

# Evaluating the clinical utility and responsiveness of the Australian Therapy Outcome Measure for Indigenous Clients (ATOMIC)



## Research Team:

Nicholas Sheahan, Dr Ros Harrington (ACU), Dr Alison Nelson (IUIH), Dr Loretta Sheppard (ACU), Ashleigh Potgeiter (IUIH), Amy Bartlett (IUIH), Rebekah White (IUIH)

Dr. Jodie Copley, Dr Anne Hill, Teresa Quinlan (UQ)

Chrisdell McLaren, Catherine Castan (IUIH)



**We honour the many Goori Tribal Nations whose territories we work across within South-East Queensland.**

**We honour the legacy and the vision of those who paved the way and those who continue to guide us.**

**We honour our future generations by maintaining the vision with focused determination.**

# Background of the Study

- Therapy services to Indigenous clients must be culturally responsive
  - Interprofessional, strengths-based, allow building of relationship, based within client/community context  
(Davidson et al., 2013; Hill et al., 2017; Nelson et al., 2017)
- Evaluation must incorporate the views of Indigenous clients regarding their service needs and desired outcomes (Lowell, 2013; McCalman, Bainbridge, Percival & Tsey, 2016)



# Context of the research



## Vision

- Healthy, strong and vibrant Aboriginal and Torres Strait Islander children, families and communities

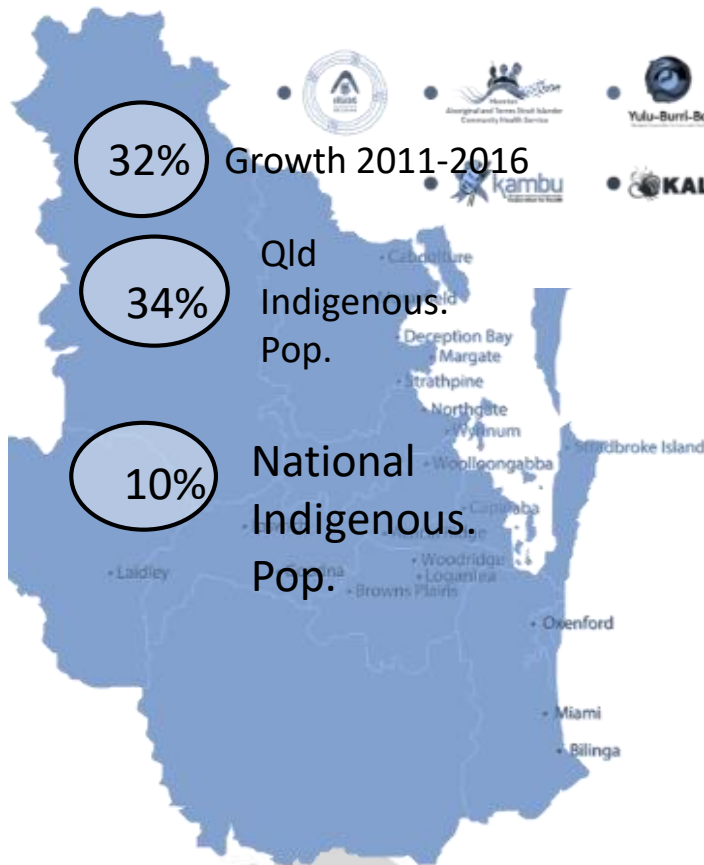
## Mission

- Family health and wellbeing through integrated health and social support services

# SEQ Indigenous Growth

# IUIH footprint

URBAN Population



Australia's largest and equal fastest growing region

ABS Count 2011	Growth	ABS Count 2016	Estimated Pop. *
48,672	15,565	64,237	75,478

\* ABS advised 17.5% undercount

**!** Growth faster than predicted: 6.4% pa compared to 3.7% pa (which originally projected a 133,000 pop in 2031)

# Why this approach?

- Clinical diversity of areas to capture for evaluation (no one-size-fits-all measure)
- Norm-referenced assessment tools not appropriate as not standardized on Aboriginal and Torres Strait Islander clients, not reflective of meaningful functional outcomes to Indigenous clients and families (Nelson et al., 2017)
- Goal-setting and demonstrating improved life outcomes in a culturally responsive manner is vital for effective service delivery with Indigenous people
- Being able to demonstrate effectiveness of an intervention is vital for healthcare services as they are accountable to not only their clients and community, but also Government and funding organisations



# Existing Goal Attainment Tools

- Focus on functional outcomes
- More sensitive to clinically meaningful change
- More readily used in interprofessional contexts

BUT

- Administration processes may not reflect culturally responsive practice for Indigenous clients
  - Language used needs to be strengths-based
  - Semi-structured interview with direct questioning (COPM, GAS, AusTOMS) vs. flexible, dynamic and relational yarning style of communication (Lewis et al., 2017)
  - Limited age ranges (PEGS, COSA)
  - Time requirements to identify 5 levels of attainment (GAS)

# What is the ATOMIC?

- The Australian Therapy Outcome Measure for Indigenous Clients (ATOMIC) was designed to facilitate a more holistic view of health outcomes by enabling:
  - Client-led goal setting
  - Flexibility in goals and priorities
  - Flexibility in how outcomes are measured
  - A culturally responsive yarn-based approach



## ATOMIC: Australian Therapy Outcome Measure for Indigenous Clients:

Name:		Therapist Name:				
Date of Birth:		Therapy Type:		OT/SP <input type="checkbox"/>	SP <input type="checkbox"/>	OT <input checked="" type="checkbox"/>
Aboriginal &/or Torres Strait Islander:		Gender:		Date of baseline assessment <input checked="" type="checkbox"/> or outcome assessment : <input type="checkbox"/>	Number of sessions attended	Consent for research
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		F <input type="checkbox"/> M <input checked="" type="checkbox"/>			1	Yes <input type="checkbox"/> No <input type="checkbox"/>

*This form is for therapist use only and should be completed after sessions with children or with the client if adults/adolescents. Discussion should take place in a yaggin' style. Refer to information sheet before completing form.*

*This form should not be referred to when completing the outcome form. Skill, goal, measurement must be completed when filling out baseline form, for purposes of objectivity.*

Not Yet Achieved X |-----| X Achieved

Skill / Domain	SMART Goal	Evidence for Rating		Comments
Meal preparation	To be able to open jars without difficulty.	Using pliers or not opening jars at all	X  -----	

# Utility and Ecological Validity with Adults

Study 1: Investigated the responsiveness of the ATOMIC to change over time

Study 2: Investigated the clinical utility of the ATOMIC

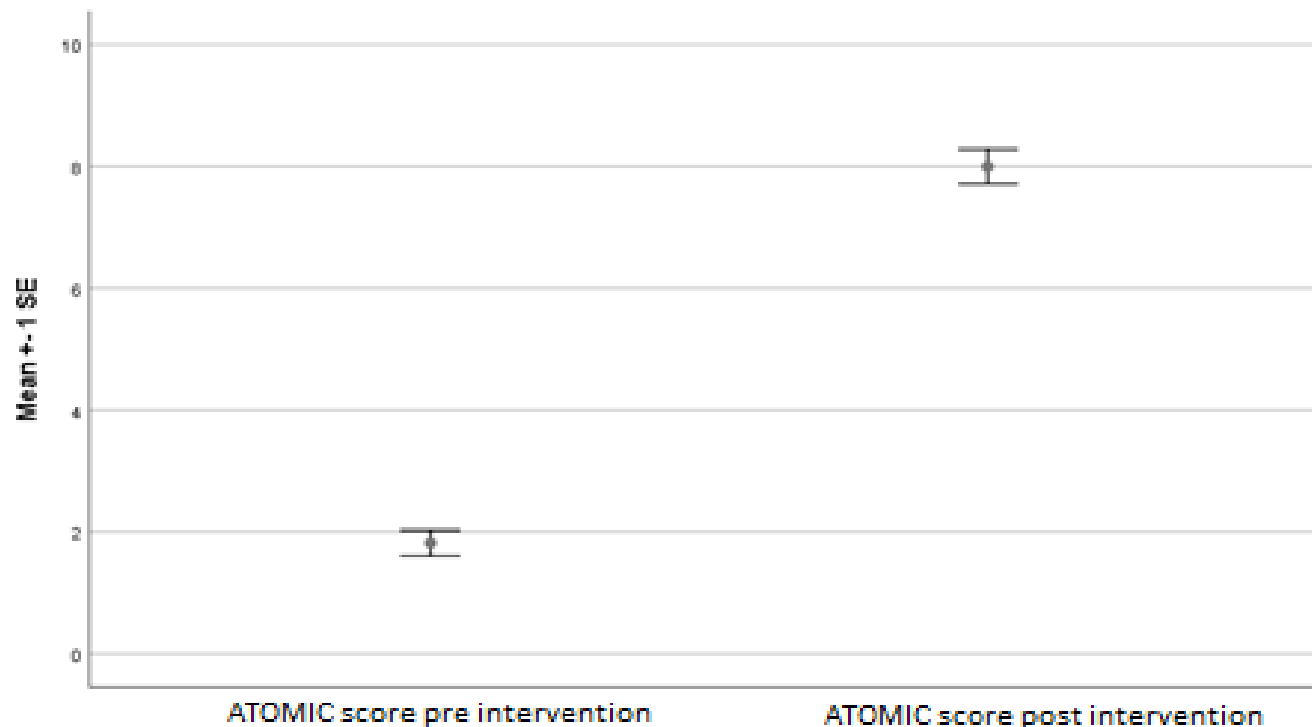
(i) Client Interviews

(ii) Clinician Focus Group



# Results: Study 1

- Pre-post ATOMIC data analysed from 34 IUIH clients (F=24, M=10)



# Results: Study 2

Synthesis of interview and focus group data resulted in four overarching themes. These were

1. First Australians are on their own journey – are adept at self-managing their conditions
2. The ATOMIC is a clinically useful outcome measure, that is acceptable to First Australian clients and clinicians;
3. The ATOMIC supports occupational therapy practice;
4. The ATOMIC supports culturally responsive goal-setting



# Results

- *“I feel like the ATOMIC is easier to use with First Australians compared to other outcome measures, like the COPM takes a long time to fill in, and it’s really structured like some of the other outcome measures that are available, so it’s nice to be able to do something in a yarning style” – FG participant*



*“When I look at the form it’s easy to see that I’ve improved on the line. I like being able to sit here and have a yarn with you about it.” – Client interviewee*

# Conclusions

- The ATOMIC is responsive to change in client goal achievement after intervention
- Clinical Utility – Acceptable to Client and Clinician
  - The ATOMIC's ability to be used flexibly increased the tool's acceptability to clients and clinicians
  - The ATOMIC's dynamic approach allows for it to be utilised during therapy when it is most appropriate, increasing its ability to be used in a culturally responsive manner
- The ATOMIC's yarning approach enables clinicians to reorient the way in which they seek to gather information about their clients, encouraging a more holistic perspective of the client.



# What's next?

- The study sets the stage for validity and reliability testing of the ATOMIC to further establish it as a culturally responsive outcome measure for First Australians
  - Trial with other disciplines
  - Trail in other settings



# References

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# Questions?



Extra Slides if we need them...



# Goal Attainment Scaling

- Valid methodology for measuring outcomes
- Used in mental health, paediatrics, neurological caseloads
- Enables client/carer to have input regarding goals and therapy priorities

# Ethical Considerations

- **Ethical clearance was obtained from the Australian Catholic University Human Research Ethics Committee (ACU HREC).**
- **Informed written consent was obtained from all participants, and participants were free to withdraw from the study at any time, without fear of any adverse outcomes.**
- **This study adhered to guidelines for conducting ethical research with First Australian people as it was initiated by a community-controlled organisation (NHRMC, 2003).**
- **First Australian run cultural advisory group located within the IUIH was consulted prior to and throughout the study**



# Interrater Reliability and Outcome measurement

- High degree of reliability (pilot study: 16 children, 55 goals)
  - Pre-therapy goal ratings ICC=0.995 (95% confidence interval)
  - Post-therapy goal ratings ICC=0.982 (95% confidence interval)
- Goal achievement (80 children; 239 goals)
  - Mean goal achievement moved 1.9 points on a 5 point continuous scale (approx. 38%)
  - No effect of age on goal achievement
  - Significant effect of attendance

# Development of ATOMIC

- GAS too complex and scale not good “fit” for our clients
- Used goal attainment methodology
- Modified for our context
- Validated with expert panel
- Trialled in paediatric therapy setting
  - Utility
  - Validity
  - Sensitivity
  - Reliability

## ATOMIC V2

- Fits a broader range of goals. Therapist more readily include
  - Functional goals
  - Goals that had been harder to measure
  - Goals outside the therapy room
- Evidence is more reflective of therapy sessions
- No longer needing to conceive a measurement beforehand

# The nature of goal setting

**Using the ATOMIC in therapy and engaging in research process promoted discussion within the community of practice regarding appropriate goal setting.**

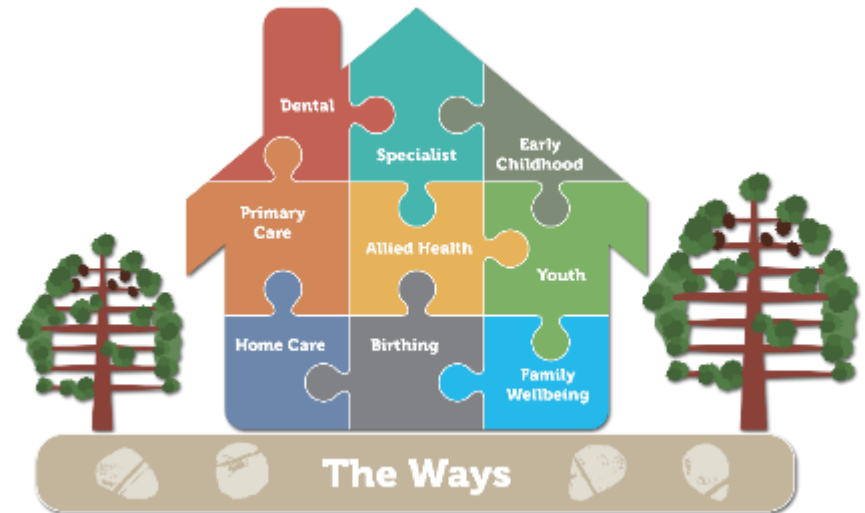
*I think overall there is definitely some really good outcomes out of the ATOMIC because I think we have had a lot more conversations around what is an appropriate goal and why (P2, FG3.P5.L157).*

# Mainstream



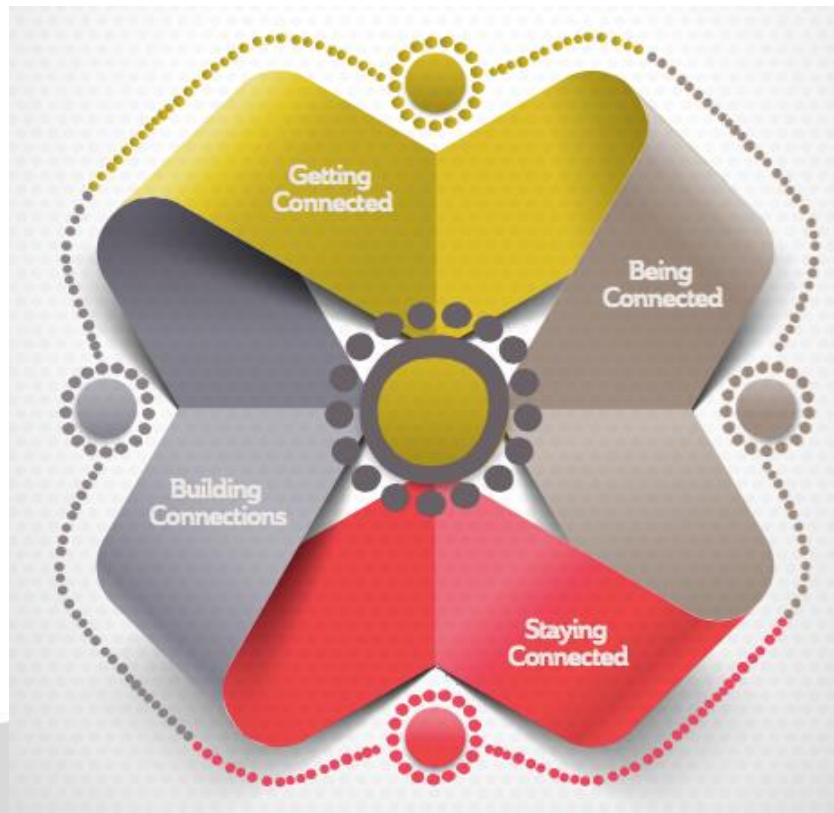
**VS**

# IUIH



# Making Connections

Alison Nelson, Tara Lewis & Chrisdell McLaren





# Methodology for Development

