
Short Paper

Knowledge Translation and Implementation Planning to Promote Research Governance in Nongovernment Organizations in the Torres Strait: Descriptive Study

Sanchia Shibasaki¹, BAppSc, MAE, PhD; Felecia Watkin Lui², PhD; Lynda Ah Mat², BA

¹ThinkThrough, Holland Park, Australia

²Cairns Institute, James Cook University, Smithfield, Australia

Corresponding Author:

Sanchia Shibasaki, BAppSc, MAE, PhD

ThinkThrough

PO Box 7083

Holland Park, 4121

Australia

Phone: 61 0447040224

Email: sanchia.shibasaki@gmail.com

Abstract

Background: Aboriginal and Torres Strait Islander people in Australia have participated in Western research for decades. When done well, research has resulted in significant benefits and positive impacts on society. However, the primary benefactor of this research has and continues to be researchers, with limited or no research knowledge mobilized for uptake and beneficial use by end users, such as individuals and communities. In 2021, the Torres Strait Islanders Research to Policy and Practice Hub (the Hub) at James Cook University designed and implemented several strategies, including a games-based interactive workshop with representatives from nongovernment organizations (NGOs). Feedback suggests the workshop and associated activities were a success.

Objective: We describe knowledge translation (KT) and implementation planning to design and implement strategies to increase awareness and understanding of NGOs in research governance.

Methods: This descriptive study involved representatives from NGOs on Thursday Island in the Torres Strait. We collected data from a literature review and informal discussions. We used several models and frameworks to guide our approach and underpin data collection and analysis.

Results: Designing and implementing strategies to increase awareness and understanding of NGOs in the Torres Strait to govern research involved several key steps: (1) identifying and defining what needed to change and who needed to change, (2) identifying and mapping barriers and facilitators, (3) selecting the most appropriate strategies to support change, (4) implementing activities, and (5) monitoring and evaluating our approach. We developed a program logic to understand and communicate to others how we would implement activities and what resources would be required to support this process. We drew on several evidence-based KT and implementation models and frameworks to do this. First, a KT planning template was used to inform what evidence we wanted to mobilize, to whom, and for what purpose. Based on this step, we recognized we wanted to bring about change with the target audience, and as such, we drew on the previously mentioned implementation planning models and frameworks. We collated the outcomes from these initial steps.

Conclusions: Our KT and implementation practice experience were successful. Encouraging researchers and end users to adopt similar practices requires investment in training and development of KT and implementation practice. This also entails modifying research standards and guidelines to include KT and implementation practice when working with Aboriginal and Torres Strait Islander people and other vulnerable groups, creating incentives for researchers and end users to embed KT and implementation practice in research, and recognizing and rewarding the benefits and impact beyond publication and presentation.

(*Interact J Med Res* 2022;11(2):e39213) doi: [10.2196/39213](https://doi.org/10.2196/39213)

KEYWORDS

knowledge translation; implementation planning; research governance; nongovernment organizations; nongovernment organisations; Aboriginal and Torres Strait Islander

Introduction

When done well, research has resulted in significant benefits and positive impacts on society [1]. In Australia, Aboriginal and Torres Strait Islander people have participated in Western research for decades [2-4]. However, the primary benefactor of this research has and continues to be researchers, with limited or no research knowledge mobilized for uptake and beneficial use by end users like individuals and communities [5-7]. Our ongoing work with nongovernment organizations (NGOs) in the Torres Strait suggests the following: continued distrust; limited awareness, skills, and experience in research best practices; and little evidence describing the practical application of knowledge translation (KT) and implementation practice by researchers [8,9].

In 2021, the Torres Strait Islanders Research to Policy and Practice Hub (the Hub) at James Cook University designed and implemented several activities, including a games-based interactive workshop with representatives from NGOs in the Torres Strait. Our success is described by a workshop participant: “as a Board member, I can see the importance and why Board members or management committee members or directors should do this training. This is important for us to sit down and get our heads around and understand research, especially when you’re going to be entering into contractual agreements.”

This paper describes KT and implementation planning to design and implement strategies to increase awareness and understanding of NGOs in research governance. Effective KT centers on Aboriginal and Torres Strait Islander communities and their wisdom to achieve maximum research impact through a carefully designed process that minimizes power dynamics

and privileges Aboriginal and Torres Strait Islander perspectives. Drawing on other definitions, KT is the reciprocal process of combining experiential wisdom with academic research. It involves a complex series of interactions between knowledge holders, producers, and users to achieve positive and sustainable long-term benefits for Aboriginal and Torres Strait Islander people [10,11]. Implementation is the process of putting to use or integrating new practices within a setting—it is about identifying and defining who needs to change and what individuals need to do differently, understanding and mapping barriers and facilitators, and selecting the most appropriate strategies to support change [12].

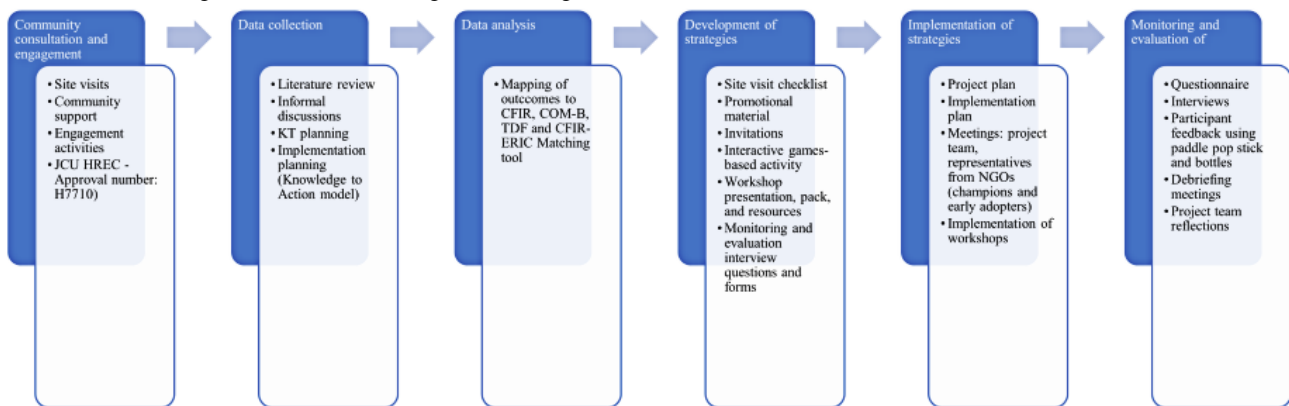
Methods

Data Collection

Figure 1 shows the methods used in this descriptive study. This paper will focus on the KT and implementation planning activities listed in the boxes titled data collection and analysis in Figure 1.

The study site was Thursday Island in the Torres Strait. The study participants were representatives from NGOs. We adopted the Knowledge to Action process model to guide our KT and implementation planning approach. We collected data from a literature review and informal discussions. The literature review focused on nationally endorsed research guidelines. Representatives from NGOs and project team members participated in informal discussions. We used a KT planning template to identify the evidence to mobilize, who were the intended users of this evidence, what key messages we wanted to share with the specified groups, and what goals we wanted to achieve with each group [13].

Figure 1. Study approach and methods. CFIR: Consolidated Framework for Implementation Research; CFIR-ERIC: CFIR-Expert Recommendations for Implementing Change; COM-B: Capability, Opportunity, Motivation, Behaviour; JCU HREC: James Cook University Human Research Ethics Committee; KT: knowledge translation; NGO: nongovernment organization; TDF: Theoretical Domains Framework.



Data Analysis

As shown in Figure 1, we used several frameworks to organize and analyze the data: the Consolidated Framework for Implementation Research (CFIR) [14], the Capability,

Opportunity, Motivation, Behaviour (COM-B) [15], the Theoretical Domains Framework (TDF), and the CFIR-ERIC (CFIR-Expert Recommendations for Implementing Change) Implementation Strategy Matching tool, version 1.0 [16].

CFIR described factors to consider in planning for implementation, such as the NGO's internal and external operating environments. COM-B identified what needed to change for a behavior change intervention to be effective and described barriers to change at the individual level. TDF was used to determine the specific influences on an individual's behavior. The CFIR-ERIC Matching tool identified the evidence-based strategy that was best suited to address known barriers.

Ethics Approval

The project obtained ethics approval from the James Cook University Human Research Ethics Committee (approval number: H7710).

Results

The CFIR factors deemed influential to our approach were (1) outer setting (ongoing demand for research, distrust, limited networking and routine communication between local NGOs, increase demand for NGOs to report on outcomes and impact,

limited local research workforce capacity and capability, cultural expectations and requirements about research practice) and (2) inner setting (NGOs are small to medium enterprises [20 to 50 staff], organizations 10 to 20 years of age, governed by a voluntary Aboriginal and Torres Strait Islander board of directors, limited funding and resources for NGOs to do or engage in research, NGOs provide a range of services and may be the only service provider for the region [competing interests and demands], NGOs share similar goals to improve the health and well-being of the local community).

As shown in [Table 1](#), the barriers to research at the individual level were as follows: distrust of researchers and the research process, limited time, limited support to backfill staff to attend training, little or no awareness of research guidelines such as the Keeping Research on Track II, lack of interest, and resistance to change.

[Textbox 1](#) displays the types of intervention strategies that can be used to address these barriers.

The program logic in [Figure 2](#) presents our approach to implementing the strategies above.

Table 1. Mapping of identified barriers to implementation strategies to implement a set of research guidelines in nongovernment organizations in the Torres Strait.

Barriers, COM-B ^a domain, and TDF ^b construct	Implementation strategy characteristics
Limited or no awareness of research guidelines such as the Keeping Research on Track II	
Capability	
Knowledge	<ul style="list-style-type: none"> • Deliver educational workshops • Dynamic training • Develop and distribute educational resources • Tailor approaches to the local context and practice
Distrust of researchers and the research process	
Motivation	
Emotion: fear, anxiety, and stress	<ul style="list-style-type: none"> • Capture and share local knowledge
Lack of familiarity with facilitators	
Motivation	
Emotion: fear, anxiety, and stress	<ul style="list-style-type: none"> • Capture and share local knowledge • Regular visits to organizations • Facilitator-supported activities • Identify and co-opt champions
Limited time	
Opportunity	
Environmental stressors	<ul style="list-style-type: none"> • Invite board members and senior executives
Resources	<ul style="list-style-type: none"> • Host events in the local community • Reduce participant costs through, for example, free events with catered meals
Limited to no support to backfill staff attending training	
Opportunity	
Organization culture and climate	<ul style="list-style-type: none"> • Invite board members and senior executives • Identify and co-opt champions
Resistance to change	
Motivation	
Optimism	<ul style="list-style-type: none"> • Identify and co-opt support from local opinion leaders
Intentions	<ul style="list-style-type: none"> • Assess readiness • Identify environmental and individual barriers and facilitators
Goals	<ul style="list-style-type: none"> • Collate outcomes from stakeholder meetings, discussions, and feedback (informal needs assessment)
Beliefs about consequences	<ul style="list-style-type: none"> • Same as above
Lack of interest	
Capability	
Knowledge	<ul style="list-style-type: none"> • Capture and share local knowledge
Opportunity	
Social influences	<ul style="list-style-type: none"> • Identify early adopters • Identify and co-opt support from local opinion leaders
Motivation	
Optimism	<ul style="list-style-type: none"> • Identify and co-opt champions

Barriers, COM-B ^a domain, and TDF ^b construct	Implementation strategy characteristics
Beliefs about consequences: outcome expectancies	<ul style="list-style-type: none"> • Same as above

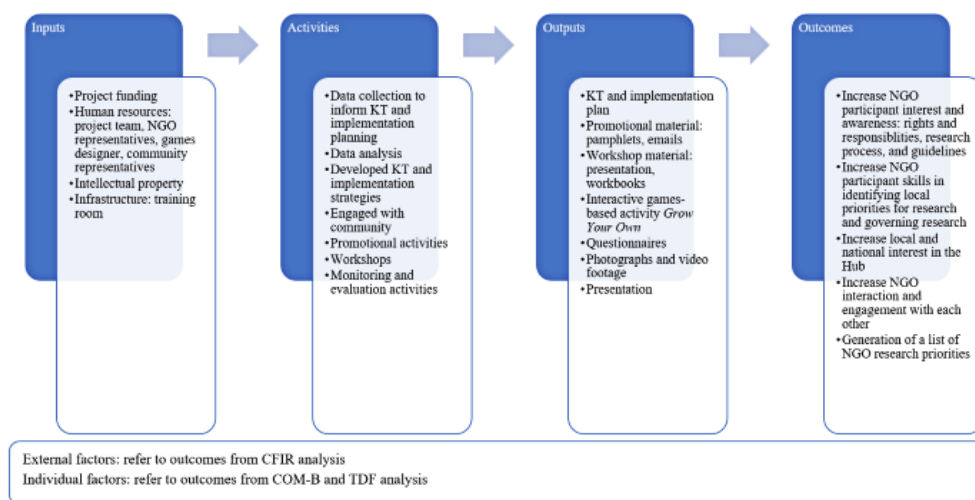
^aCFIR: Consolidated Framework for Implementation Research.

^bCOM-B: Capability, Opportunity, Motivation, Behaviour.

Textbox 1. Intervention strategies to address barriers.

- Needs assessment about what needs to change and readiness to change
 - Assess readiness
 - Identify environmental and individual barriers and facilitators
 - Collate outcomes from stakeholder meetings, discussions, and feedback
- Recognizing and embedding environmental barriers and enablers into approaches
 - Tailor approaches to the local context and practice
 - Capture and share local knowledge
 - Invite board members and senior executives
 - Host events in the local community
 - Reduce participant costs through free events with catered meals
- Developing and implementing strategies based on target audience needs
 - Develop and distribute educational resources
 - Deliver educational workshops
 - Dynamic training
 - Facilitator-supported activities
- Gaining target audience and community trust
 - Regular visits to organizations
 - Identify and co-opt champions, local opinion leaders, and early adopters

Figure 2. Program logic of study inputs, activities, outputs, and outcomes. CFIR: Consolidated Framework for Implementation Research; COM-B: Capability, Opportunity, Motivation, Behaviour; KT: knowledge translation; NGO: nongovernment organization; TDF: Theoretical Domains Framework.



Discussion

Principal Results

Our approach to designing and implementing strategies to increase awareness and understanding of NGOs in the Torres Strait to govern research involved several steps: (1) identifying and defining what needed to change and who needed to change, (2) identifying and mapping barriers and facilitators, (3) selecting the most appropriate strategies to support change, (4) developing and implementing activities, and (5) monitoring and evaluating our approach.

A KT planning template was used to inform what evidence we wanted to mobilize, to whom, and for what purpose. Based on this step, we recognized we wanted to initiate change with the target audience. We drew on several evidence-based KT and implementation models and frameworks to do this. We drew on the previously mentioned implementation planning models and frameworks. We collated outcomes from these initial steps and developed a program logic to understand how we would implement the strategies and what resources we required to support this process.

The approach we took in this study is not new [14,17,18]. However, there is limited but growing evidence describing the successful use and application of KT and implementation planning practices in NGOs in Aboriginal and Torres Strait Islander communities in Australia [19-21]. By supporting and strengthening these practices, we ensure evidence is mobilized effectively from research to end users. We also enhance end-user capacity and capability to draw on evidence to inform the design and implementation of programs and services in their communities for local benefit and impact. Finally, we demonstrate a systematic approach to inform the decision making of funding authorities and policy makers.

Strengths and Limitations

Strengths included having Torres Strait Islander researchers and project team members lead and implement the research, a strong level of trust and engagement between researchers and NGOs, and the presence of team capability in KT and implementation planning. The limitations of the project relate to the sample size and study site (all NGOs were in the same remote community). As such, the findings from this project are not generalizable to the broader NGO audience. Timing and time frames were also a limitation. The project timeline was 6 months during COVID-19 restrictions when travel restrictions were in place. The project team could not travel to other parts of Australia to collect data. Furthermore, there were limited project resources to fund an expansion of the project.

Conclusion

Based on our individual and collective experiences, we know programs, services, and practices are designed and implemented from what we think we know and expect. We have participated in various meetings, forums, and workshops that provided opportunities for participants to catch up and network but were unsuccessful in initiating and sustaining change. We have written journal publications and presented at conferences to enhance our track record but did little to improve investment in local communities. We wanted to disrupt this status quo and embark on an approach to increase awareness and understanding and initiate behavior change. Our KT and implementation practice experience were successful. Encouraging researchers and end users to adopt similar practices will require the following: (1) investment in training and development on KT and implementation practice, (2) modifying research standards and guidelines to include KT and implementation practice when working with Aboriginal and Torres Strait Islander people and other vulnerable groups, (3) creating incentives for researchers and end users to embed KT and implementation practice in research, and (4) recognizing and rewarding benefits and impact beyond the publication and presentation.

Acknowledgments

We gratefully acknowledge the support of the Australian Research Council (IN190100061), the Australian Institute of Tropical Health and Medicine, HOT North led by Menzies School of Health Research, representatives from nongovernment organizations on Thursday Island, and Boho Interactive.

Data Availability

This paper includes all data generated or analyzed in this study.

Conflicts of Interest

None declared.

References

1. Impact studies. Australian Research Council. URL: <https://dataportal.arc.gov.au/EI/Web/impact/ImpactStudies#/20/1/indigenous/> [accessed 2022-04-04]
2. Keeping Research on Track: a guide for Aboriginal and Torres Strait Islander peoples about health research ethics. National Health and Medical Research Council. 2005. URL: <https://www.nhmrc.gov.au/about-us/publications/keeping-research-track> [accessed 2022-10-26]

3. Keeping Research on Track II: a companion document to Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders. Analysis & Policy Observatory. Australia: National Health and Medical Research Council; 2018 Aug 02. URL: <https://apo.org.au/node/185011> [accessed 2022-10-27]
4. Ethical conduct in research with Aboriginal and Torres Strait Islander peoples and communities: guidelines for researchers and stakeholders. National Health and Medical Research Council. 2018. URL: <https://www.nhmrc.gov.au/about-us/resources/ethical-conduct-research-aboriginal-and-torres-strait-islander-peoples-and-communities> [accessed 2022-10-26]
5. The Lowitja Institute, Australian Institute of Aboriginal and Torres Strait Islander Studies. Evaluation of the National Health and Medical Research Council documents: Values and Ethics: Guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research 2003 and Keeping Research on Track: a guide for Aboriginal and Torres Strait Islander peoples about health research ethics 2005. URL: <https://www.nhmrc.gov.au/sites/default/files/documents/Indigenous%20guidelines/evaluation-values-ethics-research-on-track.pdf> [accessed 2022-10-26]
6. Kinchin I, McCalman J, Bainbridge R, Tsey K, Lui FW. Does Indigenous health research have impact? A systematic review of reviews. *Int J Equity Health* 2017 Mar 21;16(1):52 [FREE Full text] [doi: [10.1186/s12939-017-0548-4](https://doi.org/10.1186/s12939-017-0548-4)] [Medline: [28327137](https://pubmed.ncbi.nlm.nih.gov/28327137/)]
7. Bainbridge R, Tsey K, McCalman J, Kinchin I, Saunders V, Watkin Lui F, et al. No one's discussing the elephant in the room: contemplating questions of research impact and benefit in Aboriginal and Torres Strait Islander Australian health research. *BMC Public Health* 2015 Jul 23;15(1):696 [FREE Full text] [doi: [10.1186/s12889-015-2052-3](https://doi.org/10.1186/s12889-015-2052-3)] [Medline: [26202429](https://pubmed.ncbi.nlm.nih.gov/26202429/)]
8. Cheer K, Lui FW, Shibasaki S, Harvey A, Grainger D, Tsey K. The case for a Torres Strait Islander-driven, long-term research agenda for environment, health and wellbeing. *Aust N Z J Public Health* 2020 Jun 20;44(3):177-179. [doi: [10.1111/1753-6405.12979](https://doi.org/10.1111/1753-6405.12979)] [Medline: [32311200](https://pubmed.ncbi.nlm.nih.gov/32311200/)]
9. Shibasaki S, Harvey A, Ah Mat L, Watkin Lui F. A research participant and end-user approach to research collaboration and co-development in the Torres Strait. *Int J Comm Soc Dev* 2022 Aug 24. [doi: [10.1177/25166026221115581](https://doi.org/10.1177/25166026221115581)]
10. Smylie J, Martin CM, Kaplan-Myrth N, Steele L, Tait C, Hogg W. Knowledge translation and indigenous knowledge. *Int J Circumpolar Health* 2004 Dec 15;63 Suppl 2(sup2):139-143. [doi: [10.3402/ijch.v63i0.17877](https://doi.org/10.3402/ijch.v63i0.17877)] [Medline: [15736639](https://pubmed.ncbi.nlm.nih.gov/15736639/)]
11. Knowledge translation - definition. Canadian Institutes of Health Research. URL: <http://www.cihr-irsc.gc.ca/e/29418.html#2> [accessed 2022-09-10]
12. Designing for implementation (2021-2022 cohort). The Center for Implementation. URL: <https://thecenterforimplementation.teachable.com/p/designing-for-implementation> [accessed 2022-01-09]
13. Barwick MA. Knowledge translation planning template. The Hospital for Sick Children. 2008. URL: <https://tinyurl.com/44u52vbe> [accessed 2022-10-26]
14. Birken SA, Powell BJ, Presseau J, Kirk MA, Lorencatto F, Gould NJ, et al. Combined use of the Consolidated Framework for Implementation Research (CFIR) and the Theoretical Domains Framework (TDF): a systematic review. *Implement Sci* 2017 Jan 05;12(1):2 [FREE Full text] [doi: [10.1186/s13012-016-0534-z](https://doi.org/10.1186/s13012-016-0534-z)] [Medline: [28057049](https://pubmed.ncbi.nlm.nih.gov/28057049/)]
15. De Leo A, Bayes S, Bloxsome D, Butt J. Exploring the usability of the COM-B model and Theoretical Domains Framework (TDF) to define the helpers of and hindrances to evidence-based practice in midwifery. *Implement Sci Commun* 2021 Jan 12;2(1):7 [FREE Full text] [doi: [10.1186/s43058-020-00100-x](https://doi.org/10.1186/s43058-020-00100-x)] [Medline: [33436092](https://pubmed.ncbi.nlm.nih.gov/33436092/)]
16. CFIR-ERIC Matching tool, version 1.0. Consolidated Framework for Implementation Research. 2019. URL: <https://cfirguide.org/choosing-strategies/> [accessed 2022-10-27]
17. Tchameni Ngamo S, Souffez K, Lord C, Dagenais C. Do knowledge translation (KT) plans help to structure KT practices? *Health Res Policy Syst* 2016 Jun 17;14(1):46 [FREE Full text] [doi: [10.1186/s12961-016-0118-z](https://doi.org/10.1186/s12961-016-0118-z)] [Medline: [27316972](https://pubmed.ncbi.nlm.nih.gov/27316972/)]
18. Garbutt JM, Dodd S, Walling E, Lee AA, Kulka K, Lobb R. Theory-based development of an implementation intervention to increase HPV vaccination in pediatric primary care practices. *Implement Sci* 2018 Mar 13;13(1):45 [FREE Full text] [doi: [10.1186/s13012-018-0729-6](https://doi.org/10.1186/s13012-018-0729-6)] [Medline: [29534761](https://pubmed.ncbi.nlm.nih.gov/29534761/)]
19. Brinckley M, Bourke S, Watkin Lui F, Lovett R. Knowledge translation in Aboriginal and Torres Strait Islander research contexts in Australia: scoping review protocol. *BMJ Open* 2022 Jul 15;12(7):e060311 [FREE Full text] [doi: [10.1136/bmjopen-2021-060311](https://doi.org/10.1136/bmjopen-2021-060311)] [Medline: [35840302](https://pubmed.ncbi.nlm.nih.gov/35840302/)]
20. Shibasaki S, Gardner K, Sibthorpe B. Using knowledge translation to craft “sticky” social media health messages that provoke interest, raise awareness, impart knowledge, and inspire change. *JMIR Mhealth Uhealth* 2016 Oct 05;4(4):e115 [FREE Full text] [doi: [10.2196/mhealth.5987](https://doi.org/10.2196/mhealth.5987)] [Medline: [27707685](https://pubmed.ncbi.nlm.nih.gov/27707685/)]
21. Morton Ninomiya ME, Maddox R, Brascoupe S, Robinson N, Atkinson D, Firestone M, et al. Knowledge translation approaches and practices in Indigenous health research: a systematic review. *Soc Sci Med* 2022 May;301:114898 [FREE Full text] [doi: [10.1016/j.socscimed.2022.114898](https://doi.org/10.1016/j.socscimed.2022.114898)] [Medline: [35504232](https://pubmed.ncbi.nlm.nih.gov/35504232/)]

Abbreviations

CFIR: Consolidated Framework for Implementation Research

CFIR-ERIC: CFIR-Expert Recommendations for Implementing Change

COM-B: Capability, Opportunity, Motivation, Behaviour

KT: knowledge translation
NGO: nongovernment organization
TDF: Theoretical Domains Framework

Edited by A Mavragani; submitted 03.05.22; peer-reviewed by M Raimi, J Brown, T Zhang; comments to author 01.09.22; revised version received 09.09.22; accepted 17.10.22; published 01.11.22

Please cite as:

Shibasaki S, Watkin Lui F, Ah Mat L

Knowledge Translation and Implementation Planning to Promote Research Governance in Nongovernment Organizations in the Torres Strait: Descriptive Study

Interact J Med Res 2022;11(2):e39213

URL: <https://www.i-jmr.org/2022/2/e39213>

doi: [10.2196/39213](https://doi.org/10.2196/39213)

PMID:

©Sanchia Shibasaki, Felecia Watkin Lui, Lynda Ah Mat. Originally published in the Interactive Journal of Medical Research (<https://www.i-jmr.org/>), 01.11.2022. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in the Interactive Journal of Medical Research, is properly cited. The complete bibliographic information, a link to the original publication on <https://www.i-jmr.org/>, as well as this copyright and license information must be included.