

Traverse the Barriers in Paediatric Emergency Care: A Model to Support Rural GP

Michael Zhang¹, Mark Lee¹, Mike Anscombe¹, Rhonda Winskill², Helen Stevens³, Sandra Babekuhl⁴, Natalie Sharkey⁵

1. Paediatrician/Emergency Physician, John Hunter Hospital; 2. Paediatric Rural Outreach Clinical Nurse Consultant, HNE Health/Northern Child Health Network; 3. Paediatric Clinical Nurse Consultant, Armidale; 4. Paediatric Clinical Nurse Consultant, NCHN / MNCLHD; 5. Medical Education Officer, John Hunter Hospital

Introduction

The General Practitioners (GP) are an important group of health professionals looking after sick patients, including sick children. As with practitioners from other medical specialities, GP are required to participate Continuing Professional Development program to ensure the provision of high standard of clinical service. Although online training and teleconference can help to deliver useful educational material to them, hands-on workshops with face-to-face feedback are essential to establish and consolidate the clinical skills required in their clinical practice. Travel expenses, course fees, and clinic closure are the main obstacles to the GPs to attend the workshops held somewhere distant from their clinics.

The Hunter New England Local Health District is a widespread, diverse area with a mix of primary, secondary and tertiary care settings. Attending courses, conferences or seminars run in major centres has a significant time and financial impact on the rural GP who may need to close rooms and travel long distances.

Networking is also important in health care settings. The Paediatric emergency physicians in tertiary health institutes may take calls for advice or about transfers for sick and injured children from the rural GPs. Having met them before and being able to put a "face to the name" is invaluable for both parties.

We seek to develop a cost effective model to support clinical education of rural GPs at a location and time suitable to the attending General Practice workforce and to establish ongoing synergy between rural and regional health centres within our health District, thus helping to build local capability, improve patient outcomes, minimise risks and connect regional and rural sites.

Aim

To develop a new effective model to provide the rural and remote area health professionals with the opportunity to update and refresh clinical skills in Paediatric Emergency Care in their own community setting.

Method

A team of seven specialised clinicians from our health district contributes to the GP Outreach Support (GPOS) project. The medical members of the team are paediatric emergency physicians who have dual fellowships in Paediatrics and Emergency Medicine and are APLS or ELS instructors with a passion for education. The Paediatric rural outreach CNCs are also very experienced educators with an excellent knowledge of their local health districts and the needs of their rural GPs. The Medical Education Support Officer has a vital role in organising and coordinating the teaching program.

A program deemed to suit the requirements of majority of attending clinical staff was developed. The team members took turns, 3 to 4 each time, to travel to targeted rural centres to deliver the education sessions held on site at a location and time suitable to the attending General Practice workforce. Other relevant community clinical staff were also invited to attend.

The didactic lectures included topics essential to clinical practice by addressing the crucial need of recognizing sick children in Paediatric emergency care. During clinical cases-based presentations, we discussed the diagnostic and management aspects of important de-identified case scenarios, and promoted novel clinical practice guideline such as Paediatric Sepsis Kills Program and Paediatric Sedation guideline.

The interactive workshops focussing on Paediatric Airway and Breathing management and Circulation support allowed the attendants to have hands-on practice on these potentially life-saving clinical skills. The interactive nature of this program also provided a platform for everybody to share their knowledge and experience and to discuss practical issues unique to their local clinical practices.

The module also included the rollout of NSW and district clinical pathways, policies, procedures and guidelines through promotional handouts given as website links.

Results

Since its implementation in October 2012, the GP Outreach Support Project has provided access to on site education and training to 17 rural communities and delivered the Paediatric Emergency Care training model to over 215 doctors (most of the attendees) and nurses.

To date these include:

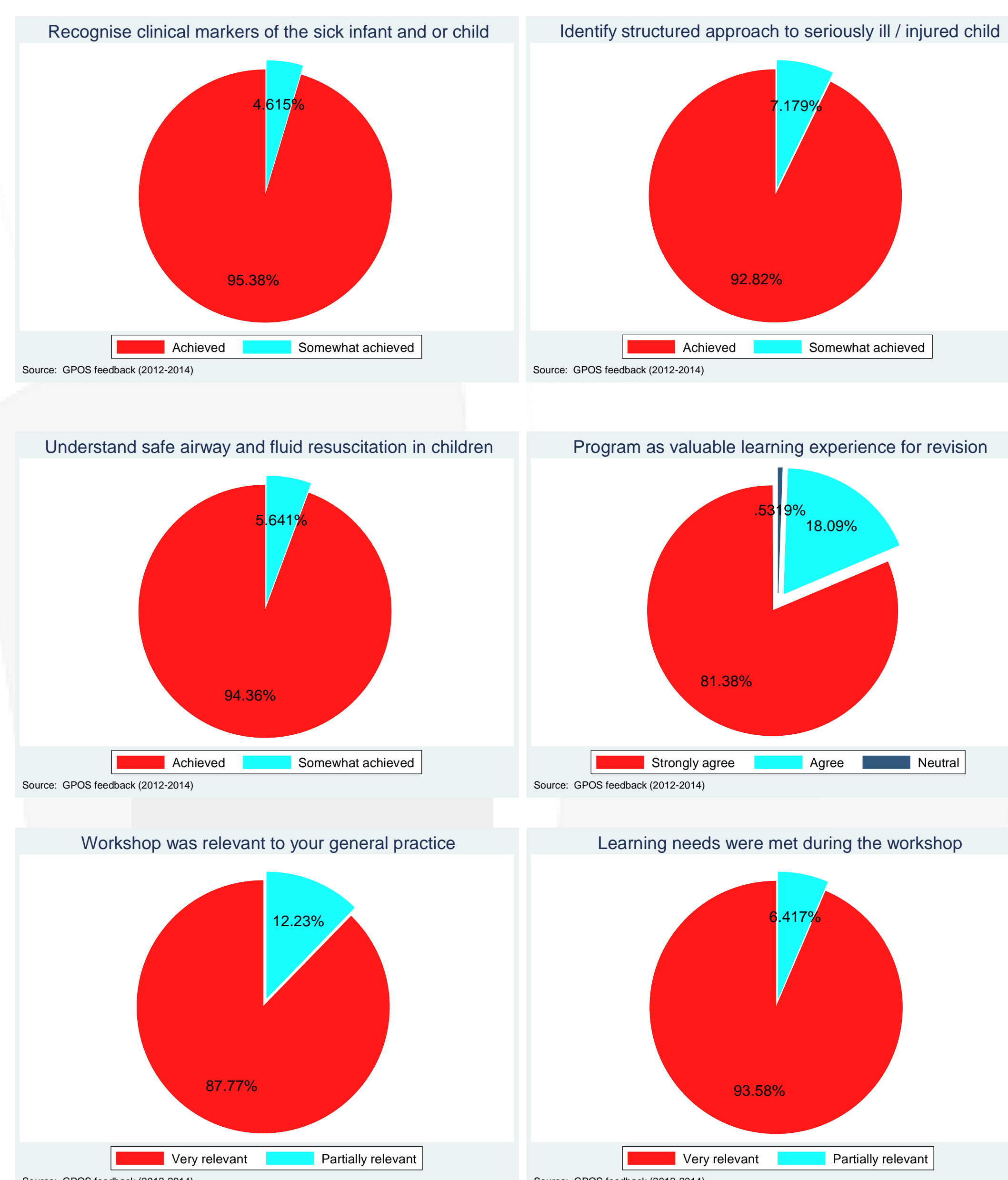
- 2012 – Bellingen, Kempsey, Cessnock, Singleton
- 2013 – Tomaree, Muswellbrook, Scone, Forster, Taree, Inverell, Armidale,
- 2014 – Singleton, Cessnock, Moree, Narrabri, Gunnedah, Tomaree

There was minimal cost and disruption to the GPs and other participants as the education sessions were delivered at the location and times suitable to them.

These attending GP were awarded Category II points as part of Continuing Professional Development through Royal Australian College of General Practitioners and Australian College of Rural and Remote Medicine.

Formal feedback from the attendees after each session was very positive. Seventy eight per cent of the attendees were very satisfied (78.07%, C.I: 71.51%, 83.47%) and 23% (C.I: 16.52%, 28.48%) of them were satisfied with the workshops. The objective of recognizing sick child was achieved in most attendees (95.18%, C.I: 90.96%, 97.49%). The majority of them (81.28%, C.I: 74.98%, 86.29%) strongly agreed that this Program was a valuable learning experience for revision. Some changes in content and format were made on the basis of constructive feedback received.

The overall results combining all the project sites are represented by the graphs below:



“Enjoyable training, workshops, skill stations and presentations, excellent. The whole evening very appropriate to our Rural ED area. Thank you”
“As an RN, it was wonderful to be part of the program. It was great to have such knowledgeable presenters and I really enjoyed working with the MO’s in a non-formal setting. Thank for making the effort to come all this way”.
“Great opportunity to practice emergency skills for paediatrics – so useful in smaller facilities as all staff need these skills”.
“Sepsis pathway explanation was excellent. Practical workshops very valuable. Thanks for coming to Singleton”



Conclusion

The GP Outreach project uniquely provides the rural health professional with the opportunity to update and refresh clinical skills in their own community setting. Having the educators to come to the rural and remote areas to deliver the education sessions to the attendees is cost effective to the rural community.

The project content and format based on current issues, feedback and evaluation was adapted to specifically meet the learning requirements of health professionals in various rural locations. The participant learning outcomes were optimized by a collaborative team model from many perspectives combining didactic lectures, case-based discussions and hands-on workshops pertinent to Paediatric Emergency Care.

The attending clinicians' knowledge, skill, confidence and performance in Paediatric Emergency Care were expected to improve as result of this. It's also believed that this cost effective onsite education model helps to build local capability, improve patient outcomes, minimise risks and connect regional and rural sites.

This has been designed to function as a standalone model which is fully established and transportable, and can be adapted to provide local solutions for varying sites, district and state wide, to meet the specific learning needs of rural health clinicians treating children in the Emergency Department.

Acknowledgements

This project is funded by the Department of Health and is overseen by the Australasian College for Emergency Medicine through EMET (Emergency Medicine Education and Training).

We thank John Hunter Hospital Emergency Department for providing additional clerical and managerial support to this valuable project.



Health
Hunter New England
Local Health District