

THE MISSING LINK:

the role of the cardiac surgical care practitioner in bridging the service training gap

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Background

Difficulties balancing service provision with surgical training have been further compounded by:

- Mandatory publication of surgeon-specific results (April 2002)
- Implementation of the European Working Time Directive (August 2004)

Objective

Surgical Care Practitioners have become widely used in the provision of Cardiac Surgery

UNT1

This study explores our centre's use of surgical care practitioners (SCPs) over the past decade

Slide 3

UNT1

I have changed this paragraph - as the Missing link bit is a conclusion not a starting point.

UHL NHS Trust, 02/03/2011

Hypotheses

1. The use of Surgical Care Practitioners has no effect on cardiac surgical trainees' operative experience.
2. The use of Surgical Care Practitioners has no influence on the short term outcomes following cardiac surgical procedures.

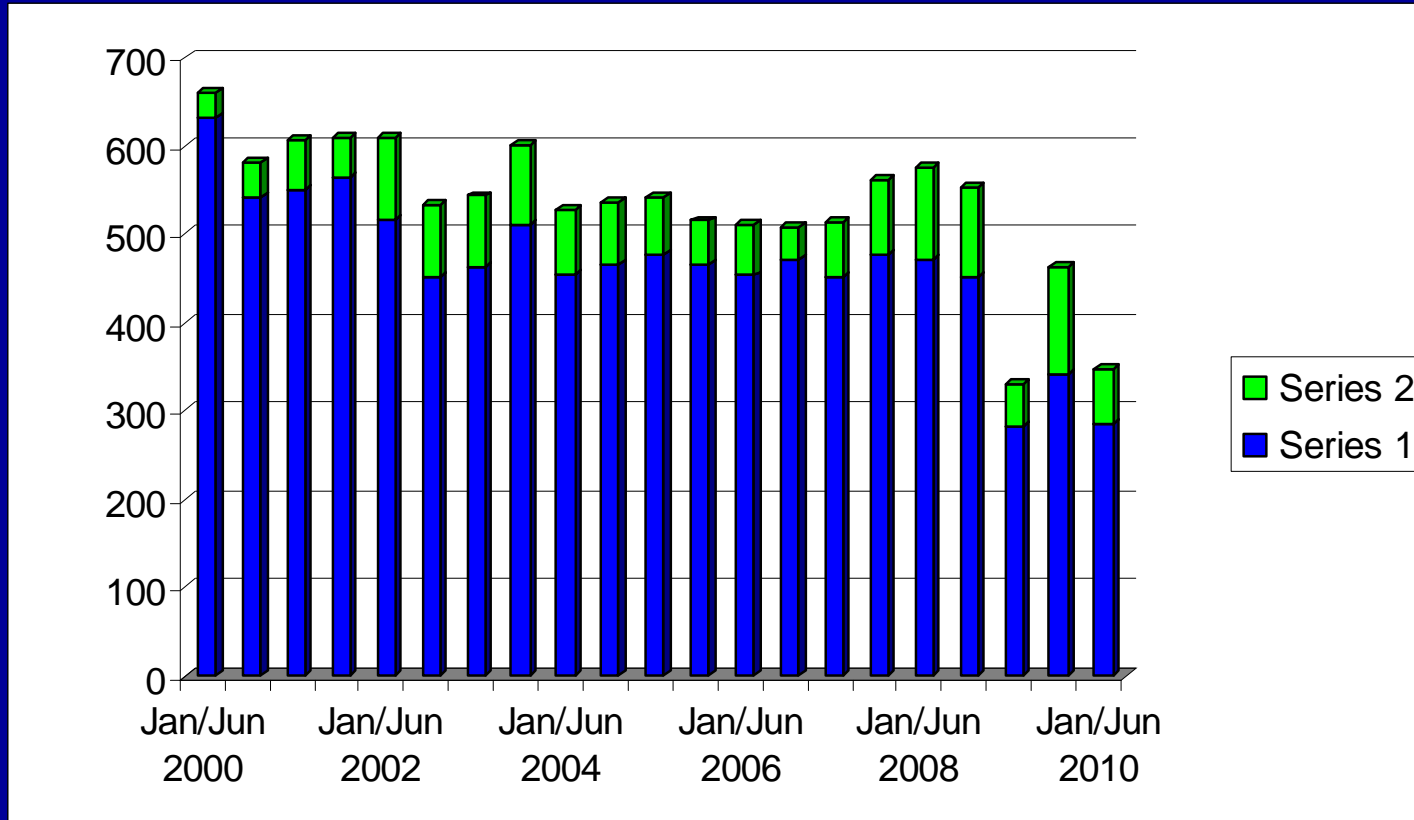
Methods

- Retrospective analysis of prospective data collected between January 2000 January 2010
- 11658 eligible cases divided into 2 groups:
 - Group I (n=10201) performed by a consultant and ST
 - Group II (n=1457) performed by consultant and SCP
- Analysis undertaken by a single observer; p values <0.05 taken as significant.

Results

- In any 6-month period there were more cases per ST (132) than per SCP (20), $p < 0.001$

Distribution of Cases



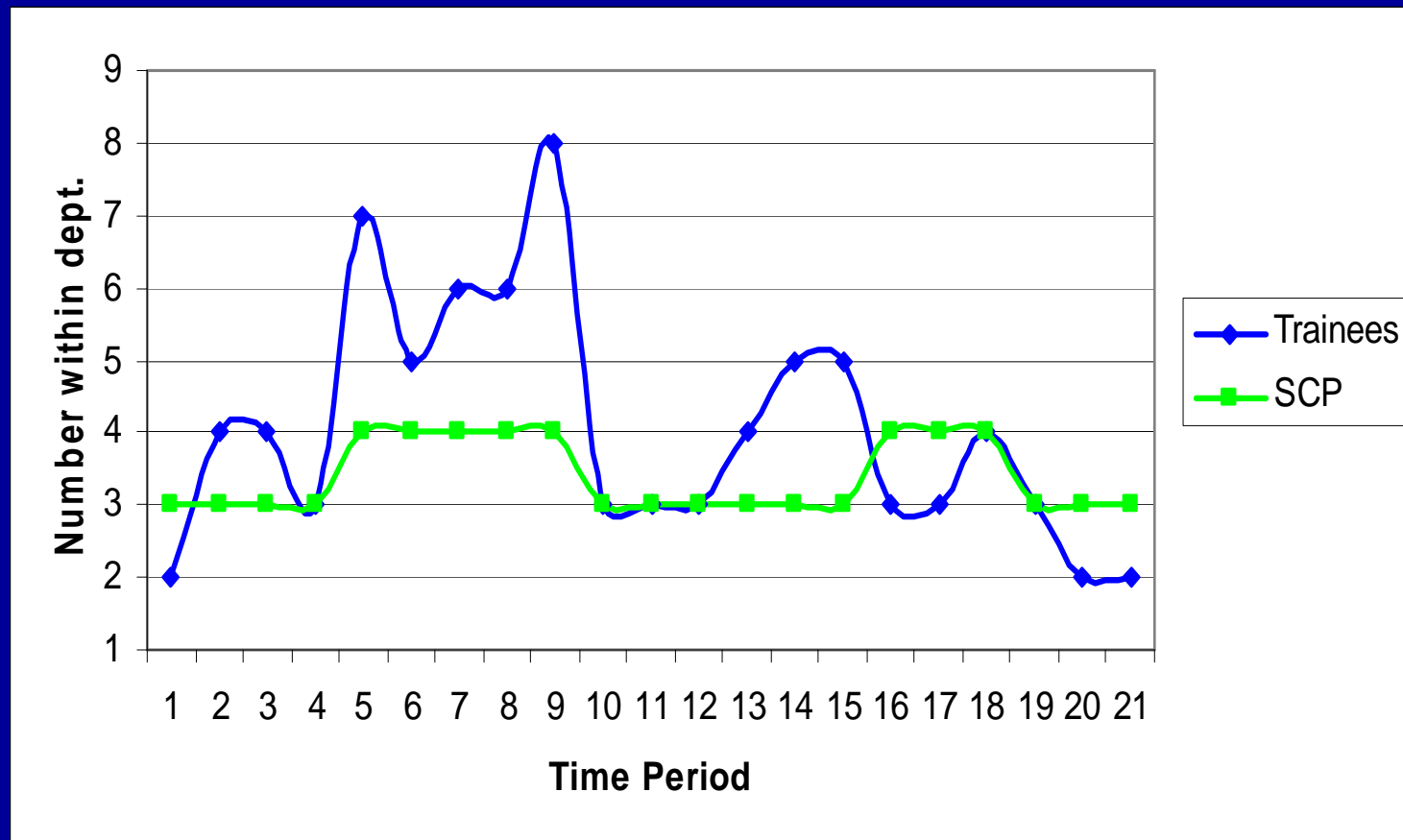
Series 1 - Consultant Surgeon + Surgical Trainee

Series 2 - Consultant Surgeon + Surgical Care Practitioner

Results

- In any 6-month period there were more cases per ST (132) than per SCP (20), $p < 0.001$
- Number of STs declining
- Number of SCPs constant

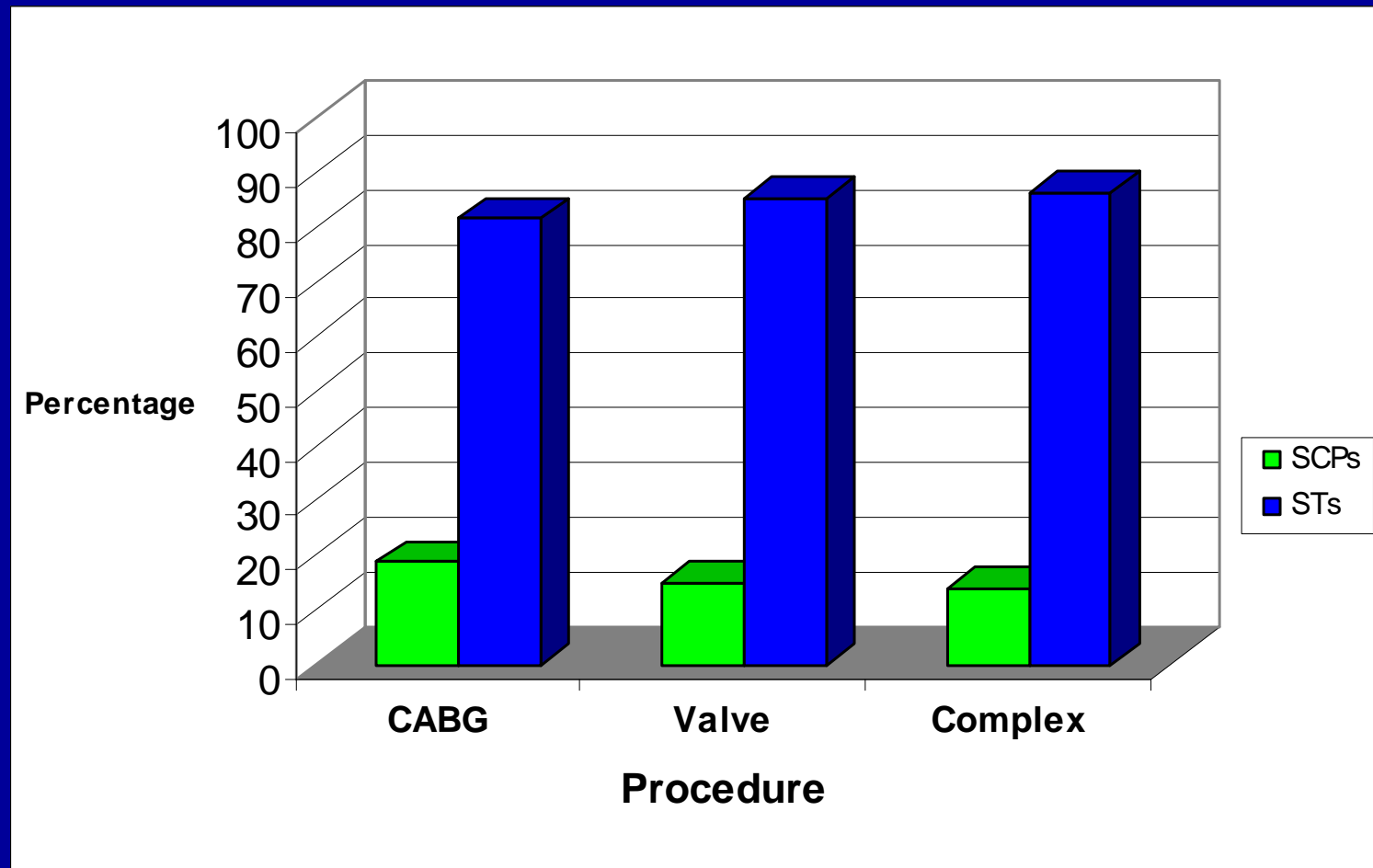
Number of STs and SCPs



Results

- In any 6-month period there were more cases per ST (132) than per SCP (20), $p < 0.001$
- Number of STs declining
- Number of SCPs constant
- STs first assistant activity remains constant
- ST activity increases with increasing case complexity

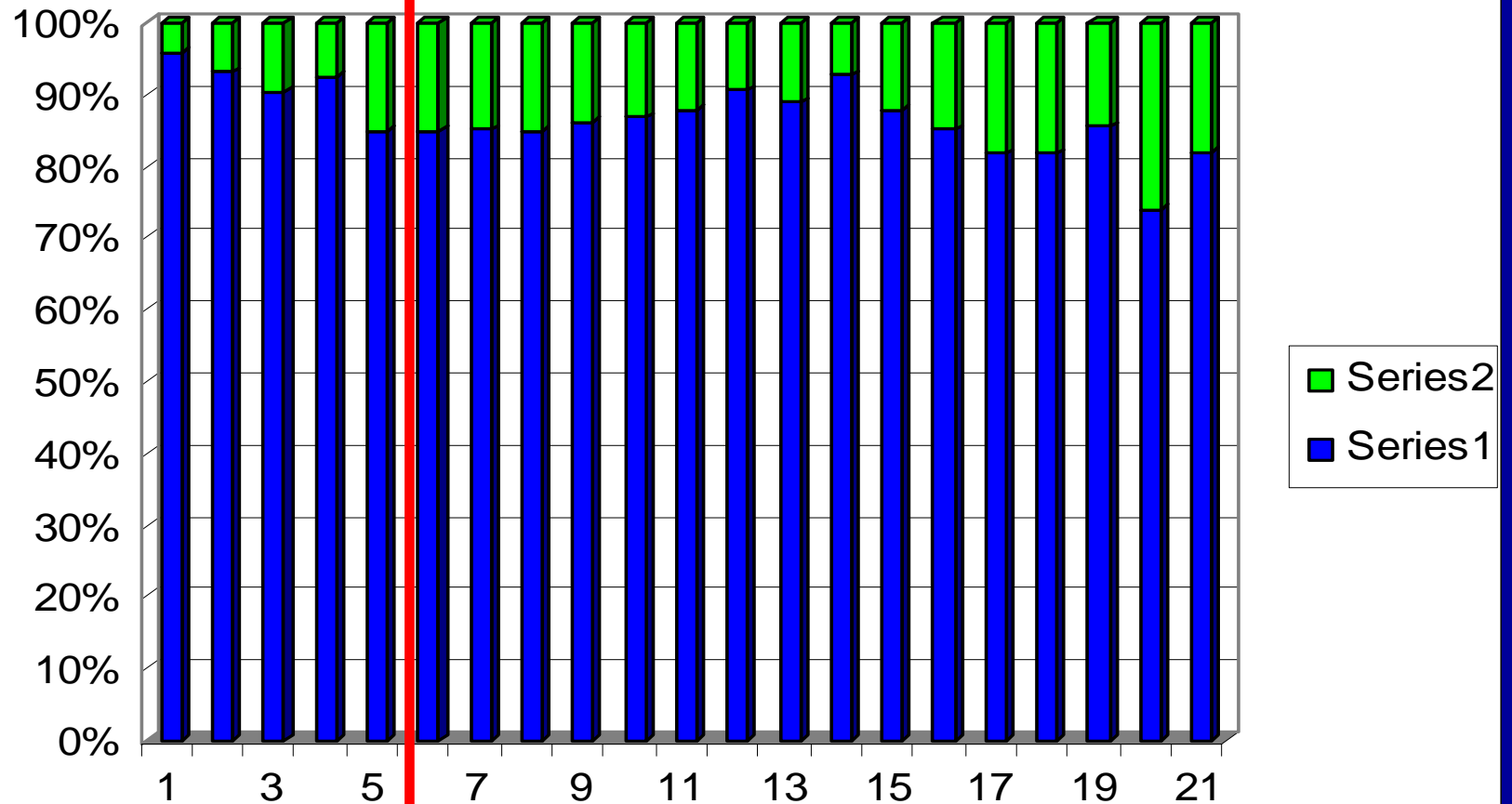
Procedure Type



Results – Surgeon Specific Data

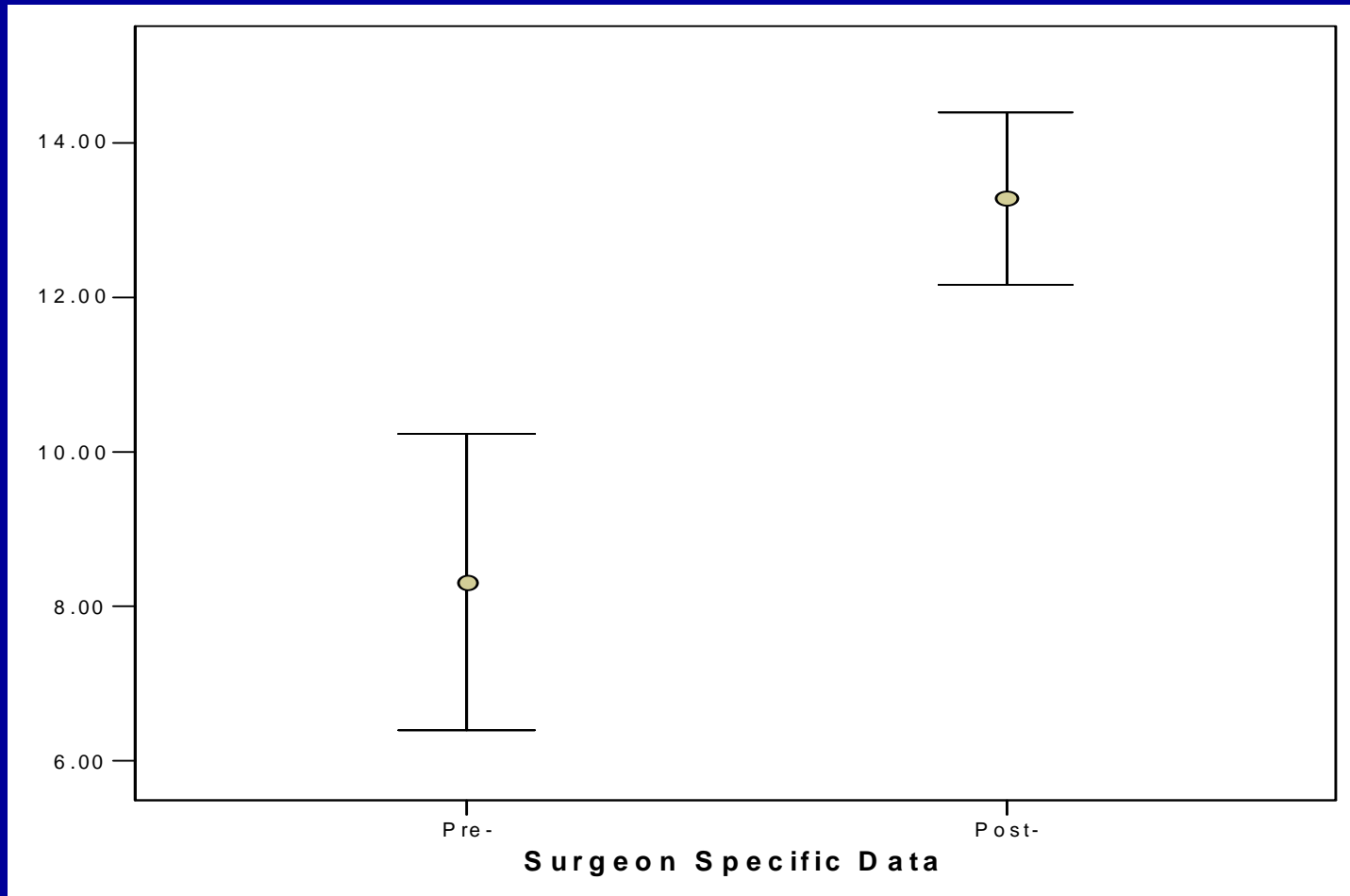
- Group II accounted for 8.3% of cases prior to publication of outcome data and 13.3% ($p=0.033$) following its introduction

Results – Surgeon Specific Data



Controlled for number of trainees, total unit activity, complexity of cases

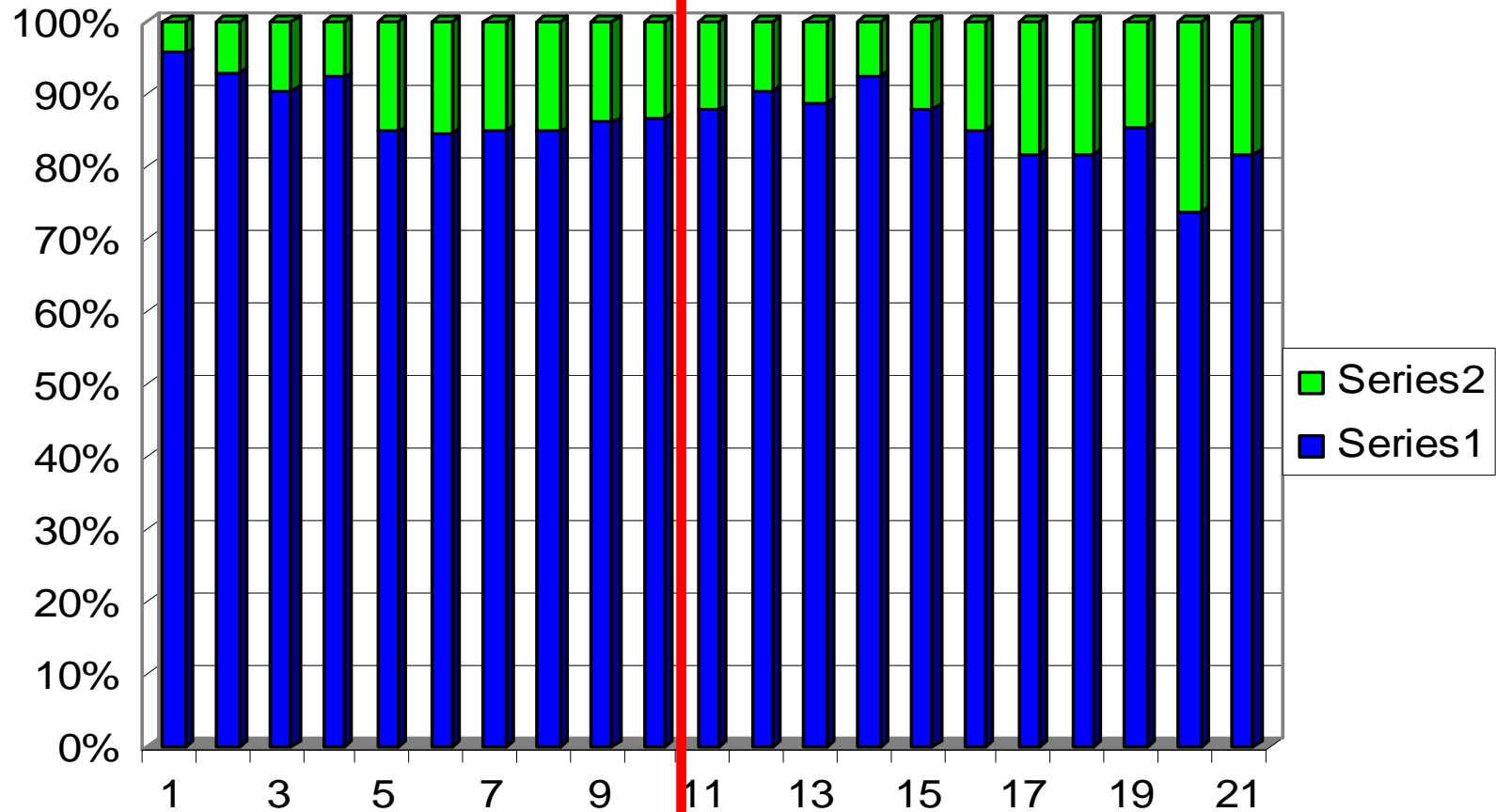
Results – Surgeon Specific Data



Results – EWTD

- Group II accounted for 11.5% of cases prior to and 14.4% ($p < 0.001$) following the implementation of the EWTD

Results – EWTD



Controlled for number of trainees, total unit activity, complexity of cases

Results – EWTD



Results – Outcomes

	<u>Group I</u>	<u>Group II</u>
Mean CBP	94 mins	90 mins*
Mean cross clamp	58 mins	54 mins*
ITU stay	2.3 days	2.2 days
Length of Inpatient stay	11.2 days	11.1 days
ITU readmission rate	3.4%	3.4%
Re-exploration	12.6%	12.2%
Infective Complication	12.7%	12.0%
In-hospital mortality	4.2%	4.0%

Discussion

- Trainees still do significantly more cases as 1st assistant than SCPs
- Trainees assist more frequently with complex cases
- SCP activity has increased following both SSD and EWTD implementation
- ST assisted procedures have longer CPB and XC times
 - This is not associated with poorer short-term outcomes

Conclusion

This study demonstrates use of SCPs to be a safe and effective way to sustain departmental activity within the constraints of modern surgical practice, whilst allowing the maintenance of surgical training.