

An Innovative Simulation Induction Programme for Foundation Doctors Working in Paediatrics

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Introduction:

A high turnover of Foundation Doctors combined with relatively short posts and limited paediatric experience poses a challenge when preparing foundation doctors for their new role on the paediatric wards. Simulation teaching is becoming increasingly popular as it has the advantage of providing trainees with the opportunity to develop skills and knowledge in a controlled environment without increased risk to patients¹.

A novel simulation programme for Foundation Doctors was introduced at The Royal Hospital for Sick Children, Edinburgh in August 2013. The aims of the programme were to increase the new doctors' preparedness and confidence with managing common clinical scenarios and to introduce the hospital's clinical policies and guidelines, including escalation, during a clinical simulation. The programme was also designed to enhance the doctors team-working skills. Improved team-working leads to improved patient safety - simulation can be used to practice and enhance these essential team-working skills².

Background:

Foundation Doctors attended two simulation sessions soon after starting their new post in paediatrics. Each session lasted 2 hours, including 2 scenarios. The Foundation Doctors worked in teams of three during each simulated clinical scenario, with the rest of the group observing. During the simulation the doctors could access local guidelines and resources. After the simulation the group would discuss the scenario giving feedback to the participants. Structured teaching would then be given on the topic, with an emphasis on how to access the relevant guidelines and how to escalate for help.

The simulated clinical scenarios included:

- Bronchiolitis
- Asthma
- Sepsis
- Obstructed airway post tonsillectomy
- Post-operative care of corrective spinal surgery patients

The scenarios are Foundation curriculum matched but also responsive to local clinical priorities including changes in clinical pathways and patient safety concerns.

Methods:

Feedback was gained from the doctors in the form of a short questionnaire at the end of each session. This included questions where a rating of either poor, fair, good or excellent could be given. Below are examples of the questions:

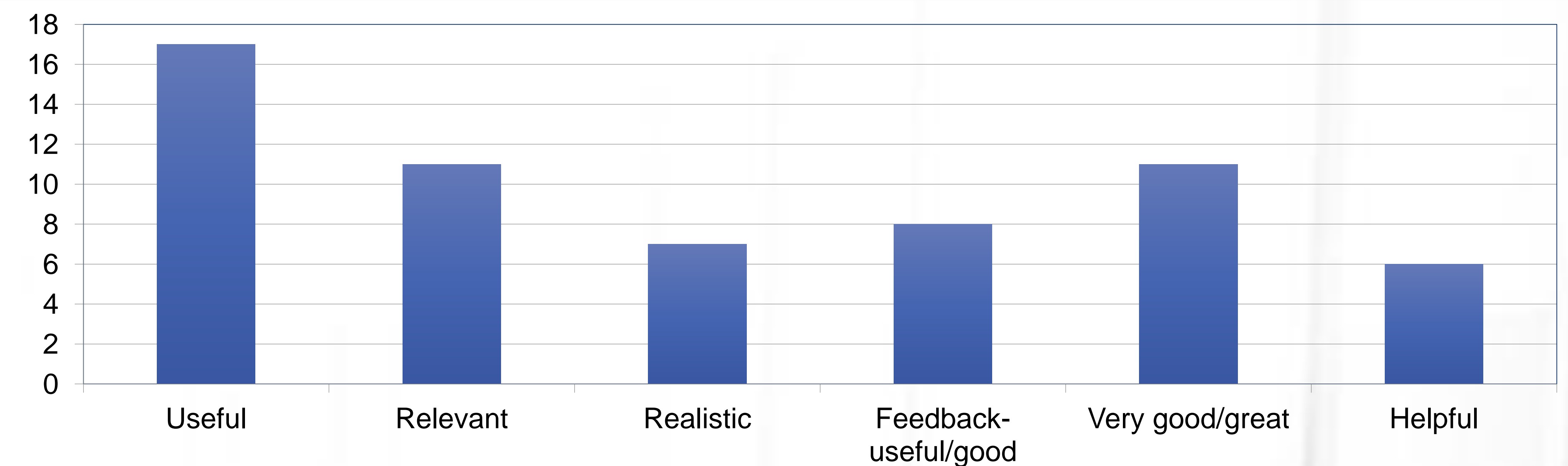
- Did the session address core competencies?
- Was the presentation pitched at the right level?

Doctors were also able to give qualitative feedback under the headings "strengths", "suggestions" and "comments". In October 2014 the first 14 months of feedback was analysed. The total number of each rating in response to questions was added up, along with analysis of the free-text comments.

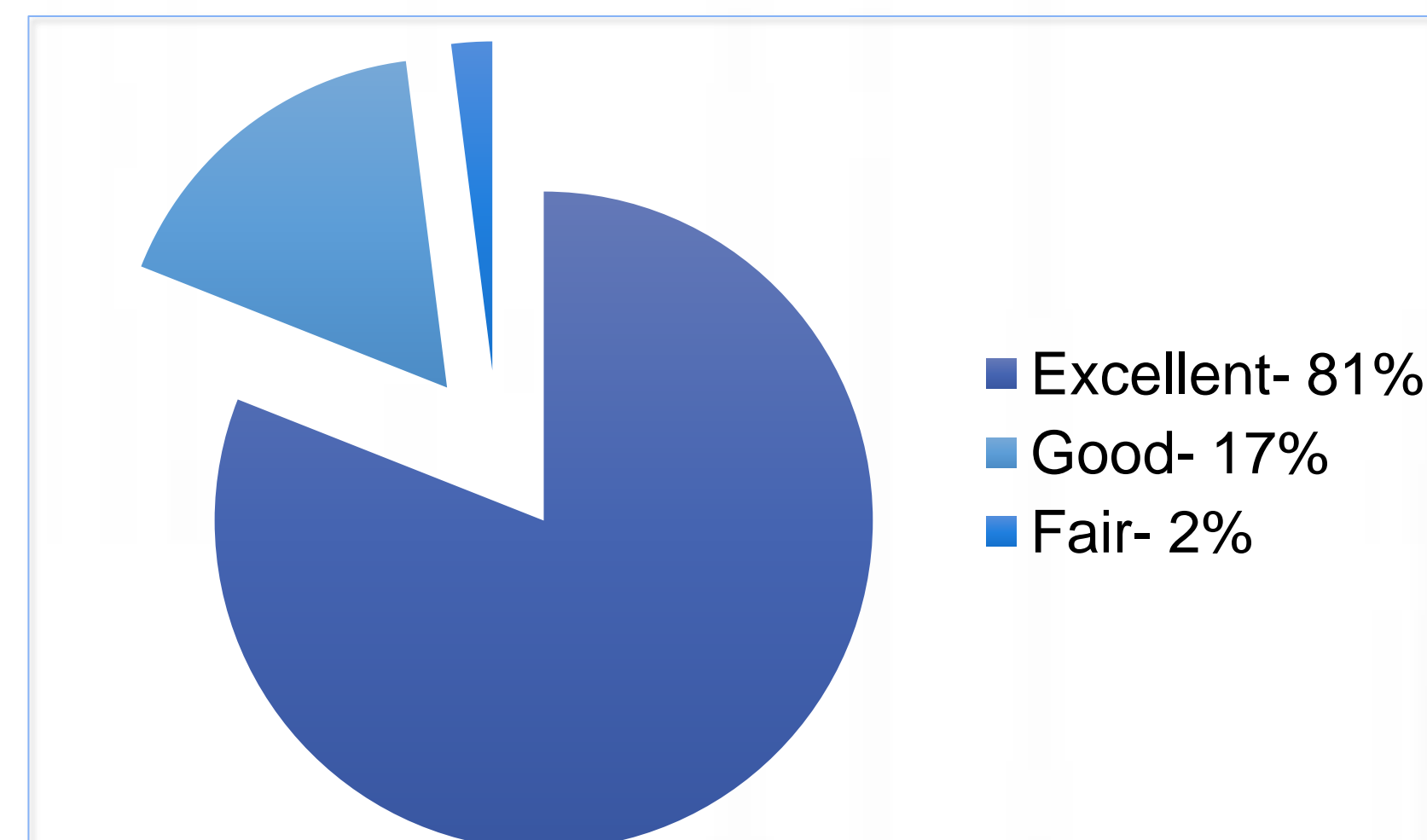
Results:

The feedback was very encouraging, with 81% of all responses to questions being "excellent" and no "poor" responses at all. The most commonly used word in free text feedback was "useful". Suggestions for improvement were most commonly surrounding the theme of more time during sessions or more sessions overall.

The Most Commonly Used Words in Free-Text Feedback



The Total Percentage of Each Rating on Feedback Forms



Suggestions for Improvement

- More cases/scenarios
- More sessions
- More time
- A shorter debrief to allow more time in the scenario
- Shorter scenarios to allow for more scenarios overall

Discussion:

This innovative simulation programme not only meets the educational needs for foundation doctors but also is a platform to introduce important induction materials and local guidelines/protocols in a realistic setting. An emphasis on escalation policies reflects the support that junior doctors need in a paediatric clinical setting. The feedback has been extremely positive and suggested improvements included increasing the number of simulation sessions. We aim to keep the scenarios matched to local clinical priorities, safety concerns and responsive to feedback from the juniors about cases that they wish to simulate. In response to the request for additional scenarios we have piloted the use of rapid 'pause and play' simulated clinical scenarios to cover more material in an efficient way, at the same time ensuring a realistic learning experience.

References:

- 1 Fehr J, Honkanen A, Murray D et al. *Simulation in pediatric anesthesiology*. Pediatric Anaesthesia 2012;22(10):pp988-994
- 2 Stone K, Reid J, Caglar D et al. *Increasing pediatric resident simulated resuscitation performance: A standardized simulation-based curriculum*. Resuscitation 2014;85(8):pp1099-1105