

Implementing telehealth innovations In a rural pediatric allied health and education service

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Research partnership between



Research aims

- Understand practice and organisation **change** involved in the implementation of multiple models of TH in an existing health organisation.
- Evaluate the **impact** of TH delivery on access to services, costs, clinical or learning outcomes and satisfaction.

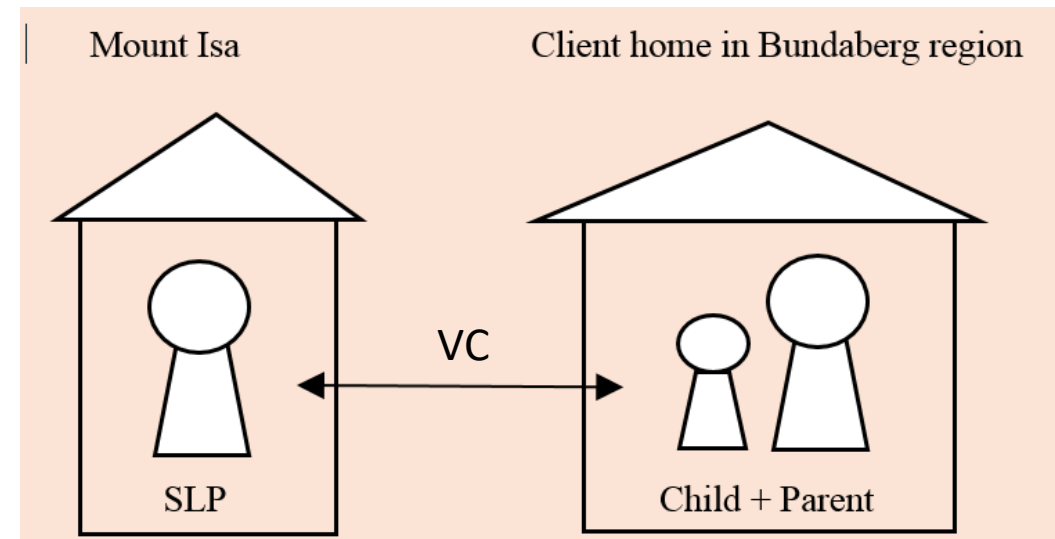
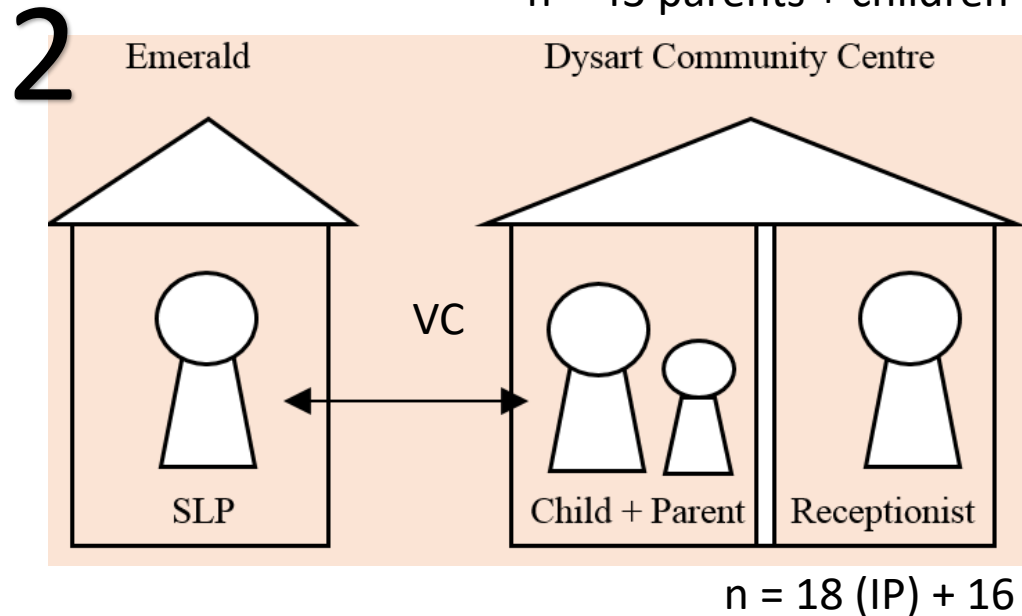
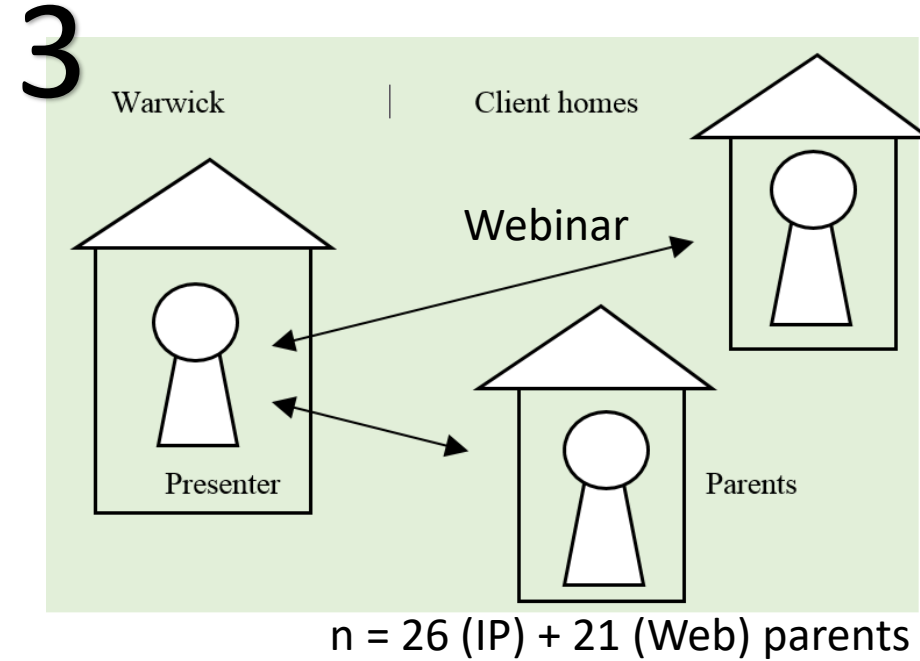
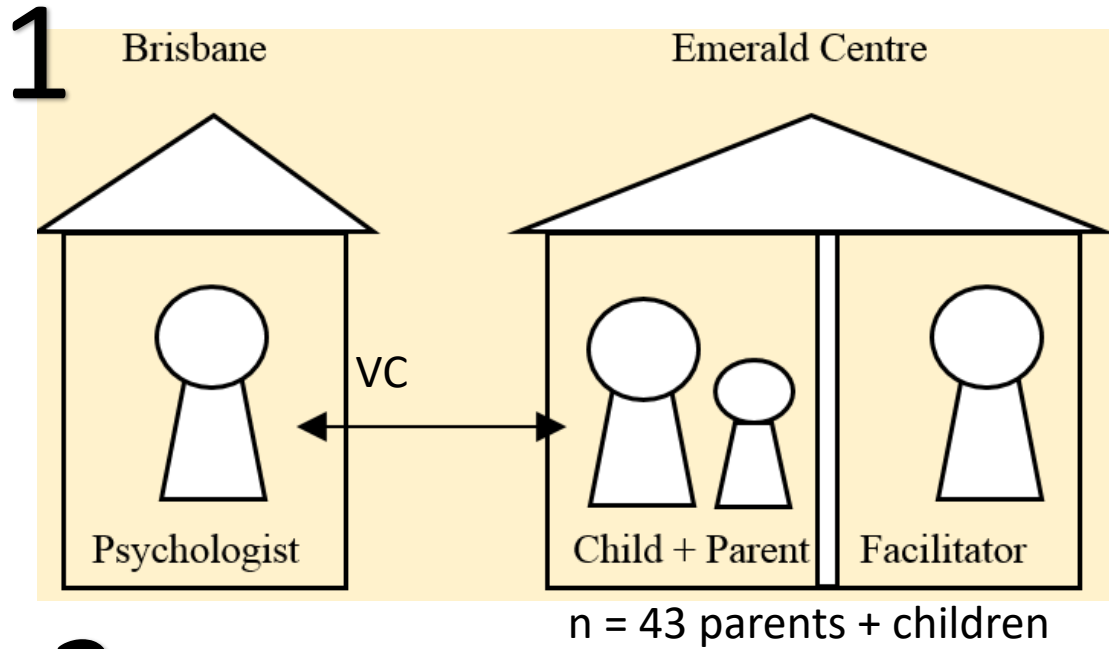
Methods

- three telehealth models within BUSHkids
- not-for-profit organisation providing free allied health + education services to Queensland regional and remote families.
- Qualitative: practice change (care observations, semi-structured interviews)
- Quantitative: cost, access, satisfaction and clinical outcomes



Telehealth services trialled

+ managers



Practice change results

Practice changes

Themes

Psychology

Additions: guidelines, training, facilitator, technology, live coaching, talking about TH, additional preparation, longer intakes, using computer during Rx. *Substitutions:* sitting at desk, electronic measures/games, verbal gambits.

- extending roles
- maintaining therapeutic presence
- formalising practice

Speech therapy

Additions: guidelines, training, facilitator (Partner), technology, box/pack of activities/rewards, additional preparation and follow-up, troubleshooting. *Substitutions:* sitting at desk, parents presenting stimuli/tasks/prompts.

- extending roles
- preparation and adaptation of resources
- compensating for physical objects/touch

Parent education webinar

Additions: training, webinar platform, posting materials, explaining chat/raise hand functions, checklist. *Substitutions:* less of presenter visible, participants not visible on video or heard via audio, electronic measures, referring to generic services. *Omissions:* fewer questions, presentation more 'on script'.

- less interactive delivery
- fewer opportunities to build rapport
- building educator efficacy with technology

Impact results: Psychology

TH = telehealth IP = In-person



Access	Cost	Clinical/ learning outcomes	Satisfaction
TH 2.67 IP 0.38 consults/day	TH \$103.93 IP \$165.50 / hour	Parent- reported ORS 16/23 65% CSI	Parent* Median 6 - 7 initial, 7 final
cancellation rate TH 19% IP 22%	\$187.11 travel cost avoided/family	Child-reported ORS <i>Sample size too small</i>	Provider Median 5.5 - 7 initial, 6 - 7 final
		Parent SRS 66% > cut-off	Child <i>Sample size too small</i>
		Child SRS <i>Sample size too small</i>	SDQ and PSC no change

ORS = Outcome Rating Scale SRS = Session Rating Scale

SDQ = Strengths and Difficulties Questionnaire

PSC = Parenting Sense of Competence

* Caution = low return rate final surveys

Impact results: Speech therapy

TH = telehealth IP = In-person

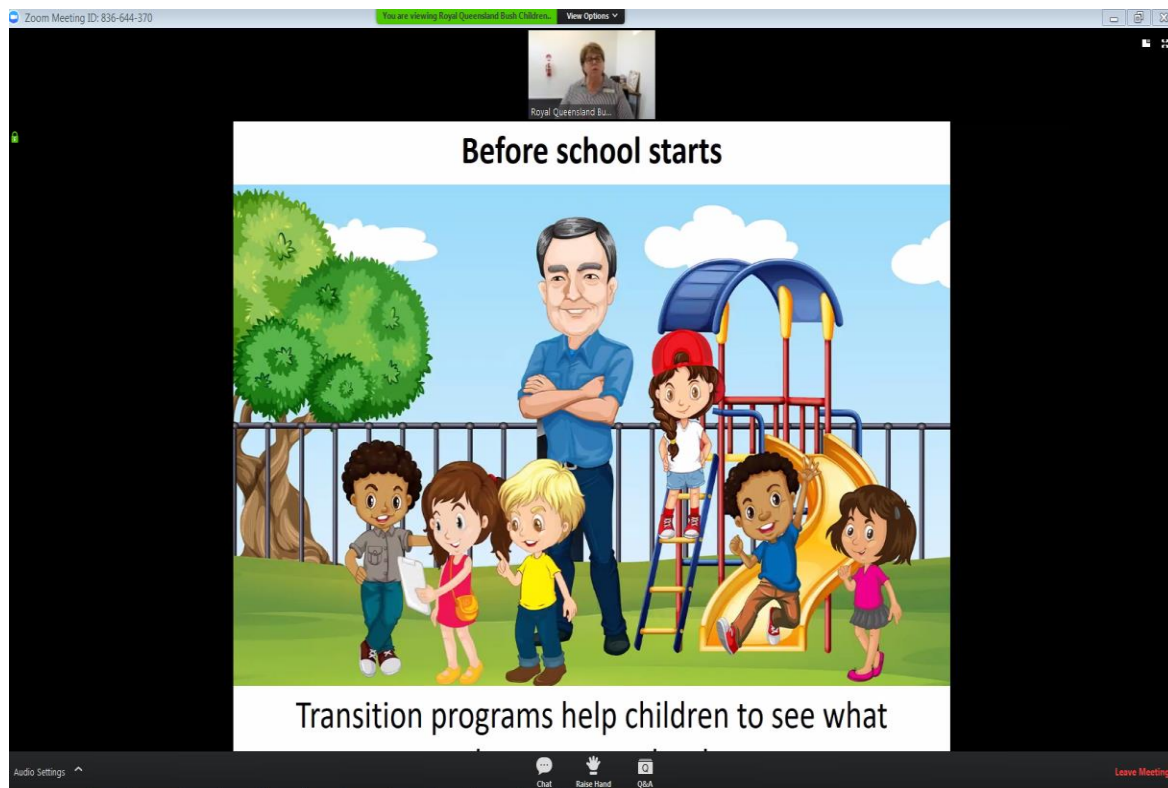


GAS = Goal Attainment Scale
 CSI = Clinically significant improvement

Access	Cost	Clinical/ learning outcomes	Satisfaction
Partner TH 21 Home TH 49 consults			Parent Median range 6 - 7 at both initial and final
Partner TH 10% Home TH 14% Baseline 16% cancellation rate	Client + clinician travel avoided Partner TH \$3,542.72 Home TH \$20,816	GAS CSI Total TH 5/9 56% IP 6/8 75%	Provider 28/32 qs received positive answers
TH average 182.89 km round trip avoided		Significant ↑ in client median attainment scores and in all goals both groups	Child <i>Sample size too small</i>

Impact results: Parent education

IP = In-person



Access	Cost	Clinical/ learning outcomes	Satisfaction
Attendees Webinar 21 IP 26	Webinar \$150.50/event IP \$182.66/event	SCORE % moderate- significant improvement Webinar 79-92% IP 73-87%	Parent Webinar 83-100% IP 93% positive Provider 15/19 positive



Clinical implications

Acknowledge importance of parents as key stakeholders
Discuss, monitor, collect information

Acknowledge intellectual, emotional and time commitments for clinicians
Support, supervision

Clinician engagement
TH practice is largely additions and substitutions
Key skills: Therapeutic presence, collaborating with parents, interactivity and rapport

High volume of clients
On the ground staff, referral agreements

Increase access
Universal and group services

Eliminate unnecessary **costs**
Monitor preparation time vs. avoided travel time

Use in-person protocol to monitor **quality of care**
Investigate **child experience**

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