

Evaluating the impact of national education in paediatric palliative care: Quality of Care Australia (QuoCCA).

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Background

QuoCCA provided paediatric palliative care (PPC) education and mentoring across Australia through a collaboration of six tertiary PPC services, funded for 5 Nurse Educators, a National Allied Health Educator, and 3 Medical Fellow positions, supported through National Project staff in Children's Health Queensland.

Methods

Evaluation was conducted through:

- Pre and post education surveys including a 5 point Likert scale related to level of confidence and knowledge.
- Measures across 9 domains related to the care of the child and family:
 - Managing a new referral
 - Symptom management – pain, nausea, dyspnoea, seizures, fear/anxiety
 - Giving medication, including subcutaneous
 - Preparing the family
 - Using local agencies and resources
- These measures were related to 8 independent variables:
 - Education - Education type, length of education session, state, remoteness, financial year
 - Participant - Previous experience caring for a child with a life limiting condition, previous education in PPC, occupation.

- Statistics were performed on the survey results, including:
 - Wilcoxon signed ranks test on the scores pre and post education
 - Binomial logistic regression to determine the factors that predict improvement following education



Results

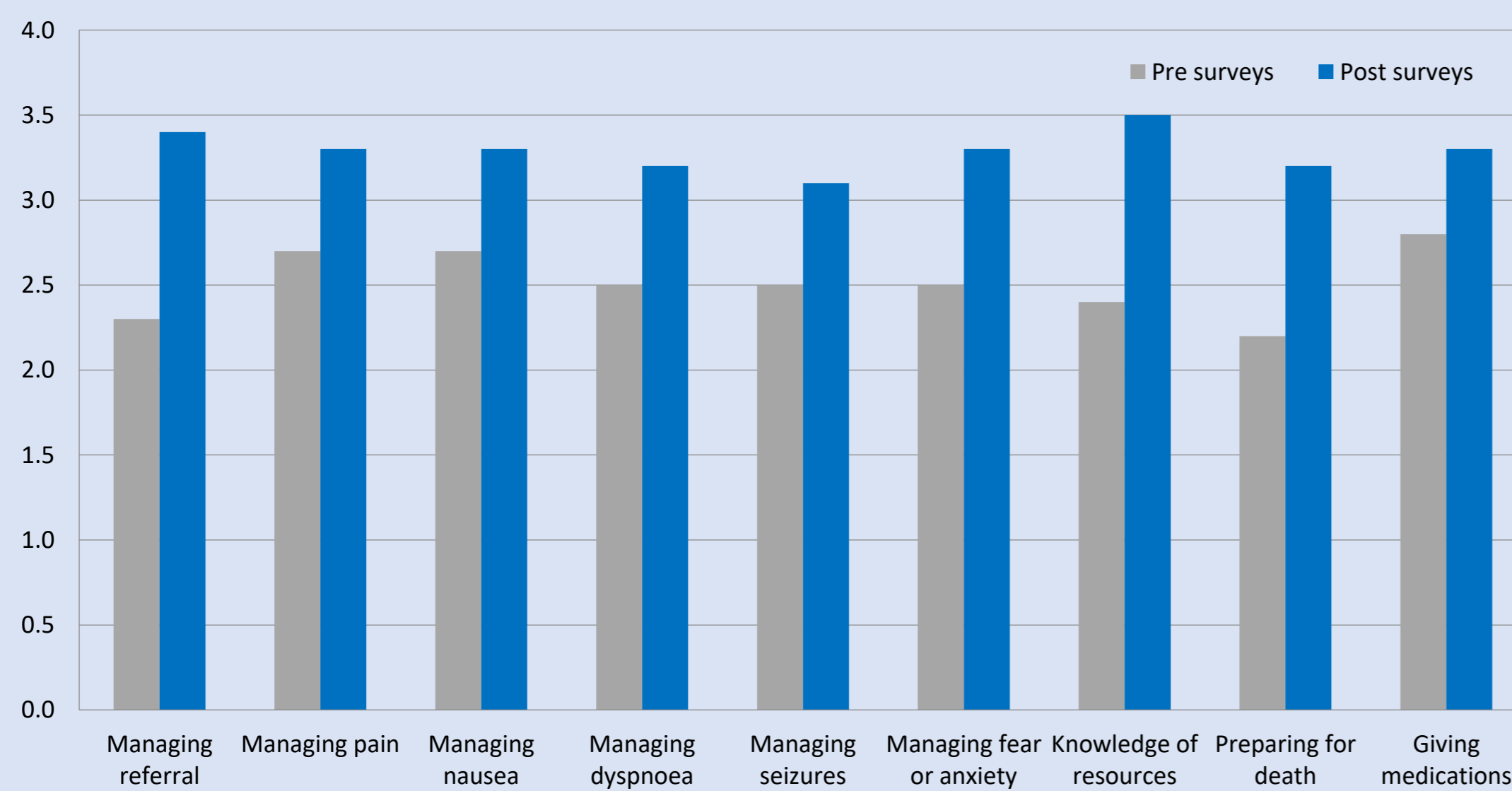
QuoCCA 1 outputs 2015-2017:

- 337 education sessions, 767 hours, 5773 attendees
- In every state and territory of Australia
- Medical Fellow positions in 3 tertiary hospitals
- Paired pre and post surveys completed by 969 participants
- Participants included 808 doctors, 3280 nurses, 562 allied health professionals, 617 others (teachers, funeral directors, pastoral carers etc) and 506 of unrecorded occupation.

Education impact:

- All participants showed a significant increase in knowledge and confidence for all measures following education (Wilcoxon signed ranks $P < 0.001$).

Average confidence for paired pre and post education surveys (n=969)



Predicting improvements in confidence / knowledge

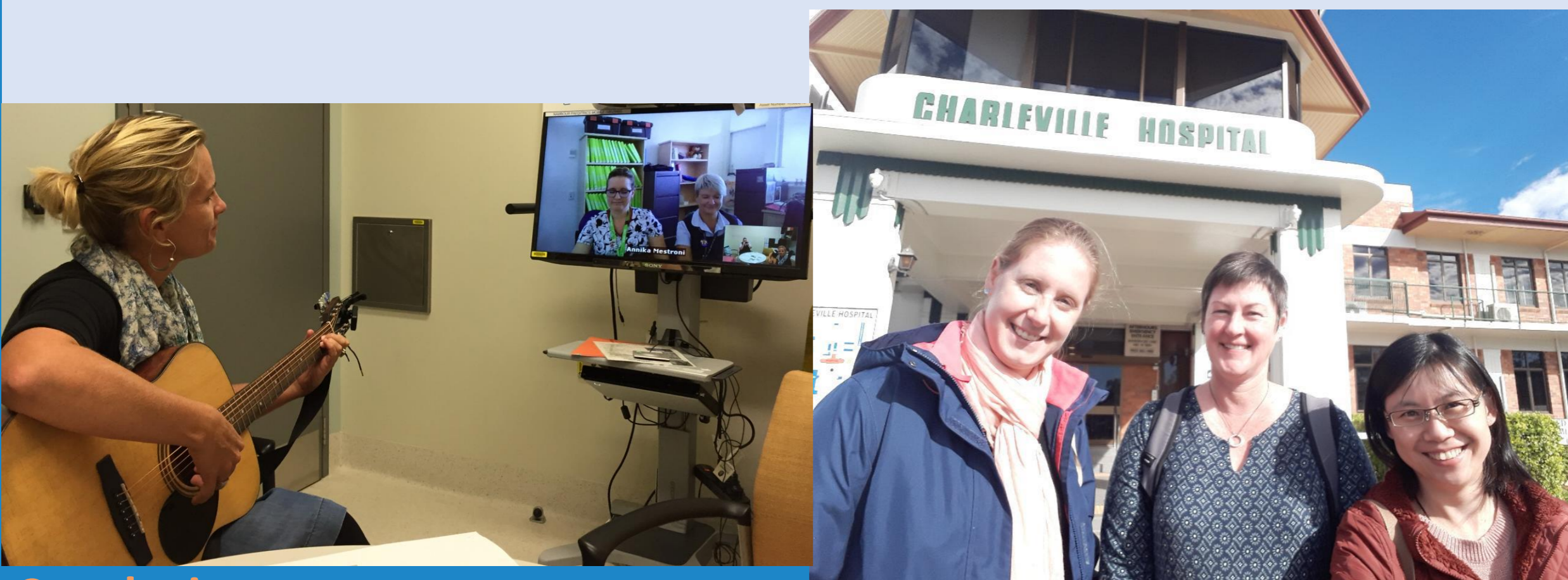
- Previous experience with caring for a child with a life limiting condition
 - Those with no previous experience were 1.9 to 2.7 times more likely to improve post education along 5 domains (referral management, pain, nausea, seizures, preparing family)
 - Those with previous experience had significantly higher scores for all measures pre and post education.
- Previous education in paediatric palliative care
 - Those with no previous education were 1.5 to 2.5 times more likely to improve post education along 8 domains (managing referrals, pain, nausea, dyspnoea, seizures, fear/anxiety, resources and preparing the family)
 - Those with previous education had significantly higher scores for all measures pre and post education.
- Length of education session
 - Participants in full day education sessions were 1.5 – 2.2 times more likely to improve following education along the domains of managing referrals, pain, nausea, fear/anxiety, resource and preparing the family.
 - Half day session participants were 1.6 – 1.7 times more likely to improve following education compared to those doing short education sessions along the domains of managing pain and nausea.
- Occupation was not a predictor for level of improvement in knowledge or confidence.

Participant comments

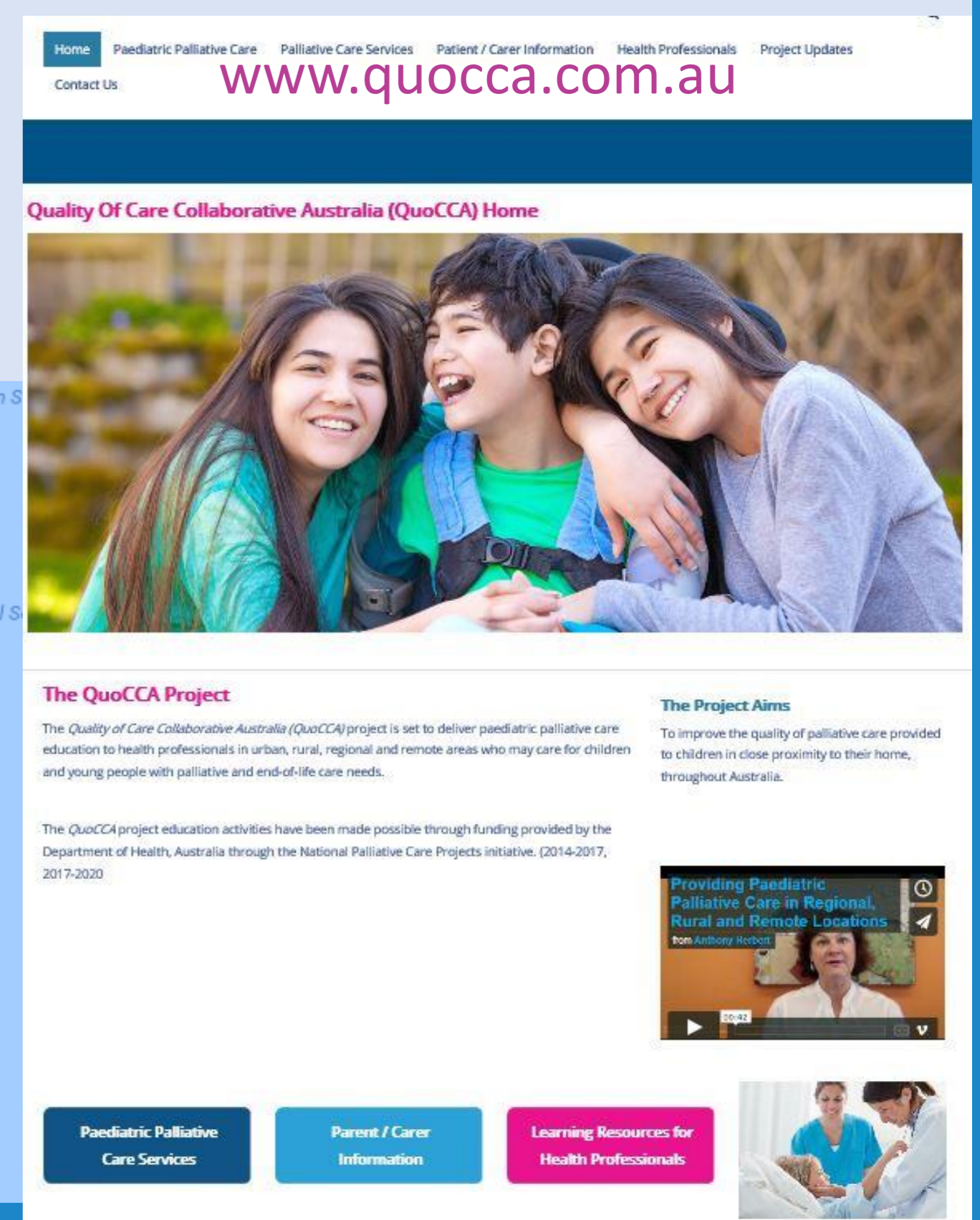
- "I feel more confidence with assisting families in caring for their palliative child, conversing with them, showing empathy/compassion and guiding them to services available."
- "Though I was unaware about PPC, after attending today's class, I feel I am filled with vast information about PPC and confident enough to deliver care to a terminally ill child and also to support the child's family."

Educator learnings

- More effective education had the following characteristics:
 - Tailored to the needs of the audience
 - Interactive
 - Included story-telling, case studies and parent experiences



Where QuoCCA 1 provided education:



Conclusions

- Dosage of education was an important factor in predicting improvement in knowledge or confidence, including prior attendance at education and the length of the education session.
- Although those with no previous experience in caring for a child with a life limiting condition showed a greater improvement following education, both novice and experienced providers moved to higher levels of knowledge and confidence.
- Learnings from the QuoCCA 1 Project are being implemented in the QuoCCA 2 Project currently underway.
- The project is currently working on simulation and interactive training, and accessible training modules and videos on the national website hosted by Caresearch (www.quocca.com.au)