

Improving Medical Student Confidence in Emergency Medicine & Critical Care Situations

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INTRODUCTION

Foundation Year doctors will be expected to initiate management in emergency situations, sometimes as the only doctor on scene.

The **EMCC (Emergency Medicine and Critical Care)** block takes place Darent Valley Hospital for fourth year Kings College London medical students. This block delivers lectures targeted at common presentations in these areas.

Prior to starting this block, medical students gave an overall confidence score of 54% in management of acutely unwell patients. This QIP aims to improve this score to >80%.

METHODS

Delivery of **five, one-hour teaching sessions**.

This includes sepsis, chest pain, trauma & head injury, blood gas interpretation with acute respiratory failure and haematemesis & melena.

Quantified surveys were taken before and after four sessions. Surveys contained seven questions asking for students' confidence in different areas.

This included focused history taking, examination, differential diagnosis, investigations, initial management, escalation and an overall confidence score.

The students marked each question out of 10 on **how confident they feel in the specific area**. An average is made across the domains. The pre and post surveys were then compared using the two averages.

CONCLUSIONS

- ❖ Running this lecture series increased student confidence in emergency situations.
- ❖ Students lack confidence when it comes to appropriately escalating to the intensive care team. This requires improvement.

Figure 1 – Sepsis Lecture: Pre -> Post Lecture Survey Scores (%)

Average Across Domains: **42.5% -> 78.4%**
Escalation To Critical Care Team: **35% -> 83%**

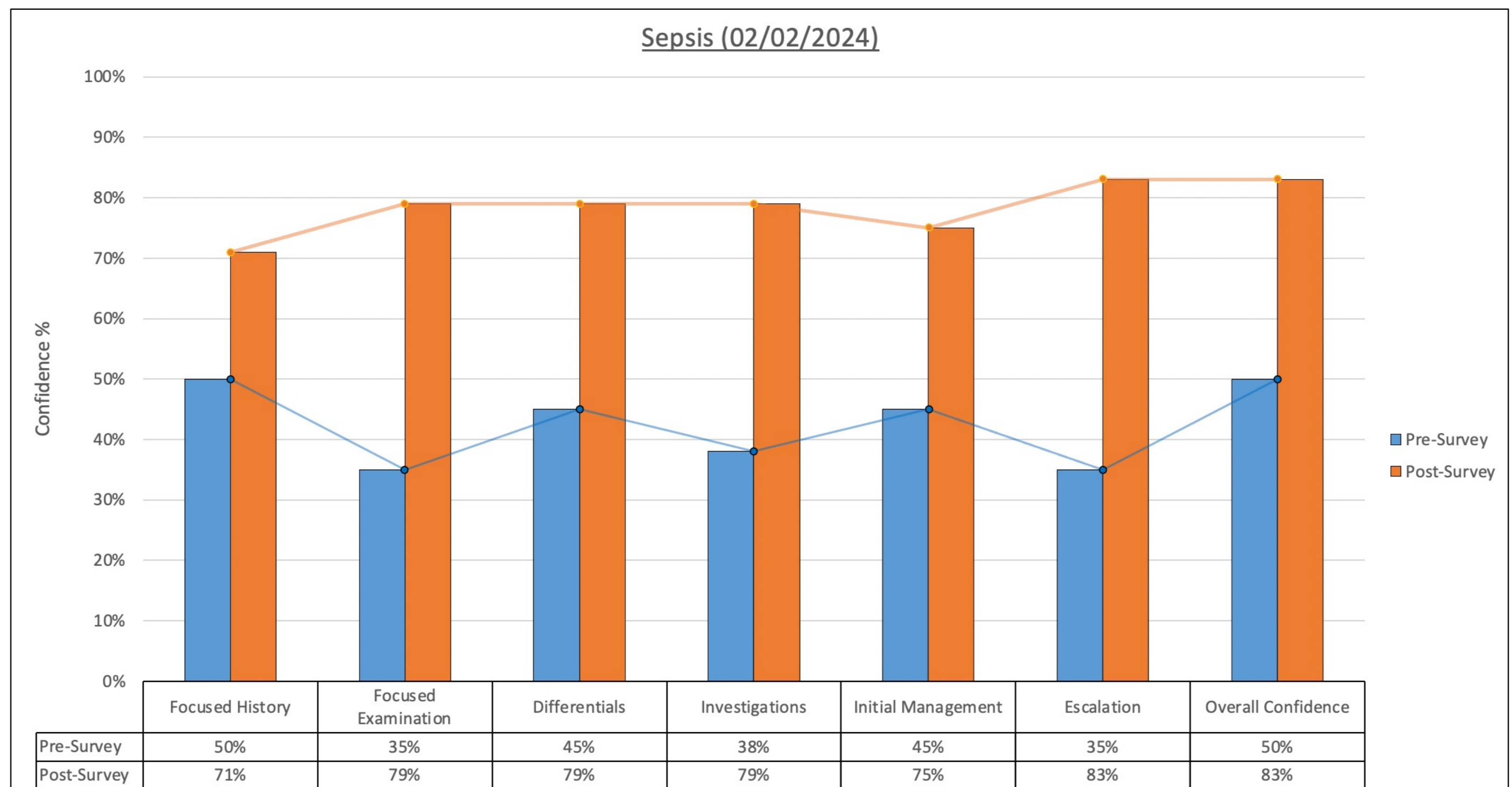
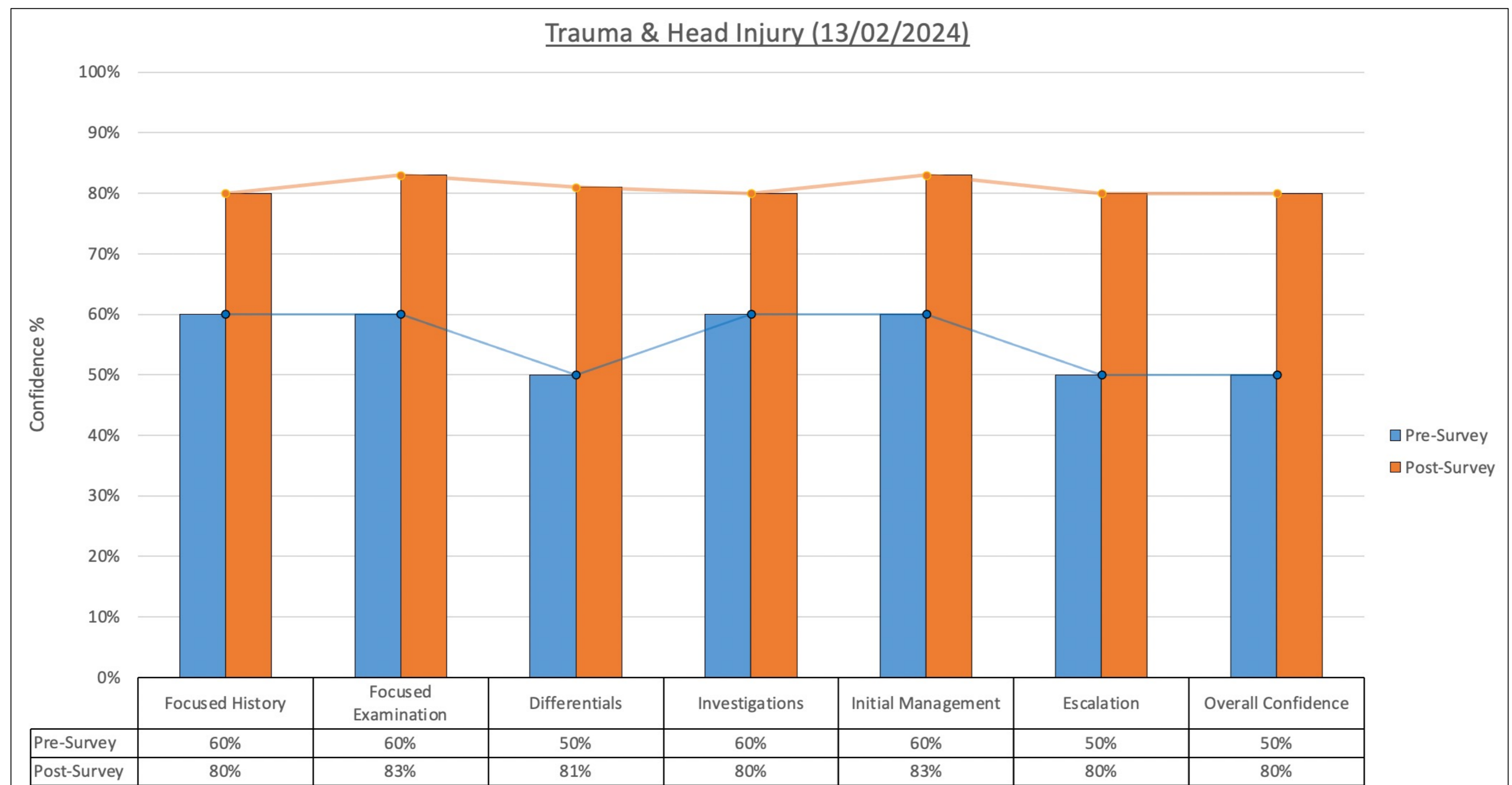


Figure 2 – Trauma & Head Injury Lecture: Pre -> Post Lecture Survey Scores (%)

Average Across Domains: **55.7% -> 81.0%**
Escalation To Critical Care Team: **50% -> 80%**



OUTCOMES

- ❖ A total of 11 different medical students consented to participating in this lecture series and took part in the surveys.
- ❖ Feedback from students showed an **increased confidence across all the domains – 53.35% -> 80.8%** (Pre -> Post lecture average across all four sessions).
- ❖ The average percentage confidence across the four lectures for the **Escalation To Critical Care Team domain** was **48%**, the lowest score in any domain Pre lecture.
- ❖ For the future – students asked for **more simulated work with the lectures**. This will be done in the next block with either simulated on call style sessions or OSCE station practice. This will be expanded to a larger student sample size for the next cycle.

Figure 3 – Upper GI Bleed Lecture: Pre -> Post Lecture Survey Scores (%)

Average Across Domains: **49.1% -> 79.6%**
Escalation To Critical Care Team: **44% -> 77%**

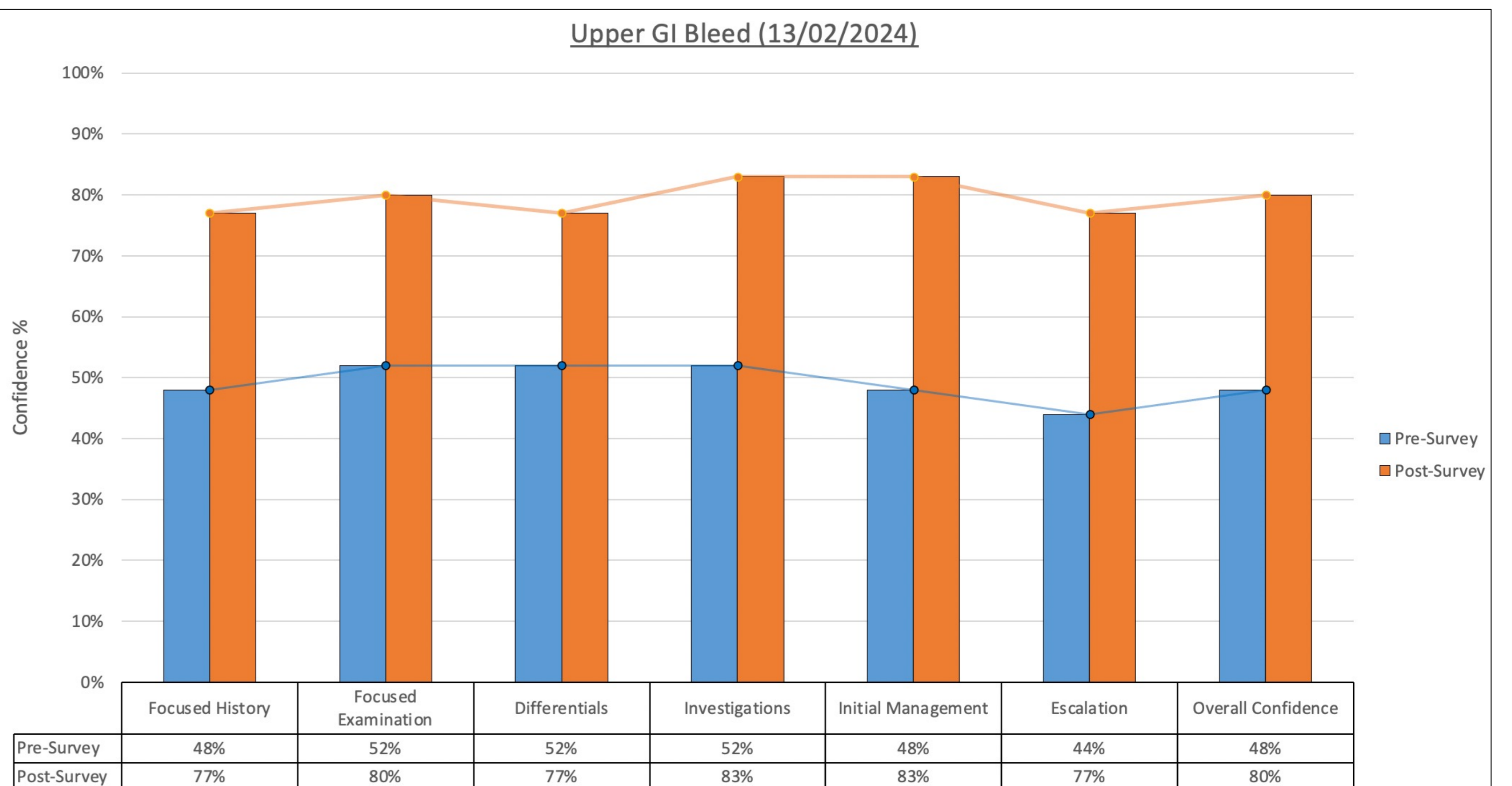


Figure 4 – Chest Pain Lecture: Pre -> Post Lecture Survey Scores (%)

Average Across Domains: **66.1% -> 84.2%**
Escalation To Critical Care Team: **63% -> 90%**

