# **Venepuncture & Cannulation:**

## **Facilitating Competence in 4th year medical students**











Authors. Sarah Noble<sup>1</sup> Nicole Macdonald<sup>1</sup> Maureen Williamson<sup>1</sup> Jen Pollard<sup>2</sup> Clinical Skills Centre, Inverness. <sup>1</sup>Clinical Skills Facilitators, <sup>2</sup>Clinical Teaching Fellow

#### **Description**

There has been a big shift within medical education to encourage students to practise on simulated models prior to real patients. The opportunity for repeated practise in a safe environment can improve students' technical ability and confidence, however there are limitations. Students can become too task focussed and have difficulty transferring the skill to clinical practice, Martin et al (1). Challenges to developing these skills in the clinical setting include an inability to forward plan (as it's often opportunistic); a lack of adequate supervision and little constructive feedback, Spencer (2). Our students report anecdotally that they still lack confidence in their ability at the end of 4th year. Immediate, relevant and succinct feedback on student performance is essential for effective learning, as it reinforces good practice and addresses shortfalls, Rolfe et al (3). Cantillon et al (4) states that creating a lasting learning experience will help to move students from novices to skilled practitioners. To facilitate development of these skills our Clinical Skills Facilitators offered supervised venepuncture and cannulation practice on real patients, with constructive feedback.

#### Methodology

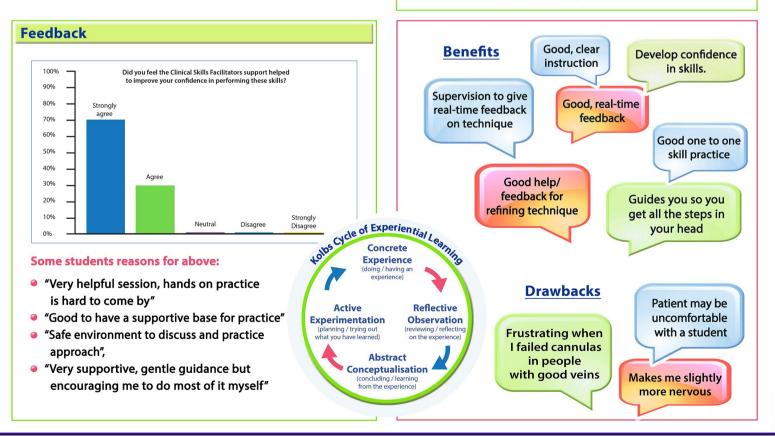
We introduced 1:1 or 1:2 voluntary, supervised venepuncture and/or cannulation practise in clinical settings that offer multiple opportunities to hone their skills. Each session lasted 2-3 hours and were offered to all Year 4 medical students.

### Aims / Objectives

To improve patient care by promoting and facilitating student competence in these clinical skills.

#### **Results / Outcomes**

Feedback was invited by questionnaire and all 20 students reported an increase in confidence on completion of the session. Several opportunities for direct supervision and feedback enabled students to adapt and consolidate their knowledge over the duration of the session. On observation of student performance there was a significant improvement in their ability to perform the skill. Receiving constructive feedback was specifically identified by the students as beneficial and they reported a positive impact on both their confidence and technical ability.



#### Reference

- 1. Irvine, S., Martin, J. Bridging the Gap: from simulation to clinical Practice. The Clinical Teacher. 2014; 11:94-98.
- 2. Spencer, J. ABC of Learning and Teaching in Medicine: Learning and Teaching in the Clinical Environment. BMJ. 2003; 326: 591-594.
- 3. Rolfe, E.l., Swanson-Fisher, RW. Translating Learning Principles into Practice: a new strategy for learning clinical skills. Medical Education. 2002;36:345-352.

4. Cantillon, P., Sargeant, J. Teaching Rounds: Giving Feedback in Clinical Settings. BMJ. 2008;337 (7861):1292-1294.

