

Month	Number of patients	Average CFS	Average age
March	17	5.5	82
June	14	5.5	81
September	12	5.8	83

A survey sent to clinicians of all grades across surgical specialties in March 2024

A review of cardiac arrests in surgical patients over a 6 month period.

There was then a multifaceted teaching intervention to surgical juniors and Geriatric medicine liaison doctors around the importance of DNACPR discussions.

## Survey of surgical Juniors

-30% reported they had or watched seniors having DNACPR discussions once a month.

-The rest (70%) reported they had or watched seniors having DNACPR discussions even less frequently ('hardly ever')

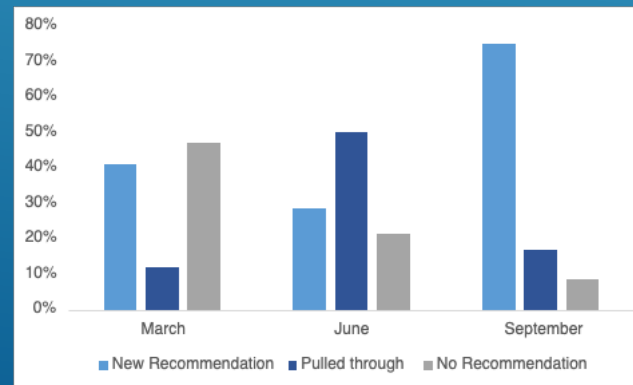
-There was a range in how confident junior doctors felt having these discussions.

**-95% of junior doctors said they would want to have more training on having DNACPR discussion.**

## RESULTS

Following teaching intervention to junior doctors and discussion with geriatric medicine surgical liaison services there was an improvement in the number of patients who had resuscitation decisions (with FOR or DNACPR) on their medical records.

This is reflected in the number of patients having no DNACPR recommendation on the patient notes going from 47% to 8%. There was an increase in the number of recommendations that were automatically "pulled through" from previous admissions. However in September this only accounted for 17% of the recommendations. This shows an improvement in DNACPR discussions and decisions being made for frail surgical patients.



## Cardiac arrest data across surgery

April- September 2023

Data obtained from National Cardiac Arrest Audit – with thanks to Kings College hospital resuscitation team.

Patients included if had a 2222 call put out and were in arrest or cardioverted.

Only Denmark Hill surgical patients >65 years included

Search terms were 'patient- elective/scheduled surgery' and 'patient-emergency/urgent surgery'

During this time period 6 surgical patients identified

**Discussion: patient A would have benefitted from resus discussion (unclear if occurred). Patient D appropriately had DNA-CPR waived during surgery, patient D +F appropriately received CPR for arrest during induction**

## Teaching intervention

We have since gone on to deliver teaching at induction to the surgical juniors as well as PROKARE (geriatric medicine liaison)

We used case based discussions to highlight the importance of these early escalation discussions.

## Summary

Through education and improving awareness around the importance of DNACPR discussions we have seen an improvement in the number of surgical patients who are living with frailty having a recommendation around CPR in their medical notes.

The number of patients we have used is small but we believe that continuing this work in education members of staff but also patients and their families will serve to improve culture around these discussions in surgery.

## References:

- <https://www.resus.org.uk/library/2021-resuscitation-guidelines/epidemiology-cardiac-arrest-guidelines>
- Hamlyn J, Lowry C, Jackson TA, Welch C. Outcomes in adults living with frailty receiving cardiopulmonary resuscitation: A systematic review and meta-analysis.