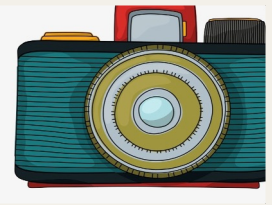
PROFESSIONALS & RESEARCHERS IN EARLY CHILDHOOD INTERVENTION



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Research Snapshot No. 22

Talking scrubs: Improving the health outcomes of patients with communication disability – a mixed method investigation of feasibility, effectiveness and clinician-patient concordance

Authors:Betty-Jean Maria Dee-Price, A Kate Fairweather, Janet Kelly, Max Saul Price, Monica Welsh, Adrian Esterman, Caroline Ellison, Josephine Thomas, Elisha White

In the spirit of reconciliation PRECI acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Presented by Sam Boag
Physiotherapist

What you need to know

People without recognised speech or written communication experience significant disadvantage in healthcare, including:

- Poorer health outcomes
- Longer hospital stays
- Higher rates of preventable harm
- Reduced opportunity to provide informed consent

Despite AAC efforts, first-person voice not prioritised during high-stakes diagnostics.

Low clinician confidence affects accuracy, engagement, decision-making.

What is this research about?

The Talking Scrubs project integrates visible communication supports into clinical practice.

Scrub tops or vests feature key communication icons that:

- Provide direct communication pathways
- Encourage clinicians to adapt to individual communication methods
- Support consent and shared decision-making
- Integrate AAC into routine practice instead of as an add-on

The intervention was co-designed with individuals with communication disabilities, clinicians, and AAC experts to ensure safety, relevance, and practicality.

What did the researchers do?

Reports findings from Stages 1–3 and presents Stage 4 protocol

Stage 1 – National Survey (completed)

+ 293 respondents (108 clinicians)
+ 71% rated Talking Scrubs positively
+ 61% of clinicians identified communication difficulty as a serious patient safety concern

Stage 2 – Co-design (completed)

+ 25 stakeholders (people with intellectual disability, families, clinicians)
+ Developed safe-use protocols and refined scrub design
+ Co-designed two communication self-efficacy tools: SE:CD17 (clinicians), SE:CH17 (people with communication disability)

Stage 3 – Validation and Pilot (completed)

+ Validated communication self-efficacy tools
+ Piloted Talking Scrubs in healthcare settings
+ Demonstrated feasibility and acceptability

What did the researchers do?

Stage 4

Protocol outlines evaluation of Talking Scrubs in real-world healthcare settings

Mixed-methods study will examine:

- Feasibility and acceptability
- Communication self-efficacy
- Diagnostic concordance
- Performance of communication tools

Study sites:

- Women's and Children's Hospital
- Adelaide Healthcare GP sites

Participants:

- Children with/without communication disability
- GPs and clinicians involved in diagnosis
- Youth co-researchers with disabilities contributing to research

What did the researchers find?

Findings from Stages 1–3 show:

- Communication disability identified as a significant safety and equity issue
- Clinicians reported low confidence communicating with non-speaking patients
- Strong stakeholder support for embedded communication supports
- Co-design improved acceptability, relevance and safety protocols
- Purpose-built communication self-efficacy tools (SE:CD17, SE:CH17) were developed and validated.

How can you use this research?

Key clinical and early intervention insights from Stages 1–3:

- Communication barriers create safety risks and limit participation
- Measure clinician capability — not just knowledge
  Talking Scrubs developed validated tools (SE:CD17, SE:CH17) to assess communication self-efficacy where no matched instruments previously existed
- Communication self-efficacy influences clinical behaviour (supported by broader evidence, e.g., Holden et al., 2017)
- Embed communication supports into routine practice — inclusive environments reduce reliance on specialist-only solutions.
- Communication access is a shared responsibility across health, ECI and education systems.

Where to from here?

Stage 4 will determine whether Talking Scrubs:

+ Increases communication self-efficacy for patients and clinicians
+ Enhances participation and informed consent during diagnostic interactions
+ Improves clinician–patient concordance
+ Can be feasibly and sustainably implemented in healthcare setting

Stage 4 now includes children and youth co-researchers, enhancing alignment with the National Best Practice ECI Framework.

About the researchers

- Dr Betty-Jean Maria Dee-Price and colleagues are researchers and clinicians with expertise in communication disability, healthcare safety, behaviour change, and implementation science. The interdisciplinary team includes co-investigators with lived experience of communication disability, specialists in speech pathology, medicine, health services research, and biostatistics.
- The Talking Scrubs project integrates lived experience, clinical practice, and research to develop scalable, evidence-informed communication interventions.

Citation:

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References:

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Holden, J.D., et al. (2017). Validation of a communication self-efficacy scale for healthcare professionals. *BMC Medical Education, 17*, 189. https://doi.org/10.1186/s12909-016-0798-7

Dee-Price, B.J.M., Fairweather, A.K., Kelly, J., et al. (2025). Talking Scrubs: improving the health outcomes of patients with communication disability. *BMJ Open.*

THANK YOU FOR LISTENING!