



**TOM TRAUER EVALUATION & RESEARCH ENTRY**

**ENTRY TITLE:** The LifeSpan suicide prevention model: delivering evidence-based research and suicide prevention interventions to save lives.

**NAME OF APPLICANT:** The LifeSpan team, led by A/Prof Fiona Shand & A/Prof Michelle Tye.

**ORGANISATION:** Black Dog Institute, University of New South Wales.

## **Additional Information** (up to 1 x A4 page)

### **Background of the LifeSpan multi-strategy suicide prevention model**

Intentional self-harm contributes significantly to global mortality and disability, with many countries, including Australia, showing no reduction in suicide death and attempt rates in the past two decades. Current World Health Organization (WHO) guidelines recommend the use of suicide prevention models that emphasise the implementation of multiple evidence-based strategies, multi-sectorial collaboration, and surveillance and monitoring. Prior studies have shown that multi-strategy models can reduce rates of suicidal behaviour by as much as 24% after two or more years of implementation. However, the evidence for the effectiveness of these models is mixed, which may in part be attributed to difficulties in implementing the model with the intended fidelity, the inclusion of programs or interventions with no evidence for reducing suicidality, and the use of trial designs that fail to control for external events and affect causality. Models that *improve* suicide recognition may also increase detection rates, creating a false negative finding that these interventions do not work.

In 2015, the Black Dog Institute was funded by the NSW Mental Health Commission to develop a framework for a place-based, multi-strategy suicide prevention model. The model, known as “**LifeSpan**”, was developed in accordance with the WHO best-practice guidance in suicide prevention. LifeSpan was intended to build a safety net for communities by connecting and coordinating the delivery of evidence-based suicide prevention interventions and programs and building the capacity of the community to better support people facing a suicide crisis. The model involves the implementation of nine universal, selective, and indicated strategies across education, community, and health systems in a defined geographical region. We undertook a rapid review of published trials and meta-analyses to identify interventions for inclusion which demonstrated efficacy in reducing suicide attempts and/or death. Relative to previous trials of multi-strategy interventions, LifeSpan had a strengthened focus on building and supporting regional suicide prevention collaboratives to provide local governance relating to implementation. In 2016, the Black Dog Institute was awarded \$14.76 million from the Paul Ramsay Foundation to trial and assess the impact of the LifeSpan model. Over the past 7 years we have tested this model in 4 communities in NSW, in a stepped-wedge randomised trial, to determine whether rates of hospital-treated self-harm would be lower after the 24-months of the implementation of LifeSpan compared to rates in the pre-implementation period. The final results are currently under review, but they show that LifeSpan was effective.

**Criteria** (up to 10 x A4 pages)

**1. Evidence of contribution to, or potential impact on, mental health service improvement.**

In 2016, the Paul Ramsay Foundation provided \$14.76M in funding to the Black Dog Institute to undertake the largest ever suicide prevention trial to take place in Australia. The innovation and scale of this research has made an exceptional contribution to suicide prevention in Australia, as it initiated a series of ground-breaking policy and practice changes across Australia. These changes started with the publication of early 'LifeSpan' outputs, which included a paper quantifying the potential impacts that could be gained from a multi-strategy suicide prevention model, and a multi-strategy suicide prevention commissioning guide for Primary Health Networks [PHNs]. These evidence pieces, along with the trial funding, acted as a linchpin of considerable change in national suicide prevention policy. The LifeSpan model and commissioning framework became a key driver in the development of the Commonwealth's Fifth National Mental Health & Suicide Prevention Plan. This Plan, for the first time in Australia, committed all governments to work together to achieve regional planning and delivery of effective interventions. LifeSpan is cited in this major policy document as providing critical guidance to shaping the actions outlined in the Plan, and this led the Commonwealth government to commit \$50 million to fund 12 PHNs across the country to deliver a multi-strategy suicide prevention strategy (11 sites implemented LifeSpan). This impact occurred less than 12 months after LifeSpan framework was formalised.

Many of the interventions included in the LifeSpan model have also gone on to have significant impacts, nationally and internationally.

Impacts on the education system: We implemented and evaluated a proven-effective schools-based suicide prevention program as part of LifeSpan; the program is known as Youth Aware of Mental Health [YAM]. The program was implemented in partnership with the NSW Department of Education. Our early findings from the evaluation of YAM as part of LifeSpan, showed that YAM was able to reduce the number of students reporting serious suicidal thoughts by 25% (equating to 3,750 students with reduced suicide risk based on 15,000 students having been exposed) and demonstrated that the delivery model works in Australian secondary schools. These findings were critical influencing factors in the NSW Department of Education's decision to adopt YAM, making it available to all NSW schools. Since 2018, more than 18,000 students from over 110 schools have now received YAM. The work Black Dog Institute did in bringing YAM to Australia and adding to the evidence base for this program also led to YAM being cited in NSW Government's 'Strategic Framework for Suicide Prevention' policy, as guidance for building wellbeing in communities.

Health system impact. LifeSpan had three strategies focused on the health system: (1) to improve the crisis and aftercare response for people experiencing suicidal crisis; (2) to use evidence-based treatment for suicidality, and (3) to equip primary care to identify and support people experiencing distress. Hospital emergency departments in the trial sites were involved in reviewing their crisis response against a set of specifically developed Delphi guidelines (involving two panels: health professionals and lived experience advisors), dedicated aftercare services were established, referral pathways were reviewed and improved, and general practitioners and mental health professionals were provided with advanced suicide prevention skills to identify and support people experiencing suicidal distress. Some sites chose to implement the evidence-based Collaborative Assessment and Management of Suicidality [CAMS], with implementation support from the LifeSpan team. As a result of lived experienced engagement in the largest trial site, they were the first to codesign and implement an alternative to the emergency department for people experiencing suicidal distress (a safe space or safe haven).

Influencing changes to data-driven decision making: Our team developed a suicide audit methodology for LifeSpan, known as a suicide data analytical report. It was designed to integrate data-driven decision-making into the suicide prevention commissioning decisions of PHNs. In 2021, this methodology was included as a best practice example of a data analytics system in the World Health Organization's 'Live Life' implementation guide for suicide prevention. In response to the appetite for our data analytic reports from the PHNs involved in LifeSpan, in 2018 we submitted a funding proposition to the Commonwealth government to establish a national suicide monitoring system that could be used to inform health networks about priority actions for suicide prevention in their local regions. This proposal led to the establishment of the National Suicide and Self-harm Monitoring Project in 2019, managed by Australian Institute of Health & Welfare. It also initiated a widespread prioritisation of data-driven decision making in several suicide prevention policies in the past five years, including in the 2020 National Suicide Prevention Adviser's 'Final Advice'.

Collectively, the LifeSpan study has directly led to evidence-based programs, evidence-based guidance, and data-driven decision making being prioritised nationally in a concerted effort to optimise prevention impacts.

## **2. Evidence of research excellence**

The excellence of the LifeSpan research team is collectively demonstrated via traditional academia via peer-reviewed publications, scientific presentations, awards, and in contributing to work that has had significant policy and practice influence at both Commonwealth and State levels, as described previously. Both A/Prof Fiona Shand and A/Prof Michelle Tye have outstanding track records in suicide prevention, and in their roles as the Director and co-Director of LifeSpan

(respectively), they have led a high-performing team of nine postdoctoral fellows and research (and data) officers.

Fiona Shand is Associate Professor at the Black Dog Institute, UNSW, a medical research facility within UNSW, Sydney, where she is Head of Suicide Prevention Research, and the crisis and aftercare research stream lead on the NHMRC Centre for Research Excellence in Suicide Prevention. She leads a team of 14 researchers (7 scholars, 7 research support staff) and 12 PhD candidates. The current budget for her team's grant funding is ~ \$14 million. Fiona has been an investigator on 25 projects in the last 10 years, with a total of \$25.7 million in funding in that period. Her research expertise includes large scale suicide prevention models, crisis and aftercare health service responses, epidemiology, and implementation science. Her 130+ peer reviewed papers, reports, books, and book chapters have been cited more than 3,400 times, including inclusion of two projects in the World Health Organization's *Live Life* implementation guide for suicide prevention (LifeSpan and the iBobbly app). Her work on LifeSpan and suicide aftercare services has strongly influenced policy. Fiona is a director of Suicide Prevention Australia, a member of the National Suicide Prevention Office Working Group on governance and social determinants of suicide, and advises regularly on a range of government suicide prevention services, policies, and frameworks.

A/Prof Michelle Tye is an Associate Professor at the Black Dog Institute, UNSW. She is currently funded by an NHMRC 'Emerging Leader' Investigator award (2022 – 2026) to lead a translational program of research, supported by a team of 8, that aims to develop new ways of understanding and prevention self-harm and suicide in young people. Her expertise in novel research methodologies, epidemiology, digital health, and implementation science position her at the forefront of national research in youth suicide prevention. She has published over 110 peer-reviewed articles and book chapters (70% in suicide prevention) and authored >10 policy-ready reports, which contribute to reducing the knowledge to practice gap. Her work has been cited >1,700 times, including in international guidelines on best practice in suicide prevention (e.g., in the WHO Live Life implementation guide published in 2021). Michelle has total career funding (Category 1 and other) of >\$20 million as a CI (~\$4 million is current) and ~\$9.5 million as an Associate Investigator. She has received 15 peer-reviewed competitive awards during her career, including a Society for Mental Health Research 'Rising Star' Award (2022); a Paul Bourke Award for Early Career Excellence (2020), and The Mental Health Society ECR Award for Innovation (2019). She is nationally recognised as a suicide prevention leader, as evidenced by invited presentations (n=10), invited expert advisory group roles to contribute to state-level suicide prevention frameworks (n=3), and in her invited role as part of national suicide prevention consortium funded by the National Suicide Prevention Leadership scheme. She is also the Deputy Chair and Board Director for the Anika Foundation in youth suicide and depression prevention, which provides scholarships to advance work in these areas.

The LifeSpan research team, comprised of 5 early career postdocs and 5 research/data officers, have achieved excellence in their careers as a result of opportunities afforded by this work. Under our co-leadership, the LifeSpan team won a highly commended award for Data Innovation from Research Australia in 2019, which recognised the innovation of the data capture systems and data assets our team established to evaluate LifeSpan's impact. Individual members of the team have won prestigious awards that highlight their excellent contributions to this work. Dr Jiahui Qian was awarded a 2021 PREMISE Career Development Support Grant from the Matilda Centre (USyd) to continue developing spatial suicide research that was being conducted in collaboration with geographers at Australian National University to assess where LifeSpan was having impact. Dr Lauren McGillivray won a national peer-reviewed award for Early Career Researcher potential from the Society of Mental Health Research (2022). Impressively, around 65% of the published papers from the LifeSpan trial have been led by this team of postdocs and research officers. They have collectively contributed to over 20 media stories on various aspects of LifeSpan, two of the research officers were awarded prestigious Australian government scholarships to undertake a PhD, and for some, this work has led to leadership positions that are rare for their career stage – e.g., one of the data officers, Alex Burnett, was invited to join the steering committee for the development and evaluation of the NSW Suicide Monitoring and Data Management System, alongside representatives from NSW Health, Communities and Justice, the State Coroner, and NSW Police. Two of LifeSpan's data analysts, under the mentorship of the project leads, have gone on to join the prestigious NSW Health biostatistician training program.

### **3. Evidence of participation of mental health consumers in the planning, implementation and evaluation.**

The LifeSpan work could not have happened or had the impact it has without the input of mental health consumers. The LifeSpan Research Advisory Committee included the CEO of Roses in the Ocean, Australia's peak suicide prevention lived experience organisation, as well as strong lived experience engagement at each of the trial sites. This was particularly evident at the Illawarra Shoalhaven site where their lived experience team ultimately led the co-design of one of the first safe spaces to be established in Australia. We commissioned the LifeSpan lived experience engagement framework from Dr Michelle Banfield at the ANU Lived Experience Research Unit, Centre for Mental health Research, which formed the basis for lived experience engagement across the project and has been instrumental in embedding lived experience engagement for all of Black Dog Institute's research, and resulted in the appointment of our first lived experience engagement manager. Our lived experience engagement framework was the first to be established in suicide prevention. As LifeSpan was the basis for an additional 12 national pilot projects funded by the federal government, it also provided a platform for Roses in the Ocean to liaise with Primary Health Networks nationally to engage with their implementation of their suicide prevention framework.

#### **4. Evidence of Partnerships and Linkages (collaboration for continuity between organisations).**

As a large-scale research implementation project, LifeSpan required the establishment of formal and informal partnerships with government, universities, service and program providers, and non-government organisations, to ensure its success and sustainability. The LifeSpan Research Advisory Committee included members from departments of health, the three universities, and CALD, lived experience, and Aboriginal and Torres Strait Islander organisations; these collaborations are still strong even after the completion of the project. For example, we have an ongoing partnership with the Centre for Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention to develop an Indigenous systems approach to suicide prevention. Our formal partnerships with the NSW and ACT Departments of Education have resulted in them taking over the YAM program for delivery into NSW and ACT high schools. As a result of LifeSpan, Black Dog Institute continues to support Primary Health Networks and regional suicide prevention collaboratives to build capacity, work that is funded by the NSW and federal departments of health. We have ongoing advisory roles in government advisory and working groups across policy, health services, and suicide data resulting from the partnerships developed during the LifeSpan project.

#### **5. Verification and Evaluation of the research effectiveness in achieving the goals of the investigation(s).**

Included below are a few key papers that verify the scientific rigour, innovation, and some early impacts of the LifeSpan trial. A full list of papers can be found in the Appendix.

Krysinska, K., Batterham, P., Torok, M., Shand, F.,.... & Christensen, H. (2016). Best strategies for reducing the suicide rate in Australia. ANZJP, 50, 115-118. doi:10.1177/0004867415620024

*This paper was the basis of the 'LifeSpan' multi-strategy model for suicide prevention, demonstrating the potential reductions in suicide and self-harm rates that could be achieved by delivering multiple interventions, simultaneously. This paper has been regularly cited in State- and national suicide prevention policy, including the Commonwealth's Fifth National Mental Health & Suicide Prevention Plan, in support of multi-strategy approaches.*

Ridani, R., Torok, M., Shand, F., Holland, C., Murray, S., ..., Christensen, H. An evidence-based systems approach to suicide prevention: guidance on planning, commissioning, and monitoring for Primary Health Networks. Australian Government Department of Health.

*This commissioning guide is often seen as the 'implementation' guide for the LifeSpan model, and it had a key role in building the influence of LifeSpan, having been cited often in various policy documents, both nationally and at the state level.*

Shand, F & Torok, M, Cockayne, N., Batterham, P, Calear, A., Mackinnon A., Martin D., Zbukvic I., Mok K., Chen N., McGillivray L., Phillips M., Cutler H., Draper B., Sara G., Christensen, H. (2020). Protocol for a stepped-wedge cluster randomised controlled trial of the LifeSpan suicide prevention trial in four communities in NSW, Australia. *Trials*, 21:332.

*This protocol paper describes the robust trial methodology we developed to test the effectiveness of the LifeSpan intervention. This is the first study to test a pragmatic, multi-strategy intervention using a stepped-wedge cluster randomised trial. It also shows (in the co-author list) the extent of collaboration required to deliver a trial of this scale.*

McGillivray, L., Shand, F., Calear, A.L....Torok, M. The Youth Aware of Mental Health program in Australian Secondary Schools: 3- and 6-month outcomes. *Int J Ment Health Syst* 15, 79 (2021). doi:10.1186/s13033-021-00503-w

*This paper describes findings from the first Australian evaluation of YAM – a health promotion and suicide prevention program for young people. This evaluation has contributed to significant health and social outcomes for secondary school students, where the positive findings from this work have led the New South Wales (NSW) Department of Education to make YAM available to all NSW secondary schools. As a result, more than 15,000 students from >300 schools have now been exposed to this suicide prevention program.*

Long, J.C., Ruane, C., Ellis, L.A., Lake, R., Le Roux, A., Testa, L., Shand, F., Torok, M., Zurynski, Y. (2022). Networks to strengthen community social capital for suicide prevention in regional Australia: The LifeSpan Suicide Prevention Initiative. *Int J Ment Health Syst* 16, 10. doi:10.1186/s13033-022-00524-z

*This network analysis highlighted the importance of the LifeSpan implementation model – which included a local site coordinator to manage the overall implementation and a suicide prevention collaborative to make sure all relevant stakeholders were represented in local implementation decisions. Via these mechanisms, there were significant improvements in the capacity of local communities to run suicide prevention activities, communication between agencies, and in the coordination of efforts. This work led to the federal government investment in continuing site coordinator roles as part of the national suicide prevention trials (which were borne from LifeSpan), to ensure the ongoing delivery of suicide prevention initiatives in these regions.*



## **Conclusion**

The LifeSpan program represents world-first, innovative research, focused on building and translating a new public health model that can benefit communities by building everyone's capacity to have a role in suicide prevention. Our research has demonstrated the positive impact of having local agency and responsibility in delivering a complex intervention into a community, and in having individuals with a lived experience of suicide share in decision making processes. Importantly, it contributed significantly to capacity building in the suicide prevention workforce at all levels, and to the development of researchers with skills in data analytics, implementation science, and health services research. The project has led to sustained partnerships and ongoing impact in suicide prevention policy and practice.

This research aligns closely with Tom Trauer's values by contributing to mental health service improvement, demonstrating research excellence and impact, the benefits of collaboration and partnership, and involving mental health consumers in a meaningful way in the research and knowledge translation process.

## **Appendix of Support Material (up to 8 x A4 pages)**

**Links to other documents or websites may only be included in the Appendix/Supporting Material Section (2xA4 Pages) and are not to be included anywhere else in the submission. Links to other documents or websites in the main submission will not be considered by the judges.**

Black Dog Institute webpage for LifeSpan:

- <https://www.blackdoginstitute.org.au/research-centres/lifespan-trials/>

Videos:

- Black Dog Institute YouTube video:  
<https://www.youtube.com/watch?v=IJrqM296YIE>
- Black Dog Institute produced a video in partnership with SAS about our Suicide Prevention Intelligence System. It includes a narrative about how the system was used by Newcastle site leads: <https://youtu.be/v4BRsxWXzdc>
- LifeSpan Site Coordinator videos promoting LifeSpan and QPR as well as interviewing those involved (collaborative members) and those impacted (lived experience representatives):
  - Central Coast: <https://suicidepreventioncentralcoast.org.au/lifespan/>
  - Newcastle: <https://vimeo.com/344948318>
  - Illawarra Shoalhaven: <https://www.suicidepreventioncollaborative.org.au/whats-happening/news/help-us-spread-the-word-about-suicide-prevention/>

World Health Organization's 'Live Life' implementation guide for suicide prevention (p-82):

- <https://www.who.int/publications/i/item/9789240026629>

Some examples of Media coverage:

- <https://www1.racgp.org.au/newsgp/professional/lifespan-a-focus-on-preventing-suicide>
- <https://www.abc.net.au/news/2016-08-04/community-approach-focus-of-new-suicide-prevent-trial-nsw/7688070>
- <https://education.nsw.gov.au/news/mental-health-program-reduces-suicidal-thoughts-in-students>
- <https://www.abc.net.au/news/2021-12-10/suicide-prevention-program-high-school-trials-helping-students/100687334>
- <https://canberraweekly.com.au/helpings-of-yam-give-moral-fibre-to-teenagers/>
- <https://www1.racgp.org.au/newsgp/professional/lifespan-a-focus-on-preventing-suicide>
- <https://newsroom.unsw.edu.au/news/health/trend-we-must-reverse>

- <https://www.abc.net.au/news/2020-09-24/youth-suicide-north-coast-nsw-it-takes-a-village/12540450>
- <https://www1.racgp.org.au/newsgp/clinical/sharp-increase-in-deaths-from-suicide-sparks-calls>
- <http://bitly.ws/DcN9>

Government planning and reports:

- [https://www.health.gov.au/sites/default/files/documents/2021/11/national-suicide-prevention-trial-final-evaluation-report\\_0.pdf](https://www.health.gov.au/sites/default/files/documents/2021/11/national-suicide-prevention-trial-final-evaluation-report_0.pdf)
- <https://www.mentalhealthcommission.gov.au/getmedia/0209d27b-1873-4245-b6e5-49e770084b81/Fifth-National-Mental-Health-and-Suicide-Prevention-Plan#:~:text=The%20Fifth%20Plan%20commits%20to,and%20effective%20mental%20health%20system.>
- <https://www.health.nsw.gov.au/mentalhealth/resources/Publications/strategic-framework-implementation-plan.pdf>
- <https://www.aihw.gov.au/getmedia/51b23bb4-4cb8-4ce0-a5a8-7604175095e6/BDI-and-SAS-Report-AIHW-Final-Report.pdf.aspx>

Figures and images:

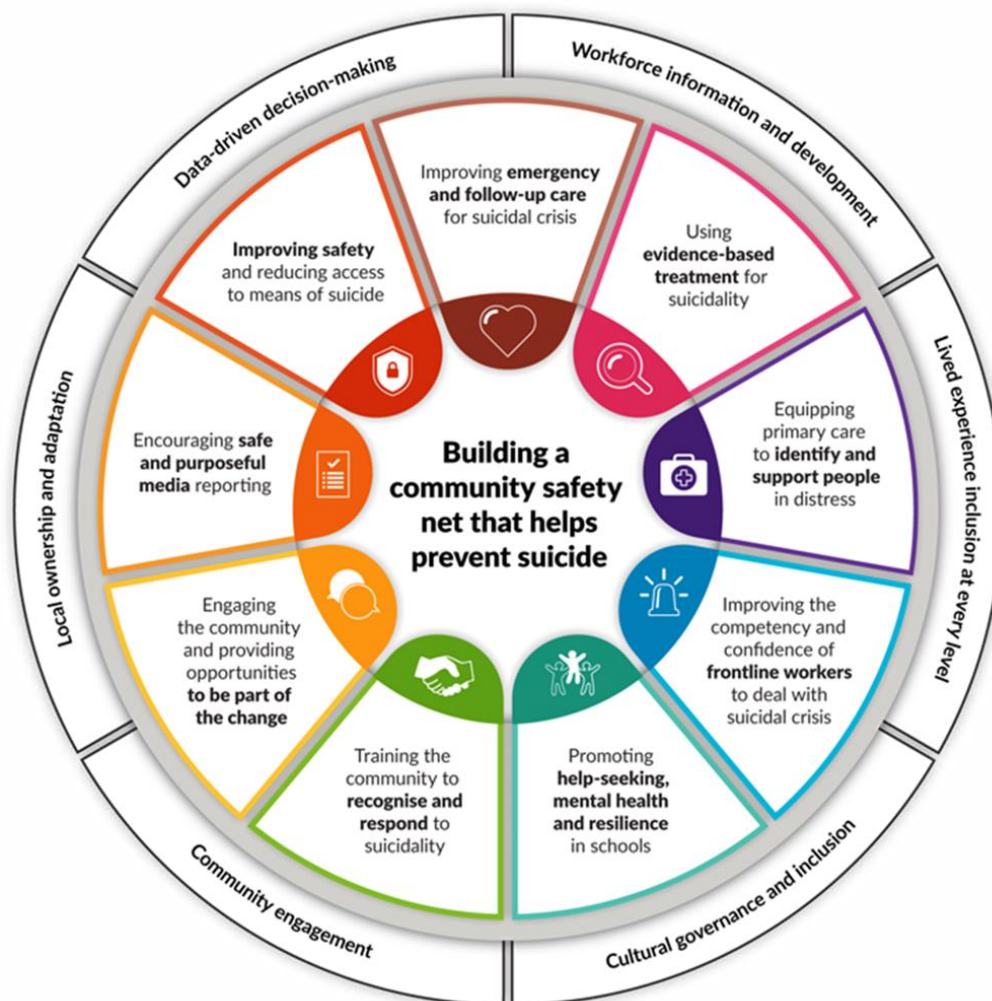


Figure 1. LifeSpan Suicide Prevention model

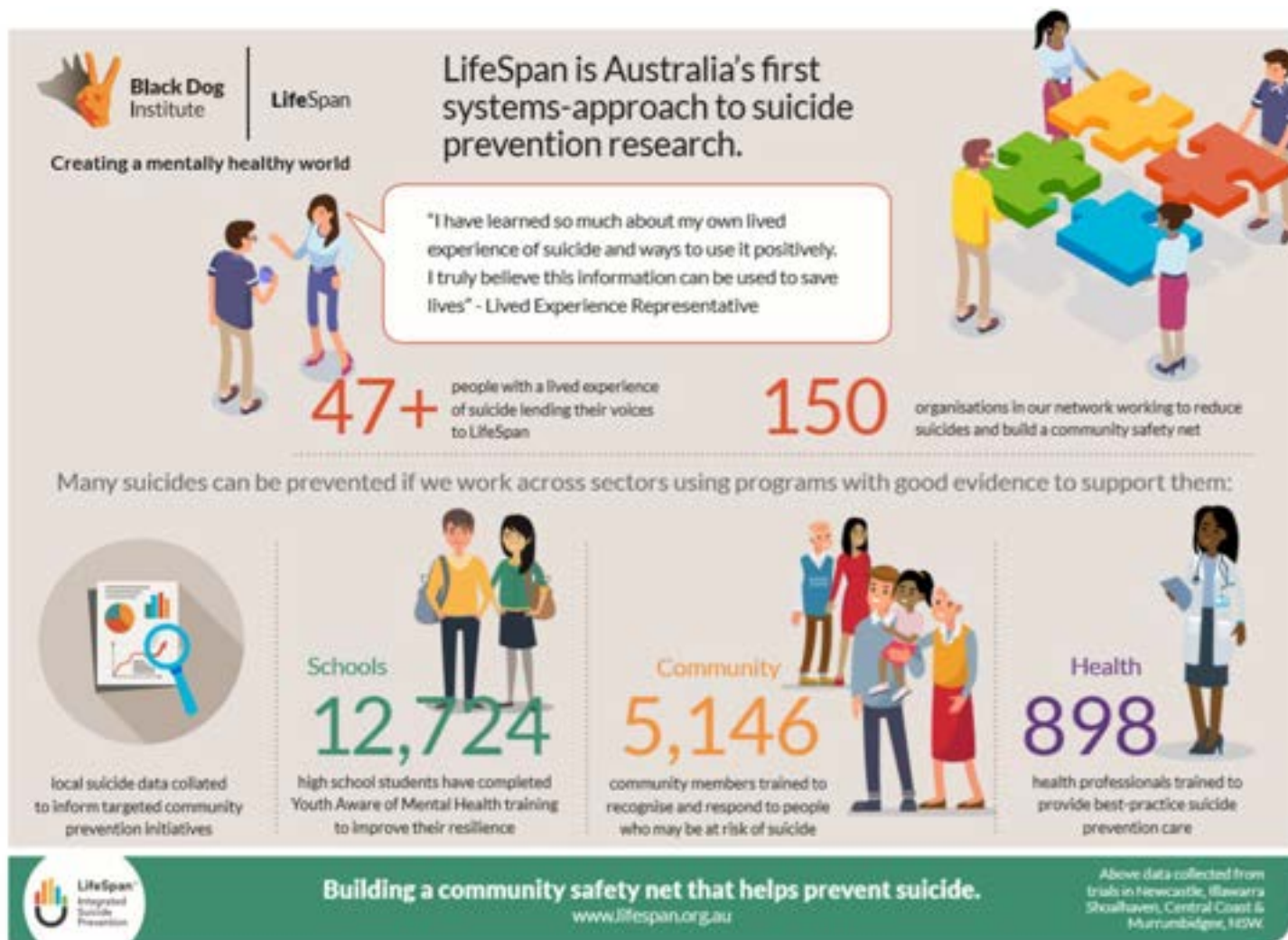


Figure 2. Example of a data infographic update from LifeSpan trial sites

LifeSpan journal articles:

1. Shand F., Torok M., et al. (2023) The LifeSpan suicide prevention model: A stepped wedge cluster randomised trial in New South Wales, Australia using whole of population data linkage. Under review in Lancet Public Health.
1. Rheinberger, D., et al. Understanding Emergency Department Healthcare Professionals' Perspectives of Caring for Individuals in Suicidal Crisis: A Qualitative Study. *Frontiers in Psychiatry*, 13. doi:10.3389/fpsyt.2022.918135
2. Burnett, A., et al. (2022). Machine learning algorithms to classify self-harm behaviours in NSW Ambulance electronic medical records: A retrospective study. *International Journal of Medical Informatics*, 161. doi:10.1016/j.ijmedinf.2022.104734.
3. Zbukvic, I., et al. (2022). Developing a tailored implementation action plan for a suicide prevention clinical intervention in an Australian mental health service: A qualitative study using the EPIS framework. *Implementation Research and Practice*, 3, 263348952110657. doi:10.1177/26334895211065786
4. Long, J.C., Ruane, C., Ellis, L.A., Lake, R., Le Roux, A., Testa,

- L., Shand, F., Torok, M., Zurynski, Y. (2022). Networks to strengthen community social capital for suicide prevention in regional Australia: The LifeSpan Suicide Prevention Initiative. *Int J Ment Health Syst* 16, 10. <https://doi.org/10.1186/s13033-022-00524-z>
5. Hawgood, J., et al. (2021). Preliminary evaluation of lived experience of suicide training: short-, medium-and longer-term impacts of our voices in action training. *Community mental health journal*, 1-12.
  6. Rheinberger D., et al. (2021). A sustained, productive, constructive relationship with someone who can help — A qualitative exploration of the experiences of help seekers and support persons using the emergency department during a suicide crisis. *IJERPH*, 18(19). doi:10.3390/ijerph181910262
  7. Rosebrock, H. Y., et al. (2021). Nonwillingness to Return to the Emergency Department and Nonattendance of Follow-Up Care Arrangements following an Initial Suicide-Related Presentation. *Crisis*. doi:10.1027/0227-5910/a000812
  8. McGillivray, L., et al. (2021). Profiles of Passive and Active Suicidal Ideation and Attempts Among Secondary School Students in Australia: A Cross-Sectional Analysis. *Archives of Suicide Research*. doi:10.1080/13811118.2021.1945983
  9. McGillivray, L., Shand, F., Calear, A.L....Torok, M. The Youth Aware of Mental Health program in Australian Secondary Schools: 3- and 6-month outcomes. *Int J Ment Health Syst* 15, 79 (2021). <https://doi.org/10.1186/s13033-021-00503-w>
  10. Torok M., et al (2021). Spatial errors in automated geocoding of incident locations in Australian suicide mortality data. *Epidemiology*, 32(6), 896-903.
  11. Rheinberger D., et al. (2021). A qualitative analysis of motivators to participation in suicide-focused research from a community-based Australian sample. *IJERPH*, 18(9). doi:10.3390/ijerph18094705
  12. Mok, K., Chen, N., Torok, M., McGillivray, L., Zbukvic, I., & Shand, F. (2021). Factors associated with help-seeking for emotional or mental health problems in community members at risk of suicide. *Advances in Mental Health*, 19(3), 236-246. doi:10.1080/18387357.2020.1770109
  13. Shand, F & Torok, M, Cockayne, N., Batterham, P, Calear, A., Mackinnon A., Martin D., Zbukvic I., Mok K., Chen N., McGillivray L., Phillips M., Cutler H., Draper B., Sara G., Christensen, H. (2020). Protocol for a stepped-wedge cluster randomised controlled trial of the LifeSpan suicide prevention trial in four communities in NSW, Australia. *Trials*, 21:332.
  14. Rosebrock, H., et al. (2020). Study protocol for a mixed methods prospective cohort study to explore experiences of care following a suicidal crisis in the Australian healthcare system. *BMJ open*, 10(8), e033814.
  15. McGillivray L., Torok M., et al (2020). Suicide prevention among young people: A study protocol for evaluating Youth Aware of Mental Health in Australian secondary schools. *Mental Health & Prevention*, 17. doi:10.1016/j.mhp.2019.200178
  16. Lee S., Torok M., et al. (2020). Performance, cost-effectiveness, and representativeness of facebook recruitment to suicide prevention research: Online survey study. *JMIR Mental Health*, 7(10). doi:10.2196/18762

17. Zbukvic I.C., et al. (2020). Short report: Understanding the process of multilevel suicide prevention research trials. *Evaluation and Program Planning*, 82. doi:10.1016/j.evalprogplan.2020.101850
18. Torok, M., et al. (2019). Data-informed targets for suicide prevention: a small-area analysis of high-risk suicide regions in Australia. *Social Psychiatry and Psychiatric Epidemiology*, 54, 1209-1218.
19. Hill, N., et al. (2019). Development of best practice guidelines for suicide-related crisis response and aftercare in the emergency department or other acute settings: a Delphi expert consensus study. *BMC psychiatry*, 19(1), 1-10.
20. Shand, F., Vogl, L., & Robinson, J. (2018). Improving patient care after a suicide attempt. *Australasian Psychiatry*, 26(2), 145-148.
21. Baker, S. T., Nicholas, J., Shand, F., Green, R., & Christensen, H. (2018). A comparison of multi-component systems approaches to suicide prevention. *Australasian Psychiatry*, 26(2), 128-131.
22. McAlister, T. J., Darwin, L., Turner, J., Trindall, M., Ross, L., Green, R., & Shand, F. (2017). The aftermath of Aboriginal suicide: lived experience as the missing foundation for suicide prevention and postvention. *Journal of Indigenous Wellbeing*, 2(2), 49-58.
23. Torok, M., et al. (2017). A systematic review of mass media campaigns for suicide prevention: understanding their efficacy and the mechanisms needed for successful behavioral and literacy change. *SLTB*, 47(6), 672-687.
24. Torok M., et al. (2017). Spatial clustering of fatal, and non-fatal, suicide in NSW, Australia: implications for evidence-based prevention. *BMC Psych*, 17(1), 1-10.
25. Christensen, H., Cuijpers, P., & Reynolds, C. F. (2016). Changing the direction of suicide prevention research: a necessity for true population impact. *JAMA psychiatry*, 73(5), 435-436.
26. Krysinaka, K., Batterham, P., Torok, M., Shand, F.,.... & Christensen, H. (2016). Best strategies for reducing the suicide rate in Australia. *ANZJP*, 50, 115-118. <https://doi.org/10.1177/0004867415620024>
27. Ridani, R., Torok, M., Shand, F., Holland, C., Murray, S., ..., Christensen, H. An evidence-based systems approach to suicide prevention: guidance on planning, commissioning, and monitoring for Primary Health Networks. Australian Government Department of Health. <https://www.health.gov.au/resources/publications/an-evidence-based-systems-approach-to-suicide-prevention-primary-health-networks-phns-guidance-on-planning-commissioning-and-monitoring?language=en>

**Please directly copy all content/essential information to be reviewed by the judges in the main submission as links within the Appendix/Supporting Material Section will only be viewed at the judges' discretion.**