

# Enhanced Recovery after Elective Caesarean Section- Delayed Discharge from the Post-operative Recovery Unit is Associated with Delayed Discharge from Hospital

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## Introduction

Next-day discharge following elective caesarean section is in keeping with National Institute for Health and Care Excellence (NICE) guidance which states that “women who are recovering well, are afebrile and do not have complications following caesarean section (CS) should be offered early discharge (after 24h) from hospital and follow-up at home, because this is not associated with more infant or maternal readmissions. The Jessop Wing Obstetric Unit is a tertiary referral centre with approximately 7000 deliveries per annum. Following the introduction of enhanced recovery in our obstetric unit<sup>1</sup> in 2012, the percentage of women going home the next day after elective caesarean section increased from less than 5% to 27%. We found that there was a statistically significant positive association between the length of stay on the recovery unit and total time spent in hospital. We reviewed factors that delayed discharge from recovery in an attempt to establish how this related to the day of discharge home.

50% of the patients who had PONV also had associated pain or bleeding and as a sole cause did not appear to prolong discharge from recovery or hospital.

411 (60%) patients who had a syntocinon infusion (n=411) stayed longer in recovery (57.8[34.1])minutes (mean[SD]) and in hospital (3.1 [2.68]) days compared to those who did not (n=269) (47.7[14.7]) minutes in recovery and (2.6[2.09]) days total stay in hospital (p=0.019 for total stay in hospital) probably because the infusion was started to control bleeding, and was an ongoing concern.

No. of patients, %	Time in recovery Mean (SD)	Length of Stay Mean (SD)	p value		Syntocinon	No Syntocinon	P Value (Length of Stay)
No issues (604, 87%)	47.6 (16.59)	2.76 (2.14)		Number of patients	411	269	
Bleeding (55, 7.9%)	107.8 (56.98)	3.9 (4.23)	0.0007	Time in Recovery Mean (SD)	57.8 (34.1)	47.7 (14.7)	0.49
Pain (17, 2.4%)	90.2 (33.4)	4.9 (5.5)	0.0001	Length of Stay Mean (SD)	3.1(2.68)	2.6 (2.09)	0.019
PONV (32, 4.6%)	75.8 (36.8)	3.6 (3.71)	0.035				

## Conclusion

Delayed discharge from the post-operative recovery unit due to bleeding, pain, PONV and syntocinon infusion is associated with delayed discharge home from hospital. Though these issues are not completely preventable, with prompt attention to bleeding, pain and PONV, it may be possible to improve day one discharge rates after elective caesarean section. There may be an opportunity to speed up recovery after elective caesarean section and improve patient outcomes, with associated benefits for staff and healthcare systems.

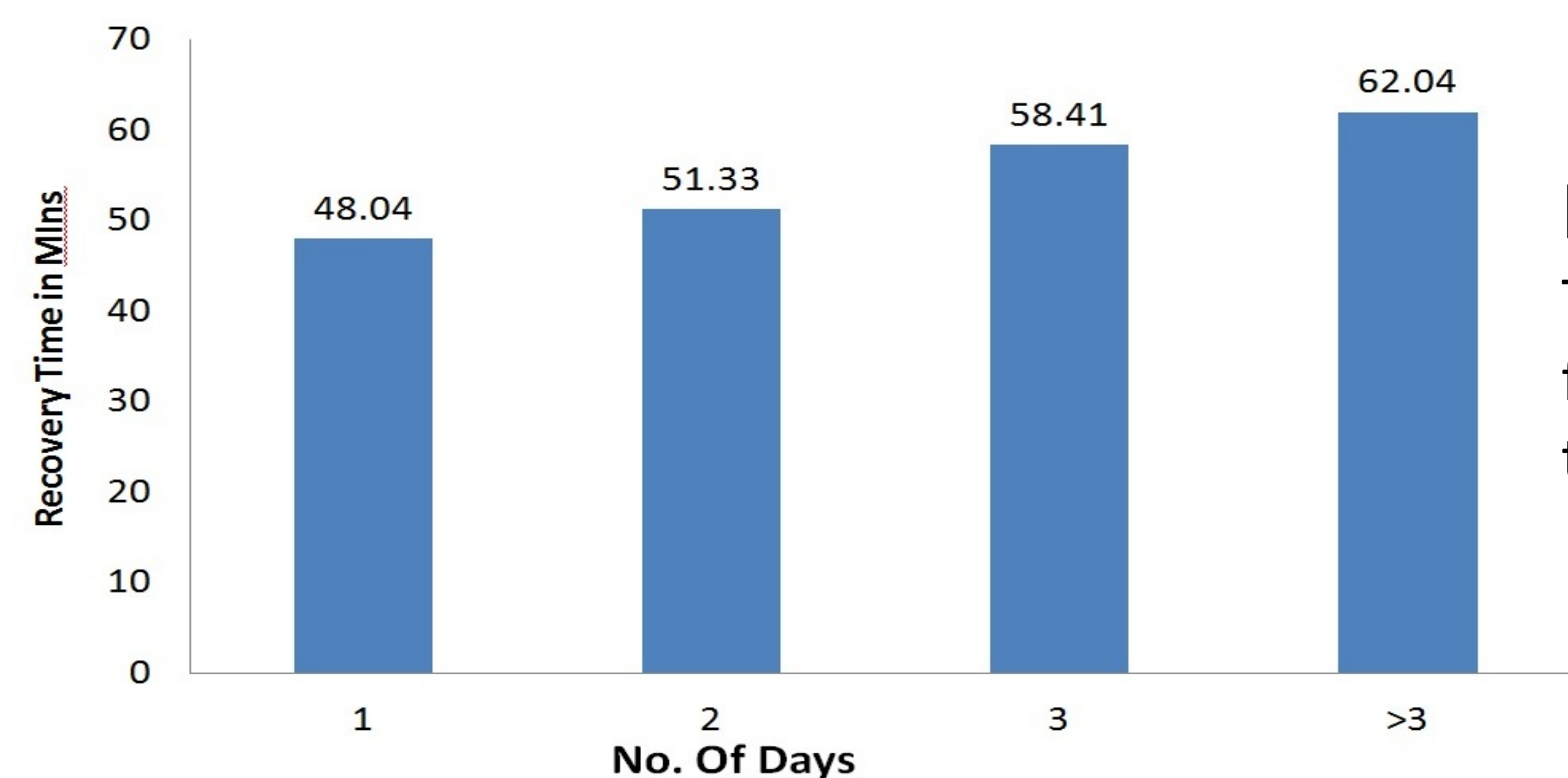
## References

1. Clinical Guideline National Institute for Health and Care Excellence. Clinical guideline 132: caesarean section Nov 2011.
2. Lucas, D.N. and Gough, K.L. Enhanced recovery in obstetrics – a new frontier?. Int J Obstet Anesth. 2013; 22: 92–95



## Methods

After obtaining approval from the trust's clinical effectiveness unit, data was collected retrospectively over a one year period from 708 patients, including patient details, time spent in recovery, immediate post-operative issues delaying discharge from recovery, whether the patient had a syntocinon infusion or not and the day of discharge from hospital. Student's T test was applied to the data for total time spent in hospital for statistical significance.



## Results

The average length of stay in recovery was 48 minutes for patients discharged on day one, vs 60 minutes for those patients discharged on day three or later.

# Summary

- **Enhanced recovery supports the QIPP programme, aiming to improve the quality of care while reducing costs**
- **NICE guidance states that “women who are recovering well should be offered early discharge from hospital”**
- **Our study showed a statistically significant association between the length of stay on PACU and time spent in hospital**
- **The main factors delaying discharge from the recovery unit were Bleeding, Pain, PONV and Syntocinon Infusion**
- **With attention to bleeding, pain and PONV, it may be possible to improve day one discharge rates after elective LSCS**