The impact of QuoCCA education and factors that enhance workforce capability and education outcomes

Quality of Care Collaborative Australia (QuoCCA)

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What is QuoCCA?

- QuoCCA – Quality of Care Collaborative Australia
- Providing paediatric palliative care (PPC) education and mentoring for health professionals in all states of Australia since 2015
- Funded through Australian Govt Dept of Health, National Palliative Care Projects

How are you?
& how do you know

QuoCCA collaboration

- Collaboration of six tertiary PPC services (Qld, NSW x2, Vic, SA, WA)
- 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

Aims of QuoCCA

- To enhance the knowledge, skills and confidence of acute and community based health professionals in the principles of paediatric palliative care
- Participants engaged in either:
  - A scheduled general education session
  - ‘Pop up’ education and mentoring focused on the support of a specific patient in their local area
  - Incidental education through QuoCCA presence at meetings, handovers, grand rounds etc

QuoCCA evaluation study

Study aims

- To evaluate the impact of QuoCCA education from the perspective of educators and participants
- To identify factors that enhance workforce capability and education outcomes in PPC
- To translate findings and build capacity in the rural and remote workforce

Methods

- **Impact surveys** completed before and after the education sessions with responses related to a 5 point Likert scale of knowledge and confidence across 9 domains related to the care of the child and family (Slater et al, 2018):
    - Managing a new referral
    - Symptom management – pain, nausea, dyspnoea, seizures, fear/anxiety
    - Giving medication, including subcutaneous
    - Preparing the family
    - Using local agencies and resources

Methods

- The 9 measures were analysed against 8 independent variables which were education and participant related.
    - 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

Methods

Outcome surveys were completed more than 6 months following the QuoCCA education session and assessed:

- The value of different aspects of the education curriculum
- Changes in practice or care of patients and families as a result of participation in QuoCCA education

Methods

- **Discovery Interviews** with 16 Educators and Health Professionals who had provided or received education (Slater & Philpot, 2016; Donovan et al, 2019)
- Discovery Interview spine
  - Meeting the family
  - Caring for the child and family
  - End of life care of the child
  - Ongoing support for the family
  - Providing future paediatric palliative care
  - QuoCCA education

Data analysis

Quantitative analysis

Statistics performed on the survey results, included:

- Wilcoxon signed ranks test on the scores pre and post education
- Binomial logistic regression to determine the factors that predict change in scores following education

Qualitative analysis

Thematic analysis of interview transcripts

Results

Red Marker – Pop-up visit

Blue Marker – Scheduled visit

Yellow Marker – Children's Hospitals

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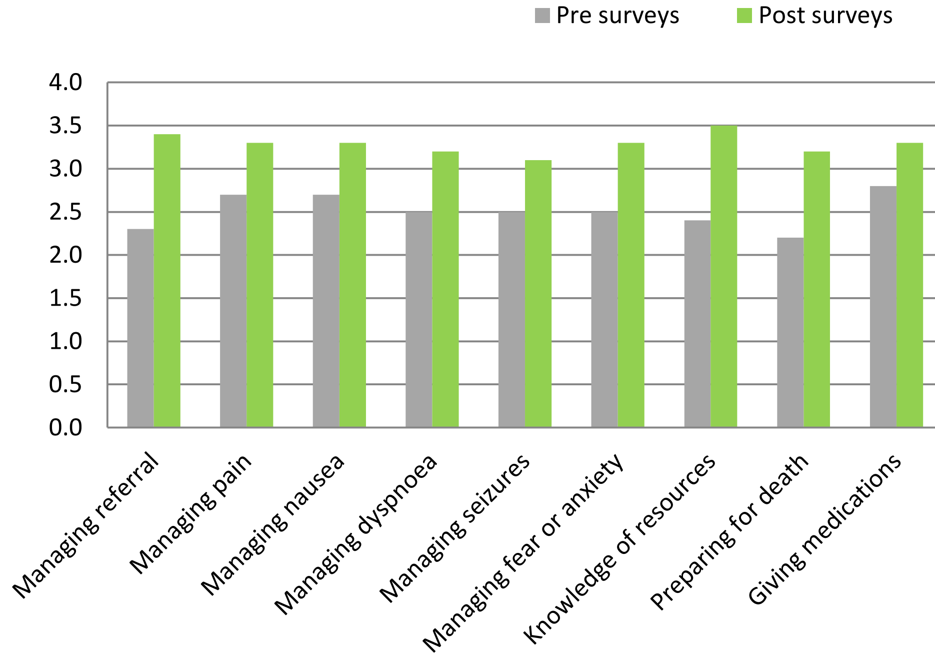
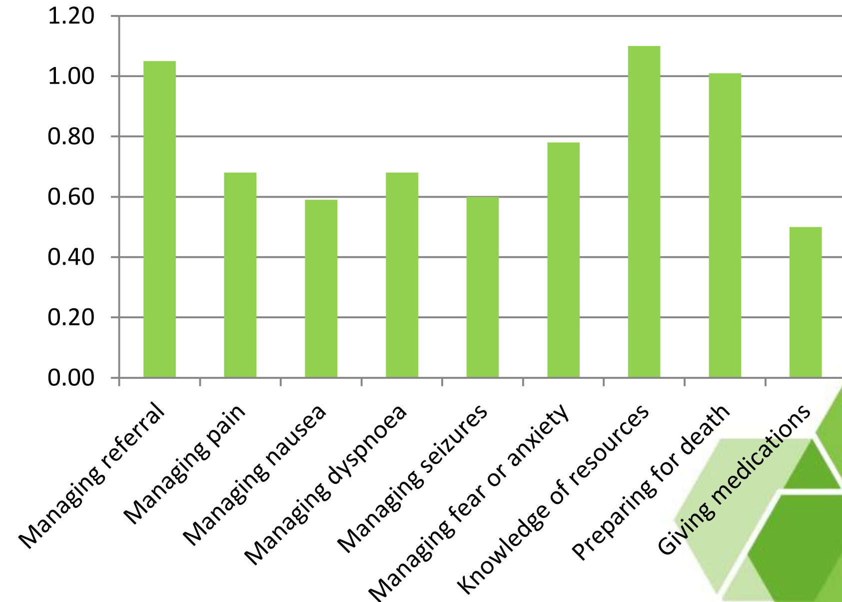
QuoCCA 1 outputs 2015-2017

- 337 education sessions, 767 hours, 5773 attendees
- 808 doctors, 3280 nurses, 562 allied health professionals, 617 others (teachers, funeral directors, pastoral carers etc) and 506 of unrecorded occupation
- Education provided in every state and territory in Australia, with 203 provided in major cities, 117 in regional areas, and 16 in remote areas
- Paired pre and post surveys completed by 969 participants

QuoCCA 1 education impact





QuoCCA 1 pre and post surveys

Number of participants who declined, stayed the same or improved in their post education score

Measure	Decline in score Post < Pre	Same score Post = Pre	Improved score Post > Pre	% improved
Referral	17	200	693	76.2
Pain	33	328	503	58.2
Nausea	45	356	448	52.8
Dyspnoea	32	313	496	59.0
Seizures	35	369	433	51.7
Fear	24	293	558	63.8
Resources	20	209	685	74.9
Preparation	17	208	692	75.5
Medication	48	374	346	45.1

Education impact

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

Predicting an increase in knowledge/confidence

- Participants with previous experience caring for a child with a life limiting condition had significantly higher scores before and after education. Those with no previous experience were more likely to improve in confidence and knowledge.
- Those with previous PPC education had significantly higher scores before and after education. Those with no previous education were more likely to improve in confidence and knowledge.
- Participants in longer education sessions were more likely to improve in confidence and knowledge.
- Regional and remote participants were more likely to improve than city participants in confidence in the management of nausea and seizures and knowledge of resources that can assist in providing care.

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Participant survey 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." *HP1099, 2017*.

- "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." *HP1052, 2016*.

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

Outcome survey

- Outcome survey completed more than 6 months following education
- QuoCCA education was rated by 98% of surveyed participants as valuable (33%) or extremely valuable (65%) (n=146)
- 78% said it was extremely or very helpful in making a difference to their practice and care of patients (n=114)

Discovery Interviews with Health Professionals

Demographics	Health Care Professionals n	Educators n
Occupation		
Medical – paediatrician	1	
Senior nurse	2	6
Allied Health		
Dietician	1	
Music Therapist		1
Occ Therapist	1	
Physiotherapist	1	1
Social Worker	2	
State of origin of interviewee		
Queensland	6	3
New South Wales		1
Victoria		1
South Australia	2	2
Western Australia		1
Remoteness area		
Major city	5	8
Inner regional	1	
Outer regional	2	
TOTAL	[illegible]	[illegible]

Interviews with Health Professionals

Four themes related to paediatric palliative care education

Building capacity

- The dedicated QuoCCA educators were instrumental in the development and harmonisation of education across Australia. As educators became more experienced, they used more effective interactive teaching methods, and were flexible to the learning needs and experience of participants. Accessibility of education was improved through local delivery and online resources and education modules. Visits to regional areas also allowed the educators to understand the services and families involved.

Building capability

Transitioning to PPC educators

- *"They might be really good at their job but they might not have the [education] skills". HP005*

Providing effective education

- *"I think early on when we were finding our feet it was very much didactic because we had to learn it ourselves… you can become a little bit more engaging once you're comfortable". HP011*

Making education accessible

- *"I think people feel a lot more comfortable having education in their own environment and they're more open and it's easier to attend things". HP001*

Developing partnerships

- QuoCCA education sessions opened up communication within the complex network of professionals in the local community and with the tertiary service. The modelling of care provision during home visits, and the ongoing mentoring, empowered the local palliative care workforce to provide paediatric care and reduced professional isolation.

Developing inter-professional partnerships

Navigating the complex web of formal and informal care providers

- *"We had one particular [visit] where we went to the school, a hospital, the carer agency … then we had a big family meeting with the family. It made me realise, it's just so complicated… there are so many people you have to think about. It's not just about giving them a symptom management plan and some morphine". HP015*

Establishing communication pathways

- *"Before [the QuoCCA educator] went out there our contact was quite haphazard. They [primary care team] wouldn't come and speak to us directly…they would make decisions locally. Once [the QuoCCA educator] went out there the lines of communication were really open and we were able to support them to support the family much better". HP002*

Developing inter-professional partnerships

Enhancing capability throughout mentoring relationships

- *“We can't keep up with the amount of enquiries that we are getting in regard to more adult palliative care services who don't have the education or experience in paediatrics … rather than create another workforce … we can empower a workforce who are already doing palliative care to provide paediatric care”. HP014*

Mentoring for wellbeing

- Ongoing mentoring affirmed the need of staff to sustain wellbeing, strongly linked to making a difference for families. The educators walked alongside the local professionals, sharing knowledge and practice wisdom enabling a quality service for families. QuoCCA also promoted a supportive team culture through checking in, clinical supervision, joint home visits, debriefing and team reflection.

Sustaining wellbeing

Sustaining emotional wellbeing

- *"When a child does die who I've known for quite some time…I found it really challenging. I didn't know who I could speak to. I caught up with some of the nurses. They attended the funeral, and kept me in the loop … We have a buddy system, because all of allied health was fairly involved…we'd catch up over coffee, and debrief about it, and I found that to be really worthwhile". HP011*

Sustaining wellbeing

Finding meaning and purpose

- *"It's highly valuable work. ... it's important that we get it right because parents and families, the kids that grow up and have their generational bereavement … they look back to this time and they never forget a good memory of staff being supportive and helpful. That's my whole aim and the reason why I'm so passionate about … getting it right for these parents and families". HP009*
- *"If I can support the family in any way that made their life a bit easier, then that's what I get out of it.   It doesn't have to be me directly talking to them, it can be supporting the team and that's what gives me comfort". HP005*

Sustaining wellbeing

Finding your support network…find your tribe

- *"I was up on the ward with the nurse…she had looked after a patient that died just a couple of days before… and I said, "And how are you?" And then she just started crying. She was just sad, and she couldn't sleep at night, she kept thinking about this family, and – and I thought we don't actually look after them and nurture them. Now I go back and check if they are okay…because I think I've got to model what I want others to do". HP015*

Learning from children & families

- Health Professionals were empowered to be confident in having conversations with families, listen deeply, walk alongside them at their pace, supporting them after bereavement and learning from their experience.

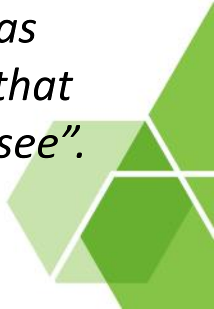
Learning from children and families

Providing family centred care

- *"At the end of life you want them [family] to be able to look back and hope that they've done everything that they wanted to do with their child. It's making sure they are comfortable in the place they want to be, and if they change their mind, they can move". HP015*

Conversations with families

- *"Every time we came it represented what lay ahead. She [mother] just couldn't stomach us at that time. We were struggling, because we thought the child was getting worse and we wanted to help manage symptoms. But we had to give that family time to grieve and – because we represented what she wasn't ready to see". HP015*



Learning from children and families

Planning ahead to support families

- *"How things evolve for that family is going to impact them for the rest of their lives. If it [child's death] goes well it's going to serve them for a lifetime and if it goes poorly, it could have an impact for a very, very long time". HP001*

Conclusions

- Implementation of educator roles in PPC have enabled:
  - Targeted education via real-time ‘pop up’ model of care and ‘scheduled’ education to raise awareness
  - Reach into a geographically dispersed population of children with a life-limiting condition and their families
  - An increase in confidence and knowledge of PPC for all health professionals

Conclusions

- The pop-up model of education has become a critical feature of QuoCCA
- The successful transition from expert health professional to educator requires guidance and support
- Beyond providing education, these roles had an ongoing mentoring function for staff providing PPC outside the specialist services
- Provide ongoing mentoring and wellbeing support for staff who provide non-specialist PPC

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

Conclusions

- QuoCCA has enabled rapid change in workforce capability in PPC in Australia, enhanced quality of service delivery and access to PPC in a geographically dispersed population of children with PPC needs and their families.
- This study supports the integration of educators in tertiary PPC teams, including an ongoing mentoring model for regional providers.

Next steps

- Learnings from the QuoCCA 1 & 2 Projects are being applied progressively.
- QuoCCA 3 commences in 2021
- Incorporating the voice of families impacted by the QuoCCA program in future research will provide additional evidence to support this innovative education program
- The next steps for the project are simulation, interactive training and accessible training through the national website hosted by Caresearch www.quocca.com.au.

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The QuoCCA Project

The *Quality of Care Collaborative Australia (QuoCCA)* project is set to deliver paediatric palliative care education to health professionals in urban, rural, regional and remote areas who may care for children and young people with palliative and end-of-life care needs.

The *QuoCCA* project education activities have been made possible through funding provided by the Department of Health, Australia through the National Palliative Care Projects initiative. (2014-2017, 2017-2020

The Project Aims

To improve the quality of palliative care provided to children in close proximity to their home, throughout Australia.

Paediatric Palliative Care Services | **Parent / Carer Information** | **Learning Resources for Health Professionals**

Questions for reflection

1. What mentoring role do you play in your role?
2. How can we integrate a sustainable mentoring model of professional support nationally?
3. How can we integrate the voice of children and families in our evaluation processes?
4. How can this evaluation inform the impact and outcomes of rural and remote education?

Thank you

References

- Slater PJ, Herbert AR, Baggio SJ, Donovan LA, McLarty AM, Duffield JA, Pedersen LC, Duc JK, Delaney AM, Johnson SA, Heywood MG and Burr CA. Evaluating the impact of national education in pediatric palliative care: the Quality of Care Collaborative Australia. Advances in Medical Education and Practice 2018;9:927-941.
- Donovan LA, Slater PJ, Baggio SJ, McLarty AM, Herbert AR, Quality of Care Collaborative Australia. Perspectives of health professionals and educators on the outcomes of a national education project in pediatric palliative care: the Quality of Care Collaborative Australia. Advances in Medical Education and Practice 2019;10:949-958.
- Slater PJ and Philpot SP. 2016. Telling the story of childhood cancer - An evaluation of the Discovery Interview methodology conducted within the Queensland Children's Cancer Centre. Patient Intelligence 2016;8:39-46.