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## Describing the inputs, activities and outputs of "10,000 Lives", a coordinated regional smoking cessation initiative in Central Queensland, Australia

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# Describing the inputs, activities and outputs of "10,000 Lives", a coordinated regional smoking cessation initiative in Central Queensland, Australia

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# Keywords

Smoking cessation, process evaluation, health promotion, regional health planning.

## **Abstract:**

## **Objective**

This study utilised a program logic model to describe the inputs, activities and outputs of the "10,000 Lives" smoking cessation initiative in Central Queensland, Australia

## Design

A program logic model provided the framework for the process evaluation of "10,000 Lives". The data were collected through document review, observation and key informant interviews, and subsequently analysed after coding and re-coding into classified themes, inputs, activities and outputs.

### Setting

The prevalence of smoking is higher in the Central Queensland region of Australia compared to the national and state averages. In 2017, Central Queensland Hospital and Health Services set a target to reduce the percentage of adults who smoke from 16.7% to 9.5% in the Central Queensland region by 2030 as part of their strategic vision ('Destination 2030'). Achieving this target is equivalent to 20,000 fewer smokers in Central Queensland, which should result in 10,000 fewer premature deaths due to smoking-related diseases. To translate this strategic goal into an actionable smoking-cessation initiative, the "10,000 Lives" health promotion program was officially launched on 1 November 2017.

## Result

The activities of the initiative coordinated by a senior project officer included building clinical and community taskforces, organising summits and workshops, and regular communications to stakeholders. Public communication strategies (e.g., Facebook, radio, community exhibitions of "10,000 Lives", and health-related events) were utilised to promote available smoking cessation support to the Central Queensland community.

## Conclusion

The "10,000 Lives" initiative provides an example of a coordinated health promotion program to increase smoking cessation in a regional area through harnessing existing resources and strategic partnerships (e.g., Quitline). Documenting and describing the process evaluation of

the "10,000 Lives" model is important so that it can be replicated in other regional areas with a high prevalence of smoking.

# Strengths and limitations of this study

- The study considered a standard evaluation framework (logic model) to describe the program.
- Multiple sources of data were collected and included to describe the process of the program
- The plan for impact evaluation of the program is discussed in the article.
- Some outputs may have been omitted due to lack of systematic documentation of all activities within the project field notes.

# Funding

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# **Competing interests**

The authors have no conflict of interest to declare.

## Introduction

Tobacco smoking remains the leading avoidable risk factor that contributes to the burden of death and disease in Australia. The 2015 Australian Burden of Disease Study estimated that 9.3% of the total disease burden, 13.3% of all deaths, and 443,235 Disablity Adjusted Life Years (DALYs) were related to tobacco use.<sup>1,2</sup> In 2016, twelve percent of the adult population were daily smokers in Australia,<sup>3</sup> whereas 14.5% of adults in Queensland,<sup>4</sup> and 16.7% of adults in Central Queensland (CQ) smoked daily.<sup>5</sup> Reasons for the higher smoking prevalence in CQ may include the higher proportion of the population who experience socioeconomic disadvantage, compared to the state average.<sup>6,7</sup> Priority populations for smoking cessation assistance identified within CQ include pregnant women (17.0% smoking prevalence),<sup>8</sup> and people living in some local government areas within CQ, such as Gladstone 19.1% and Rockhampton 17.7% smoking prevalence.<sup>6,7</sup>

Tobacco control and smoking cessation programs are a shared responsibility between the Federal Government and the States and Territories in Australia.<sup>9</sup> The State and Territory governments implement many tobacco control and smoking cessation programs. Queensland has performed as one of the best states in Australia for tobacco control activities in recent years.<sup>10</sup> Programs and policies delivered by the Queensland Government include the Quitline service<sup>11</sup>, anti-smoking mass media campaigns, and smoke-free policies and laws. These have contributed to maintaining a downward trend in the daily smoking rate in Queensland over the last few decades.<sup>12</sup> However, a significantly higher rate of adult smoking than the state average has persisted in some regional areas like the CQ region.<sup>8</sup>

The higher prevalence of smoking in CQ compared with the whole of Queensland led CQ Health and Hospital Service (CQHHS) to prioritise smoking cessation while formulating the region's strategic health vision (known as 'Destination 2030') through a six month consultation process with CQ health personnel, consumers, priority groups, and community partners.<sup>13</sup> As part of 'Destination 2030',<sup>13</sup> CQHHS set a goal to reduce the adult daily smoking prevalence from 16.7% to 9.5% in CQ by 2030. Accomplishing this goal would be equivalent to 20,000 fewer smokers in CQ which was estimated to result in 10,000 lives that would be saved from premature death due to smoking-related diseases because half of all long-term-smokers die from a smoking related disease.<sup>14</sup> The strategic goal was translated into an actionable health promotion initiative to increase smoking cessation, which was named "10,000 Lives".<sup>15</sup> The

name of the "10,000 Lives" initiative builds on the previously highly successful "10,000 Steps Rockhampton" program, which promoted physical activity in Rockhampton.<sup>16,17</sup>

Tobacco control and smoking cessation are priorities of federal and state governments (e.g., Queensland) in Australia, yet, there are always budgets constraints for preventive health promotion.<sup>18</sup> As such it is imperative to consider how to leverage off existing funded programs with small iterative changes and budgets. A low-cost and locally initiated program like "10,000 Lives" is one such example, where this principle is being applied, with the aim of improving the health and wellbeing of the community. This paper documents the process evaluation of "10,000 Lives" so that researchers, health professionals and policy makers can use this information for future program planning.

## Aim

This study aims to describe the inputs (planning, resources and costs, and partners), activities and outputs of the "10,000 Lives" initiative of Central Queensland, Australia.

## Method

An evaluation plan was formulated to investigate the inputs, activites, outputs, impact and outcome of the "10,000 Lives" initiative. A program logic model, adapted from a standard health promotion evaluation framework,<sup>19</sup> was developed for the evaluation plan. The evaluation framework was discussed among stakeholders who attended the "10,000 Lives" summit in Rockhampton, Australia, in November 2018. The model has guided understanding the program inputs and outputs for the evaluation. The model, shown in **Figure 1**, demonstrates the process evaluation framework by illustrating the interplay of the different factors that may influence the impacts and outcomes of the program activities. However, this paper focuses on describing the inputs (planning, resources and cost, and partnership), activities and outputs of the initiative.

## Target population of the "10,000 Lives" initiative

The target population for the "10,000 Lives" initiative is all smokers living in the service catchment area of CQHHS (**Figure 2**), which includes 12 public hospitals in CQ.<sup>5</sup> In 2017, the population of the CQ region was ~220,000 people (4.5% of the Queensland population and 0.9% of the Australia population).<sup>20</sup> There were 54,722 families (74,201 households) in 2017; the median age was 34.9 years; sixty-five per cent of the population were aged between 15–64

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years.<sup>21</sup> Approximately six per cent of the population are Aboriginal and/or Torres Strait Islanders.<sup>7</sup> The rate of homelessness was 41.0 per 10,000 persons. The median total personal income per year was \$35,017 Australian dollars (AUD), with 50.2% having the highest level of schooling of Year 11 or 12 (or equivalent). In CQ, 25.7% of the population were in the most disadvantaged quintile and 10.1% of the population were in the least disadvantaged quintile, whereas in Queensland, 20% of the population were in most disadvantaged quintile and 20.0% in the least disadvantaged quintile in 2017.<sup>7</sup> According to a state-wide survey in the year preceding the launching of "10,000 Lives" an estimated ~28,000 adult daily smokers resided in CQ.<sup>22</sup> The daily smoking prevalence was highest (17.4%) in the 30-44 years age group. Also, the prevalence was high (18.5%) among the most disadvantaged quintile. The proportion of the determinants for poor health, i.e., 'low-income households', 'early exit from school', 'unemployment' and 'mental health issue' is higher in CQ than the whole of Queensland and Australia.<sup>23</sup>

## Study design, data collection and analysis

We conducted an exploratory investigation by critically appraising the project plan, partnership development, communication strategies, targeted project activities and overall health promotion activities for smoking cessation covered by the "10,000 Lives" initiative. Data were collected retrospectively for the period between July 2017 (initiation of planning) up to December 2019 (26 months after the official launch of "10,000 Lives") from field notes, project documentation notes, relevant policy documents, and key informant interviews with project personnel.

A generic search was performed of relevant websites (i.e., Queensland Health: <u>www.health.qld.gov.au</u>, CQ Health: <u>www.health.qld.gov.au/cq</u>, Department of Health of Australian Government: <u>www.health.gov.au</u>, and Australian Institute of Health and Welfare: <u>www.aihw.gov.au</u>) for relevant policy documents, and social media pages (e.g., Facebook) for information about smoking cessation campaigns active during the study timeframe.

Data were extracted from these sources and imported into NVIVO, <sup>24</sup> and then cleaned, coded, and classified into five themes: plans, resources and cost, partnerships, activities and outputs. A narrative synthesis and summary interpretation was completed and these are presented in the results section. The data sources and collection methods are shown in **Table 1**.

## Ethical approval

The study was approved by CQHHS Human Research Ethics Committee (HREC) (HREC/2019/QCQ/50602).

## Patient and Public involvement

We used routine data source for process evaluation of the program. Individual participants were not involved in this study.

## Result

**Table 2** lists the key findings of the important areas for process evaluation (i.e., planning, resources and cost, partnerships, activities and project outputs) covered in this study in the first 26 months since the "10,000 Lives" initiative launched. Major strategies employed by the "10,000 Lives" initiative are shown in **Figure 3**.

## Planning

At the program planning stage (July-August 2017), CQPHU, with the help of the Service Integration Coordinator of the Department of CQ Mental Health Alcohol and Other Drugs, developed a project proposal to establish a smoking cessation taskforce in CQ. The project proposal<sup>25</sup> stated the objectives of the initiative as:

"1. Establish a 10,000 Lives Taskforce: The taskforce will form the backbone of the project and through collective impact with the support of a wide range of community stakeholders large scale social change will be achieved. ("Collective impact" is a structured and disciplined approach to bringing cross-sector organisations together to focus on a common agenda that result in long-lasting improvement.).

2. Establish a team of clinical champions to engage key stakeholders e.g. G.P.'s and provide health promotion activities, intervention and education to the broader community".

The aim was subsequently reflected in 'Destination 2030'.<sup>13</sup> The initial plan considered strategies that adhered to the following guiding principles: i) *Population approach* of delivering a sustained, effective and comprehensive initiative for all, ii) *Whole system approach* of harnessing the many inter-related factors that can contribute to improving health and wellbeing, iii) *Evidence-based approach* of integrating knowledge from research evidence into implementation, iv) *Reducing inequality* by addressing the differences in health status in the community through recognising and responding to the vulnerable groups (e.g. the groups who have higher smoking prevalence), v) *Working in partnership* with government

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departments, community members, NGOs, and academic stakeholders, vi) *Building capacity* by developing an adequate number of skilled and empowered people, and vii) *Effective implementation and evaluation* for ensuring the platform to track the collective impact.<sup>25</sup> For implementing the approaches, multiple and specific mini-projects were planned to target priority groups. For example, plans were formulated to give more attention to specific geographical areas (e.g., Gladstone and Woorabinda) and populations (e.g., mine workers and Aboriginal and Torres Strait Islander people). Ambitious milestones were set during program planning including a reduction of ~3,000 smokers by 2020', 'a reduction of ~14,000 smokers by 2025' and 'a reduction of ~20,000 smokers by 2030'.<sup>25</sup>

## **Resources and costs**

A senior project officer (SPO, Administrative Officer Grade 5) was recruited in December 2017 to coordinate the planned activities and manage the implementation of the program strategies. Other resources utilised in the project included communication materials (e.g., Posters and leaflets, emails, news, website and social media content), promotion materials (e.g., information containing postcards, coffee cups, fridge magnets, water bottles and bags), materials required for mobile stalls to display the project activities in community or health events (e.g., display table, carbon monoxide breath testing for smokers), organising summits and workshops, and ground signage. The approximate cost for running the program for 24 months (January 2018-December 2019) was \$280,748 (AUD) including the amount \$64,164 (AUD) for the research and evaluation component (**Table 2(c)**). The initiative was approved by the CQHHS board and solely funded by CQHHS.

In addition to the direct resource and costs, the initiative utilised in- kind support from the CQPHU for administrative activities including administration staff support and operational support during the period between starting the program planning in July 2017 and the official launch of the initiative in November 2017. Also, the initiative utilised the existing resources available for smoking cessation in CQ which included combination of 12-weeks-free NRTs and telephone counselling via the Queensland Quitline's intensive Quit support program,<sup>12</sup> subsidised smoking cessation pharmacotherapies through the Pharmaceutical Benefits Scheme, Queensland Health's Quality Improvement Payment (an incentive program for clinicians), and the collaborative support from existing smoking cessation programs (i.e., "Quit for You...Quit for Baby", "Quit for You", "Yarn to Quit", B.strong).

## **Partnerships**

Developing partnerships and involving stakeholders in the implementation of "10,000 Lives" was a key strategy of the initiative. A strategic partnership was made with the Queensland Quitline<sup>11</sup> for enhancing the promotion of their existing intensive Quit support program which was available to rural, regional and remote communities with a higher than average smoking prevalence and accessing a monthly report to track Quitline registrations and participation status for smokers in CQ. Extensive in-kind support was provided by the Board and Chief Executive of CQHHS by arranging the project fund, and the Preventive Health Branch of Queensland Health by giving strategic advice and advocacy for implementing the smoke-free policies. Partnerships were built with different units and programs within CQHHS (e.g., Oral health, Mental health, 'CQ Youth Connect'), community organisations (e.g., Rotary<sup>26</sup>), a foundation for youth mental health called 'Headspace',<sup>27</sup> a targeted brief intervention training program for Aboriginal and Torres Strait Islander people named 'B.strong',<sup>28</sup> a health promotion initiative for Aboriginal and Torres Strait Islander people called 'Deadly Choices',29 local councils (city council and local government staff) and a non-government organisation (NGO) supporting and developing buisnesses and projects in CQ called "Capricorn Enterprise"<sup>30</sup> to promote and support smoking cessation activities for their own staff and client population (patient, youth, community and Aboriginal and Torres Strait Islander people who smoke). The project collaborated with a University in Australia for academic support for the program evaluation. Partnerships were developed with "Cancer Council Queensland"<sup>31</sup> for conducting training and workshops for the local clinicians, social workers and volunteers who were interested in supporting the initiative. The local Primary Health Network (PHN) actively collaboratored with "10,000 Lives" initiative by distributing information to General Practitioners (GPs). Local sports clubs and radio staions also partnered with the initiative on health promotion activities.

### Activities

The SPO coordinated the activities of "10,000 Lives" under the guidance of the director of CQPHU. The SPO took a pre-set plan and continuously adapted strategies (described in planning section) for implementing the program. The following range of activities were delivered to increase smoking cessation in CQ:

- 1. **Organising tobacco summits** to develop partnerships with clinicians, GPs, social workers, local council and industry staff, and local politicians.
- 2. Establishing a clinical and community organisation taskforce for smoking cessation to identify clinical and community organisation personnel to become a champion for smoking

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cessation. CQHHS clinicians were encouraged to conduct inpatient hospital and health care facility-based documentation and brief intervention via a standardised 'Smoking Cessation Clinical Pathway (SCCP)' form among patients who smoke, and to refer them to Quitline for accessing the intensive Quit support program. Community champions were encouraged to promote the Quitline program and other smoking cessation support (e.g., My QuitBuddy app) among people who smoke.

- 3. **Promoting smoking cessation** through emails, newsletters, local radio, social media pages (i.e., Facebook), digital billboard and ground signage, and exhibiting in various community expos and health-related events. The SPO explored various communication pathways to promote the available smoking cessation support, particularly the Quitline program. These included; conducting events on the local radio station ('Triple M'), posting messages on Facebook pages ("10,000 Lives", CQHHS and 'Triple M' Facebook pages), local newspapers (The Morning Bulletin and Gladstone Observer) and in the daily news and weekly bulletin of CQHHS and e-newsletters for GPs, and electronic billboard display in the center of the main city of the CQ region (i.e. Rockhampton CBD).
- 4. Advocating for smoke-free policies and programs that could support smokers to quit. For example, the initiative established the ground signage and delivered tear off flyers promoting Smoke-free Healthcare in each of the hospital and community health campuses of CQHHS.
- 5. Implementing mini-projects to give extra attention to priority populations. For example, a film competition on 'smoke-free teens' was organised to deliver a youth-centric smoking cessation message designed by youth for youth, and a workshop was conducted by the SPO to introduce carbon monoxide breath testers (Smokerlyzer) with *Gumma Gundoo Indigenous Maternal & Infant Care Outreach team* <sup>32</sup> to increase awareness amongst Aboriginal and Torres Strait Islander pregnant women of the adverse effects of antenatal smoking on mother and baby.

## **Outputs**

The quantitative output measures from the "10,000 Lives" activities are shown in Table 2(a) and 2(b). Overall, the "10,000 Lives" initiative conducted seven smoking cessation summits and one Tackling Tobacco Forum, promoted and celebrated World No Tobacco Day regionally, completed at least twenty education sessions for newly recruited CQHHS staff, and conducted a combined smoking cessation workshop for the clinical and community champions. The SPO encouraged all the clinicians of CQHHS to attend the Smoking Cessation

Masterclasses conducted by Queensland Health (Metro South HHS and Metro North HHS), with 70 clinicians completing, and a three-day training course on nicotine addiction and smoking cessation,<sup>33</sup> which was completed by six clinicians. Forty Aboriginal and Torres Strait Islander volunteers were trained in Brief Intervention training conducted by the Menzies School of Health Research (B.strong).<sup>28</sup> The "10,000 Lives" initiative was exhibited in twelve community expos and nine health-related events. The initiative implemented two mini-projects for priority population (Aboriginal and Torres Strait Islander pregnant women, younger people). "10,000 Lives" collaborated with 15 different organisations including Hospital and Health Service, regional councils, University, Community Organisations and other initiatives to promote smoking cessation in CQ. The SPO shared updated resources and information about smoking cessation to  $\sim$ 3,400 staff of different partner organisations through emails and 4,800 staff of CQHHS through posting in the daily news and a weekly bulletin called 'The Drift'. As a result of communication through email, phone call, posting messages and in-person meetings by the SPO, at least seven clinical champions, two community champions, two political champions and a champion GP centre became actively involved and worked on the ground as the smoking cessation taskforce in CQ.

## Discussion

This study describes the inputs, activities and outputs of the program logic model, documenting the process evaluation of the "10,000 Lives" initiative. This article explains why and how the initiative was implemented, and describes the way it operated over the 26 month period following its official launch in November 2017. This study also outlines how success of the program will be measured.

The "10,000 Lives" initiative was launched to reduce the daily smoking rate in CQ, which is higher than the state average. Policymakers realised the high disease burden that is due to smoking and included the ambitious aim to reduce the smoking rate to 9.5% by 2030 in the Destination 2030 plan. The implementing organisation of the initiative is the local Public Health Unit which explored the existing and available smoking cessation support available in its region. A number of effective tobacco control and smoking cessation interventions were already available in the region, and the "10,000 Lives" initiative aimed to increase awareness and uptake of these interventions. In this way, the initiative focused on maximising the use of existing services available in the region.

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The initial plan was guided by the standard principles (described in the *Planning* part of the results section) of program implementation. The initiative was launched in each of the local government areas of CQ region at a Smoking Cessation Summit. People from multiple sectors including Health and Community Services and state and local government were invited to attend the inaugural summit which ultimately facilitated the initiative to build the partnerships and identify champions. Partnerships were built with various government and non-government organisations so that the coverage of workplace based smoking cessation programs were increased and the smoke-free workplace policies implemented. Active partnership with Quitline Queensland assisted the initiative to promote their intensive Quit support program. The SPO was integral to building communication pathways to promote the smoking cessation support available. The regular communication and motivation to the stakeholders (clinical and community champions) helped the SPO to identify the opportunities (e.g., arrange training and workshop on smoking cessation) and tackle the barriers of smoking cessation work for them. This integral strategy of building partnerships and communication pathways became useful to build a clinical and a community taskforce of smoking cessation in CQ which leveraged the existing smoking cessation program and policies available in the region. This approach is an exemplar of running a health promotion campaign in a resource constrained environment.

The 10,000 "Lives" initiative was built on the success of a previous health promotion campaign "10,000 Steps Rockhampton" in this region.<sup>16,17</sup> The Rockhampton area was choosen for "10,000 Steps Rockhampton" program because of the high prevalence of obesity.<sup>16</sup> Again, "10,000 Lives" initiative was launched in CQ to address the higher prevalence of smoking in this region. The "10,000 Lives" utilised the program strategies (e.g., media campaign, partnerships with clinicians, focusing on priority populations) that were also used in the "10,000 Steps Rockhampton" program.<sup>16</sup> Other similarities include the use of of technology to measure exhaled carbon monoxide in "10,000 Lives" and pedometers in "10,000 Steps Rockhampton" to measure activity levels. The use of the Smokelyzer provided a teaching moment to discuss the health impacts of smoking by demonstrating the person's exposure to one of the toxins in cigarette smoke, leading to increased autonomous-motivation to quit smoking . Creating autonomus motivation in people who smoke, often explained by the 'Self-Determination Theory',<sup>34</sup> is effective for promoting smoking cessation. <sup>35</sup>

However, the implementation of the program was sometimes challenging, such as increasing clinician participation in deliverying brief advice and quitline referrals. Some stakeholders

expected "10,000 Lives" to directly deliver smoking cessation services. However, this was beyond the scope and resources of the program.

The "10,000 Lives" initiative is quite different from other smoking cessation programs in Australia (e.g., B.strong, Quitline) which deliver smoking cessation assistance directly to smokers. Rather, "10,000 Lives" intended to increase motivation to quit, and raise awareness of existing smoking cessation assistance that is available via these other programs. While the national tobacco campaign <sup>36</sup> and statewide anti-smoking campaigns primarily use paid advertising to disseminate the quit smoking message, the "10,000 Lives" program focused on low cost approaches to disseminating the quit smoking message via partnerships with local media and local clinical and community champions for promoting the smoking cessation interventions. This model has also been used in other health promotion programs implemented in New South Wales, Australia and in a community of North East England.<sup>37,38</sup> However, the findings of process evaluation using a logic model of those program were not found after serachin in relevant websites.

The strategies for achieving the goal of the "10,000 Lives" initiative reflect ecological models of health promotion' which explain the multiple levels of influence on health behaviour. <sup>39</sup> The initiative put substantial efforts to increase the use of interventions of smoking cessation programs by involving the service providers in the community (e.g., clinicians, NGO personnel) such this is a 'downstream' approach. For example, the "10,000 Lives" initiative encouraged clinicians to deliver brief interventions with their patients and refer them to Quitline, and other relevant smoking cessation programs. The use of local radio, which involved sports stars discussing smoking cessation and posting messages on Facebook pages are examples of 'midstream' strategies. While the advocacy of state level policies and programs (e.g., smoke-free hospitals) are 'upstream' strategies. Thus the "10,000 Lives" program fits the multi-level population based health promotion model of McKinlay.<sup>40</sup>

Overall, the initiative brought all the available smoking cessation support together and promoted the adoption of smoke free policies and programs. The stakeholders's perspective and the impact of "10,000 Lives" are currently evaluated through analysis of the stakeholder-survey data and changes in the numbers and rate of referrals, program participation and interactions to Quitline, and the result will be reported through separate peer-reviewed publications.

## Conclusion

The "10,000 Lives" is an example of a health promotion program which coordinates smoking cessation activities in a regional area by harnessing and improving awareness of existing resources (e.g. employing only one project officer). Utilising existing resources and programs can be a cost-effective approach in countries like Australia where effective smoking cessation interventions are already widely available, but uptake is suboptimal. Evaluation of impact and outcome of this initiative could inform the development of future regional smoking cessation programs.

## Contributors

AK, GK, SL and CG conceived and designed the study. AK conducted the key informant interviews. AK and KG extracted the data from different sources. AK performed the analysis of the data. AK, KG, GK, SL and CG interpreted the results. AK drafted the manuscript and all authors contributed with critical revisions to the contents of the manuscript. The final version of the manuscript was approved by all authors.

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# **References:**

- 1. Australian Institute of Health and Welfare. Australian Burden of Disease Study 2015: Interactive data on risk factor burden. 2019; <u>https://www.aihw.gov.au/reports/burden-of-disease/interactive-data-risk-factor-burden/contents/tobacco-use</u>. Accessed 17/06/2019.
- 2. Data tables: ABDS 2015 Risk factors estimates. 2019. https://www.aihw.gov.au/getmedia/28658401-d7f2-4e93-bb6f-9cbd2d5fa64c/ABDS-2015-Risk-factor-data.xlsx.aspx.
- Australian Bureau of Statistics (ABS). National Health Survey: First Results, 2017-18, cat. no. 4364.0.55.001. Released at 11:30 AM (CANBERRA TIME) 07/02/2019 . 2018; http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2017-18~Main%20Features~Smoking~85. Accessed 30/8/2019.
- 4. Queensland Health. The health of Queenslanders 2016. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2016. https://www.publications.qld.gov.au//dataset/chief-health-officer-reports. Accessed 07/08/2019.
- 5. Queensland Government. Central Queensland Hospital and Health Service. 2016; <u>https://www.health.qld.gov.au/cq</u>. Accessed 26/01/2019, 2019.
- 6. Queensland Health. Detailed Queensland and regional preventive health survey results. *Preventive health surveys* 2019; <u>https://www.health.qld.gov.au/research-reports/population-health/preventive-health-surveys/detailed-data#documentation</u>. Accessed 29/08/2019.
  - 7.
     Queensland
     Regional
     Profiles.
     Queensland
     Government;
     2019.

     https://statistics.qgso.qld.gov.au/qld-regional-profiles.
     Accessed 29/07/2019.
     Accessed 29/07/2019.
     Accessed 29/07/2019.
- 8. Queensland Health. The Health of Queenslanders 2018. Report of the Chief Health Officer Queensland; Hospital and Health Service profiles. 2018.
- 9. Australian Government the Department of Health. National Tobacco Strategy. 2018; https://www1.health.gov.au/internet/main/publishing.nsf/Content/tobacco-strategy. Accessed 07/08/2019.
- 10. AUSTRALIAN COUNCIL ON SMOKING AND HEALTH. National Tobacco Control Scoreboard. 2019; <u>https://www.acosh.org/what-we-do/national-tobacco-control-scoreboard/</u>. Accessed 04/06/2020.
- 11. Queensland Health. Where Quitters Click. 2019; <u>https://www.health.qld.gov.au/news-alerts/campaigns/tobacco/where-quitters-click-campaign</u>. Accessed 08/08/2019.
- 12. Queensland Health. Smoking Prevention Strategy 2017 to 2020. 2017; https://www.health.qld.gov.au/ data/assets/pdf file/0022/651802/health-wellbeingstrategic-framework-smoking.pdf. Accessed 04/06/2020.
- 13. Central Queensland Hospital and Health Services. Destination 2030. 2017; https://www.health.qld.gov.au/\_\_data/assets/pdf\_file/0037/669772/destination-2030full.pdf. Accessed 08/08/2019.
- 14. World Health Organization (WHO). Tobacco. 2019; <u>https://www.who.int/news-room/fact-sheets/detail/tobacco</u>. Accessed 05/08/2019, 2019.
- 15. Queensland Health. 10000 Lives CQ Smoking Cessation Project. 2020; https://clinicalexcellence.qld.gov.au/improvement-exchange/10000-lives-cq-smokingcessation-project. Accessed 08/05/2020.
- 16. Brown WJ, Eakin E, Mummery K, Trost SG. 10,000 Steps Rockhampton: Establishing a multistrategy physical activity promotion project in a community. *Health Promotion Journal of Australia*. 2003;14(2):95-100.
- 17. Wendy JB, Kerry M, Elizabeth E, Grant S. 10,000 Steps Rockhampton: Evaluation of a Whole Community Approach to Improving Population Levels of Physical Activity. *Journal of Physical Activity and Health.* 2006;3(1):1-14.

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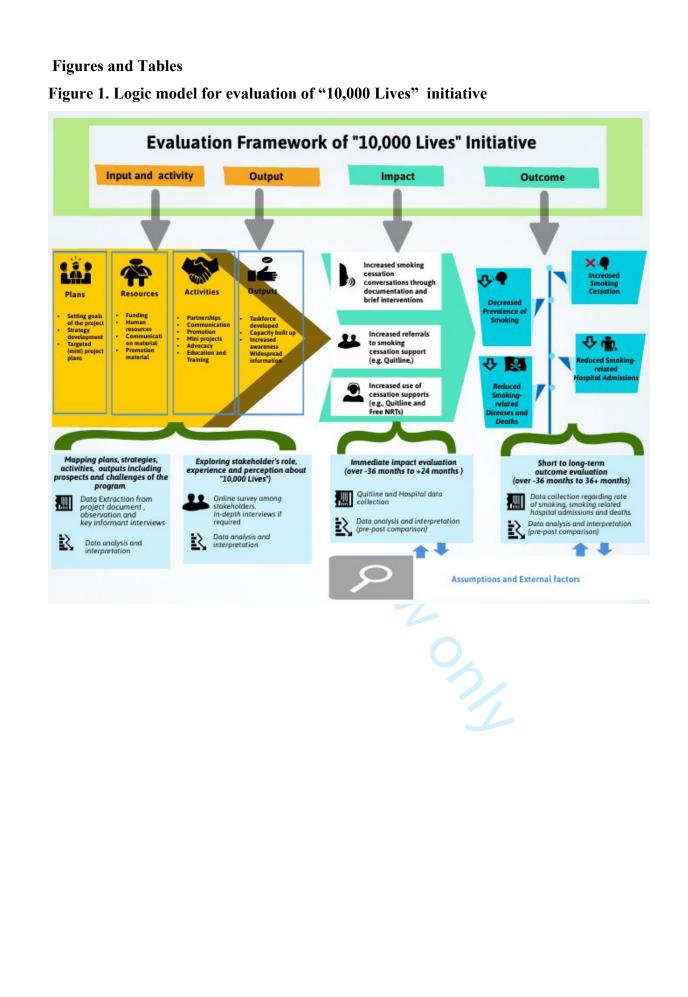
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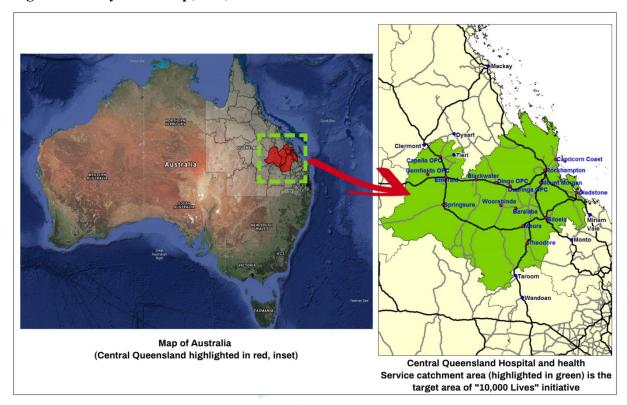
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60

1		
2 3	10	Lachard II. Chiell A. Descentive health, Herrineric desce Australia and a is it as such 2
4	18.	Jackson H, Shiell A. Preventive health: How much does Australia spend and is it enough? .
5	10	Canberra2017.
6	19.	Prevention and Population Health Branch 2010, Evaluation framework for health promotion
7		and disease prevention programs, Melbourne, Victorian Government Department of Health.
8		https://www2.health.vic.gov.au/about/publications/policiesandguidelines/Evaluation-
9	20	framework-for-health-promotion-and-disease-prevention-programs. Accessed 10/12/2018.
10 11	20.	Australian Bureau of Statistics, 2019, <i>Themes: Central Queensland</i> .
12		https://itt.abs.gov.au/itt/r.jsp?RegionSummary&region=308&dataset=ABS_REGIONAL_ASGS
13		2016&geoconcept=ASGS_2016&datasetASGS=ABS_REGIONAL_ASGS2016&datasetLGA=ABS
14		<u>REGIONAL_LGA2016&amp;regionLGA=LGA_2016&amp;regionASGS=ASGS_2016</u> . Accessed
15	21	18/07/2019.
16	21.	Boykan R, Messina CR. A Comparison of Parents of Healthy Versus Sick Neonates: Is There a
17		Difference in Readiness and/or Success in Quitting Smoking? <i>Hospital pediatrics</i> .
18	~~	2015;5(12):619-623.
19	22.	Asfar T, Caban-Martinez AJ, McClure LA, et al. A cluster randomized pilot trial of a tailored
20 21		worksite smoking cessation intervention targeting Hispanic/Latino construction workers:
21	•••	Intervention development and research design. <i>Contemporary clinical trials.</i> 2018;67:47-55.
23	23.	Torrens University Autralia (PHIDU). Social Health Atlas; Maps. 2019;
24		http://phidu.torrens.edu.au/social-health-atlases/maps. Accessed 31/07/2019, 019.
25	24.	QSR International. NVivo Qualitative Data Analysis Software [Software] 1999;
26		https://qsrinternational.com/nvivo/nvivo-products/
27	25.	Central Queensland Hospital and Health Services. Project Plan: 10,000 Lives. In. Rockhampton,
28		Queensland, Australia Central Queensland Public Health Unit; 2017:Page 2 of 16.
29	26.	Rotary Club. Rotary Districs 9570, Central Queensland. <u>https://rotary9570.org/</u> . Accessed
30 31		05/05/2020.
32	27.	Headspace. Headspace Rockhampton. <u>https://headspace.org.au/headspace-</u>
33		centres/rockhampton/. Accessed 05-05-2020.
34	28.	Menzies School of Health Researc. B.strong; Quit, Eat & Move for Health.
35		https://www.bstrong.org.au/. Accessed 01/08/2019.
36	29.	Deadly Choices. Deadly Choices. https://deadlychoices.com.au/.
37	30.	Capricorn enterprise. CAPRICORN ENTERPRISE. <u>https://capricornenterprise.com.au/</u> .
38		Accessed 05-05-2020.
39	31.	Cancer Council Queensland. Cancer Council <u>https://cancerqld.org.au/</u> . Accessed 05-05-2020.
40	32.	Queensland Health. Gumma Gundoo Indigenous maternal and infant outreach. 2019;
41 42		https://www.health.qld.gov.au/cq/services/gumma-gundoo. Accessed 06/05/2020.
42	33.	The Australasian Professional Society on Alcohol and other Drugs. NICOTINE ADDICTION &
44		SMOKING CESSATION TRAINING COURSE. 2018; <u>https://www.apsad.org.au/news-a-</u>
45		media/209-nicotine-addiction-smoking-cessation-training-course. Accessed 20/3/2020.
46	34.	Deci EL, Ryan RM. Self-determination theory. In: Handbook of theories of social psychology,
47		Vol. 1. Thousand Oaks, CA: Sage Publications Ltd; 2012:416-436.
48	35.	Williams GG, Gagné M, Ryan RM, Deci EL. Facilitating autonomous motivation for smoking
49		cessation. Health Psychology. 2002;21(1):40-50.
50	36.	Hill D, Carroll T. Australia's national tobacco campaign. Tobacco Control. 2003;12(suppl 2):ii9-
51 52		ii14.
53	37.	Campbell MA, Finlay S, Lucas K, Neal N, Williams R. Kick the habit: a social marketing campaign
54		by Aboriginal communities in NSW. Australian Journal of Primary Health. 2014;20(4):327-333.
55	38.	McGeechan GJ, Woodall D, Anderson L, Wilson L, O'Neill G, Newbury-Birch D. A Coproduction
56		Community Based Approach to Reducing Smoking Prevalence in a Local Community Setting.
57		Journal of environmental and public health. 2016;2016:5386534.
58	39.	Promoting Health: Intervention Strategies from Social and Behavioral Research. American
59		Journal of Health Promotion. 2001;15(3):149-166.
60		

- 40. McKinlay JB. The promotion of health through planned sociopolitical change: challenges for research and policy. Social science & medicine (1982). 1993;36(2):109-117.
- 41. Queensland Government. Central Queensland Hospital and Health Service maps. 2019; https://www.health.qld.gov.au/maps/mapto/centralqld. Accessed 18/07/2019.





## Figure 2. Study Area Map; "10,000 Lives" initiative's catchment area

*Map showing the "10,000 Lives" initiative's target area (highlighted in green) which is the CQHHS catchment area. Red dots are indicated for the hospitals of CQHHS (Source: Queensland Health website <sup>41</sup>)* 

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Themes	Data sources	Collection method
Inputs		
Planning	Project planning documents and policy document 'Destination 2030' <sup>13</sup>	Document review and internet search
Resource	Project management documents	Document review
Partnershij	Project planning and management documents, Key informant interviews	Document review, Key informant interviews
Activities	Project management documents, Master file for project management, Key informant interviews, Workin group documents, Websites and Social media	Document and content review Websites, Social media, Observation, Key informant interviews
Outputs	Project management documents, Master spread sheet, Stakeholders meeting documents, Attendance sheet, and Key informant interviews	
Anticipated impact a outcome	<i>nd</i> Project management documents, Policy documents Key informant interviews	<ul> <li>Project document review,</li> <li>Policy documents review, Key informant interviews</li> </ul>

## Table 1. Summary of data sources and collection method for each evaluation topic

Planning	<b>Resources and Cost</b>	Partnerships	Activities	Outputs
<ul> <li>Aims and objectives         <ul> <li>Reducing smoking prevalence</li> <li>Saving lives from smoking-related deaths</li> </ul> <ul> <li>Strategies</li> <li>Establish a smoking cessation taskforce</li> </ul> </li> <li>Guiding principle         <ul> <li>A Population approaches</li> <li>Whole system approach</li> </ul> </li> <li>Human resource         <ul> <li>One senior project officer</li> <li>One senior project officer</li> <li>Leaflets</li> <li>Media documents (e.g., newsletter, Facebook pages)</li> </ul> </li> <li>Promotion material         <ul> <li>Digital Billboard</li> <li>Ground Signage</li> <li>Information marked gift items (e.g.</li> </ul> </li> </ul>	<ul> <li>Implementing intervention <ul> <li>Quitline</li> <li>CQHHS</li> <li>Local community development service</li> <li>GP</li> <li>Headspace-works for Youth Mental Health; funded by Department of Health of the Australian Government</li> <li>Every child CQ-community service initiative-,</li> </ul> </li> </ul>	<ul> <li>Quitline</li> <li>Launched initiative</li> <li>CQHHS</li> <li>Invited clinical,</li> <li>Local community</li> <li>development service</li> <li>GP</li> <li>Identified champions</li> <li>Headspace-works</li> <li>for Youth Mental</li> <li>Health; funded by</li> <li>Department of</li> <li>Health of the</li> <li>Australian</li> <li>Government</li> <li>Every child CQ- community service</li> <li>Launched initiative</li> <li>outputs are showed below tables (Topological partners)</li> <li>Identified champions</li> <li>Repeated</li> <li>Identified champions</li> <li>Repeated</li> <li>communication and</li> <li>motivation</li> <li>Identified</li> <li>opportunities</li> <li>Tackled barriers of</li> </ul>		
<ul> <li>iii. Evidence-based approach</li> <li>iv. Reducing inequality</li> <li>v. Building capacity</li> <li>vi. Building capacity</li> <li>vii. Effective implementation and evaluation</li> </ul> Pre-set milestones	Postcard      Materials for exhibition	bottle, bag, fridge magnets)B. strong)and capacity developmentPostcardAdvocacyImage: Campaigned and promoted smoking cessationerials for exhibitionPreventive Health Branch of Queensland HealthCampaigned and promoted smoking cessationPosterPrimary Health Network (PHN)-NewsletterLeafletNetwork (PHN)-Local radio Social media		

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<ul> <li>A reduction of ~3,000 smokers by 2020</li> <li>A reduction of ~14,000 smokers (by 2025</li> <li>A reduction of ~20,000 smokers (equal to saving ~10,000 Lives from smoking-related premature deaths) by 2030</li> </ul>	<ul> <li>Cost</li> <li>Labour cost</li> <li>Non-labour cost</li> <li>Cost for research and evaluation</li> <li>Expenditure is shown in Table 2(c)</li> </ul>	Federal Government Agency Rotary Club Six local councils within the district Business industry association (Capricorn enterprise) of CQ Research and Evaluation PhD project	<ul> <li>Digital billboard</li> <li>Community expos</li> <li>Health events</li> </ul> Advocated policy <ul> <li>Smoke-free hospitals</li> </ul> Implemented mini projects <ul> <li>Smoke-free teens</li> <li>Reduce smoking rate among Aboriginal and Torres Strait Islander pregnant women</li> </ul>	
		eriel	v M	

# Table 2(a). Occurrence of different activities and events implemented by "10,000Lives" initiative in first 26 months

Event name	Frequency (n)
Smoking cessation summits organised	7
'World No Tobacco Day' campaign (including a tobacco forum)	2
Number of mini-projects implemented for priority populations	2
Film competition with the theme of smoking cessation for young people,	1
organised	
Attended health event with "10,000 Lives" stall	9
Attended community expo and event with "10,000 Lives stall"	12
Brief education sessions delivered to newly recruited CQHHS staff	20
In-person meeting conducted	97
Facebook pages (10000 Lives CQ, CQ Health and Triple M central Queensland)	206
discussed posts	
Occasional share of the updated information and resources to CQHHS staff	4,800
through daily news and the weekly bulletin (Drift)	
Occasional emails with updated information and resources to the personnel from	3,409
partner organisations other than CQHHS	

# Table 2(b). Numbers of partners and champions contacted, and numbers who supported the "10,000 Lives" initiative in first 26 months

Champions and partners	
Clinical Staff were contacted (Identified as a Champion <sup>†</sup> )	133 (7)
Community Staff were contacted (Identified as a Champion <sup>†</sup> )	26 (2)
GP centres were contacted (Identified as a Champion <sup>†</sup> )	76 (1)
Regional and local council staff were contacted (Actively supported <sup>‡</sup> )	15 (6)
Politicians including Minister, MP, Mayor, Councillors were contacted (Actively	24 (3)
supported <sup>‡</sup> )	
Number of the collaborating organisation (Active partner <sup>§</sup> )	18 (15)
Clinicians were encouraged smoking cessation masterclass training (training	133 (70)
completed)	
Number of students/teens registered for film competition (films developed)	21 (6)
Aboriginal and Torres Strait Islander volunteers trained for Brief intervention training	40
by B.strong collaborated by "10,000 Lives"	

<sup>†</sup> *Champion:* The people or the unit who routinely worked for smoking cessation, kept regular communication with feedback to SPO of "10,000 Lives" of his smoking cessation activities.

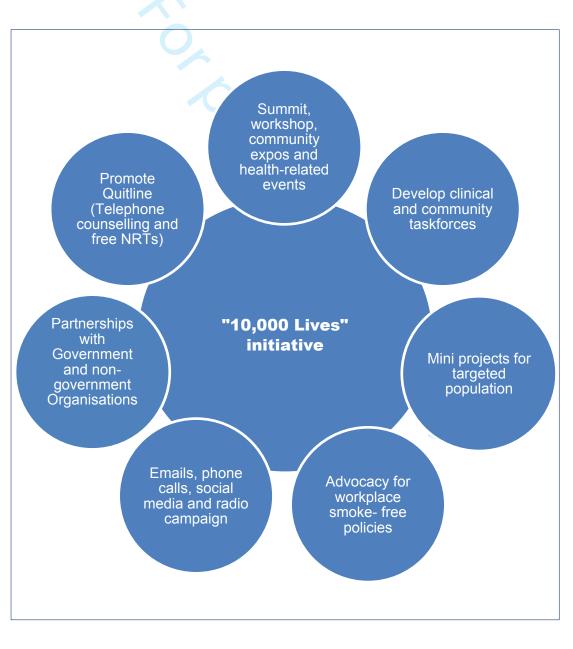
<sup>‡</sup> Actively supported: Provided support and did advocacy for '10,000 lives" initiative

§ Active partner: Collaborated and worked together with "10,000 Lives" initiative

# Table 2(c). Monetary cost spent for "10,000 Lives" initiative in 24 months (January 2018-December 2019) after launch

Item of cost	Amount in Australian Dollar
Labour cost (human resource)	\$199,600.0
Non-labour cost (Materials, supplies, travel etc.)	\$16,984.0
Evaluation and research cost (PhD project)	\$64,164.0
Total	\$ 280,748.0

# Figure 3. Major strategies employed by "10,000 Lives" initiative



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# How can a coordinated regional smoking cessation initiative be developed and implemented? A program logic model to evaluate the "10,000 Lives" health promotion initiative in Central Queensland, Australia

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# How can a coordinated regional smoking cessation initiative be developed and implemented? A program logic model to evaluate the "10,000 Lives" health promotion initiative in Central Queensland, Australia

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## Keywords

Smoking cessation, process evaluation, health promotion, regional health planning.

## **Abstract:**

## **Objective**

This study utilised a program logic model to describe the inputs, activities and outputs of the "10,000 Lives" smoking cessation initiative in Central Queensland, Australia

## Design

A program logic model provided the framework for the process evaluation of "10,000 Lives". The data were collected through document review, observation and key informant interviews, and subsequently analysed after coding and re-coding into classified themes, inputs, activities and outputs.

### Setting

The prevalence of smoking is higher in the Central Queensland region of Australia compared to the national and state averages. In 2017, Central Queensland Hospital and Health Services set a target to reduce the percentage of adults who smoke from 16.7% to 9.5% in the Central Queensland region by 2030 as part of their strategic vision ('Destination 2030'). Achieving this target is equivalent to 20,000 fewer smokers in Central Queensland, which should result in 10,000 fewer premature deaths due to smoking-related diseases. To translate this strategic goal into an actionable smoking-cessation initiative, the "10,000 Lives" health promotion program was officially launched on 1 November 2017.

## Result

The activities of the initiative coordinated by a senior project officer included building clinical and community taskforces, organising summits and workshops, and regular communications to stakeholders. Public communication strategies (e.g., Facebook, radio, community exhibitions of "10,000 Lives", and health-related events) were utilised to promote available smoking cessation support to the Central Queensland community.

## Conclusion

The "10,000 Lives" initiative provides an example of a coordinated health promotion program to increase smoking cessation in a regional area through harnessing existing resources and strategic partnerships (e.g., Quitline). Documenting and describing the process evaluation of

the "10,000 Lives" model is important so that it can be replicated in other regional areas with a high prevalence of smoking.

# Strengths and limitations of this study

- The study considered a standard evaluation framework (logic model) to describe the program.
- Multiple sources of data were collected and included to describe the process of the program
- The plan for impact evaluation of the program is discussed in the article.
- Some outputs may have been omitted due to lack of systematic documentation of all activities within the project field notes.

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## Introduction

Tobacco smoking remains the leading avoidable risk factor that contributes to the burden of death and disease in Australia. The 2015 Australian Burden of Disease Study estimated that 9.3% of the total disease burden, 13.3% of all deaths, and 443,235 Disablity Adjusted Life Years (DALYs) were related to tobacco use.<sup>1,2</sup> In Queensland, the northeast state of Australia, leading causes of deaths are lung cancer, COPD, coronary heart diseases, which have a strong link with tobacco smoking.<sup>3</sup> In 2016, 12% of the adult population were daily smokers in Australia,<sup>4</sup> whereas 14.5% of adults in Queensland,<sup>5</sup> and 16.7% of adults in Central Queensland (the central regional district of Queensland) smoked daily.<sup>6</sup> Central Queensland (CQ) had the fourth-highest smoking prevalence among all 15 hospital and health services catchment regions in Queensland; South West (inner regional area) had the highest (21.6%) and the Sunshine Coast (close to the capital city, Brisbane) had the lowest rate (10.3%).<sup>7</sup> Reasons for the higher smoking prevalence in CQ may include the higher proportion of the population who experience socioeconomic disadvantage, compared to the state average.<sup>7,8</sup> Priority populations for smoking cessation assistance identified within CQ include pregnant women (17.0% smoking prevalence),<sup>9</sup> Aboriginal and/or Torres Strait Islander peoples (Australia's Indigenous people groups),<sup>5</sup> and people living in particular local government areas within CQ, such as Gladstone 19.1% and Rockhampton 17.7% smoking prevalence.<sup>7,8</sup>

Tobacco control and smoking cessation programs are a shared responsibility between the Federal Government and the States and Territories in Australia.<sup>10</sup> The State and Territory governments implement many tobacco control and smoking cessation programs. Queensland has performed as one of the best states in Australia for tobacco control activities in recent years.<sup>11</sup> The daily smoking rate in Queensland declined from 17.9% in 2002 to 10.3% in 2020 .<sup>12</sup> Programs and policies delivered by the Queensland Government including the Quitline service<sup>13</sup>, anti-smoking mass media campaigns, and smoke-free policies and laws have together contributed to maintaining a downward trend in the daily smoking rate in Queensland over the last few decades.<sup>14</sup> However, a significantly higher rate of adult smoking than the state average has persisted in some regional areas like the CQ region.<sup>9</sup> This might be due to a higher baseline smoking prevalence and sub-optimal use of available interventions (e.g., Quitline) by the regional and rural people who smoke (Quitline monthly data, 2014-2019).

The higher prevalence of smoking in CQ compared with the whole of Queensland led Central Queensland Hospital and Health Service (CQHHS) to prioritise smoking cessation while

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formulating the region's strategic health vision (known as 'Destination 2030') through a six month consultation process with CQ health personnel, consumers, priority groups, and community partners.<sup>15</sup> As part of 'Destination 2030',<sup>15</sup> CQHHS set a goal to reduce the adult daily smoking prevalence from 16.7% to 9.5% in CQ by 2030. Accomplishing this goal would be equivalent to 20,000 fewer smokers in CQ which was estimated to result in 10,000 lives that would be saved from premature death due to smoking-related diseases because half of all long-term-smokers die from a smoking related disease.<sup>16</sup> The strategic goal was translated into an actionable health promotion initiative to increase smoking cessation, which was named "10,000 Lives" .<sup>17</sup> The name of the "10,000 Lives" initiative builds on the previously highly successful "10,000 Steps Rockhampton" program, which promoted physical activity in Rockhampton.<sup>18,19</sup> The popularity of "10,000 Steps Rockhampton" helped branding "10,000 Lives" and increasing recognition of the program among the partners and the community. Besides, the lesson learned from the process evaluation of "10,000 Steps Rockhampton" assisted us to develop a working model for achieving the goals of the "10,000 Lives" initiative. <sup>18,19</sup>.

Tobacco control and smoking cessation are priorities of federal and state governments (e.g., Queensland) in Australia, yet, there are always budget constraints for preventive health promotion.<sup>20</sup> As such it is imperative to consider how to leverage off existing funded programs with small iterative changes and budget. A low-cost and locally initiated program like "10,000 Lives" is one such example, where this principle is being applied, with the aim of improving the health and wellbeing of the community. Completing a process evaluation of "10,000 Lives" was undertaken so that others can benefit from the shared learning experience, and to identify elements that were implemented well and which were less successful and could be improved. Process evaluations of the national campaign for smoking cessation in Australia are documented rigorously.<sup>21-25</sup> Some targeted smoking cessation campaigns have been evaluated for their impact and outcomes.<sup>26,27</sup> However, we could not find any similar evaluations of smoking cessation programs that used a logic model in the scientific literature. This paper documents the process evaluation of "10,000 Lives" so that researchers, health professionals and policy makers can use this information for future program planning.

#### Aim

 This study aims to describe the inputs (planning, resources and costs, and partners), activities and outputs of the "10,000 Lives" initiative of Central Queensland, Australia.

### Method

An evaluation plan was formulated to investigate the inputs, activites, outputs, impact and outcome of the "10,000 Lives" initiative. A program logic model, adapted from a standard health promotion evaluation framework,<sup>20</sup> was developed for the evaluation plan. The evaluation framework was discussed among stakeholders who attended the "10,000 Lives" summit in Rockhampton, Australia, in November 2018. We have chosen this model because this has guided understanding the program input for "10,000 Lives" but also the program evaluation, where process, impact and outcome assessment can be clearly delineated (**Figure 1**). However, this paper focuses on describing the inputs (planning, resources and cost, and partnership), activities and outputs of the initiative.

## Target population of the "10,000 Lives" initiative

The target population for the "10,000 Lives" initiative is all smokers living in the service catchment area of CQHHS (Figure 2), which includes 12 public hospitals in CQ.<sup>6</sup> In 2017, the population of the CQ region was ~220,000 people (4.5% of the Queensland population and 0.9% of the Australia population).<sup>28</sup> There were 54,722 families (74,201 households) in 2017; the median age was 34.9 years; sixty-five per cent of the population were aged between 15-64 years.<sup>29</sup> Approximately six per cent of the population are Aboriginal and/or Torres Strait Islanders (Australian Indigenous people).<sup>8</sup> The rate of smoking is higher among these population groups compared to the overall population due to the legacy of colonisation.<sup>30</sup> The rate of homelessness was 41.0 per 10,000 persons. The median total personal income per year was \$35,017 Australian dollars (AUD), with 50.2% having the highest level of schooling of Year 11 or 12 (or equivalent). In CQ, 25.7% of the population were in the most disadvantaged quintile and 10.1% of the population were in the least disadvantaged quintile, whereas in Queensland, 20% of the population were in most disadvantaged quintile and 20.0% in the least disadvantaged quintile in 2017.8 Compared to the whole state of Queensland, CQ has a higher burden of the social determinants of poor health, including low-income households, early exit from school, unemployment and mental health issues. These socio-demographic factors contribute to the higher prevalence of smoking in this region.<sup>31</sup> According to a state-wide survey in the year preceding the launching of "10,000 Lives" an estimated ~28,000 adults who smoke resided in CQ.<sup>7</sup> The daily smoking prevalence was highest (17.4%) in the 30-44 years age group. Also, the prevalence was high (18.5%) among the most disadvantaged quintile.<sup>7</sup>

## Study design, data collection and analysis

We conducted an exploratory investigation by critically appraising the project plan, partnership development, communication strategies, targeted project activities and overall health promotion activities for smoking cessation covered by the "10,000 Lives" initiative. Data were collected retrospectively for the period between July 2017 (initiation of planning) up to December 2019 (26 months after the official launch of "10,000 Lives") from field notes, project documentation notes, relevant policy documents, and key informant interviews with project personnel.

A generic search was performed of relevant websites (i.e., Queensland Health: <u>www.health.qld.gov.au</u>, CQ Health: <u>www.health.qld.gov.au/cq</u>, Department of Health of Australian Government: <u>www.health.gov.au</u>, and Australian Institute of Health and Welfare: <u>www.aihw.gov.au</u>) for relevant policy documents, and social media pages (e.g., Facebook) for information about smoking cessation campaigns active during the study timeframe.

Data were extracted from these sources and imported into NVIVO,<sup>32</sup> and then cleaned, coded, and classified into five themes: plans, resources and cost, partnerships, activities and outputs. A narrative synthesis and summary interpretation was completed and these are presented in the results section. The data sources and collection methods are shown in **Table 1**.

## Ethical approval

The study was approved by CQHHS Human Research Ethics Committee (HREC) (HREC/2019/QCQ/50602).

## Patient and Public involvement

We used routine data source for process evaluation of the program. Individual participants were not involved in this study.

## Result

**Table 2** lists the key findings about the inputs (planning, resources and cost, and partnerships), activities and outputs of the "10,000 Lives" initiative in first 26 months after it's launch. Below, we described the result according to the findings from different parts of the logic model framework (i.e., Inputs, Activities and Outputs).

## Input: Planning

At the program planning stage (July-August 2017), Central Public Health Unit (CQPHU), with the help of the Service Integration Coordinator of the CQ Mental Health Alcohol and Other

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Drugs Services, developed a project proposal to establish a smoking cessation taskforce in CQ. The project proposal<sup>33</sup> stated the objectives of the initiative as:

"1. Establish a 10,000 Lives Taskforce: The taskforce will form the backbone of the project and through collective impact with the support of a wide range of community stakeholders large scale social change will be achieved. ("Collective impact" is a structured and disciplined approach to bringing cross-sector organisations together to focus on a common agenda that result in long-lasting improvement.).

2. Establish a team of clinical champions to engage key stakeholders e.g. G.P.'s and provide health promotion activities, intervention and education to the broader community".

The aim was subsequently reflected in 'Destination 2030'.<sup>15</sup> The initial plan considered strategies that adhered to the following guiding principles: i) Population approach of delivering a sustained, effective and comprehensive initiative for all, ii) Whole system *approach* of harnessing the many inter-related factors that can contribute to improving health and wellbeing, iii) Evidence-based approach of integrating knowledge from research evidence into implementation (e.g., evidence review of effective smoking cessations and partnership with academic institute for process evaluation), iv) Reducing inequality by addressing the differences in health status in the community through recognising and responding to the vulnerable groups (e.g. the groups who have higher smoking prevalence), v) Working in partnership with government departments, community members, Non-Government Organisations (NGOs), and academic stakeholders, vi) Building capacity by developing an adequate number of skilled and empowered people, and vii) Effective implementation and evaluation for ensuring the platform to track the collective impact.<sup>33</sup> For implementing the approaches, multiple and specific mini-projects were planned to target priority groups. For example, plans were formulated to give more attention to specific geographical areas (e.g., Gladstone and Woorabinda) and populations (e.g., mine workers and Aboriginal and Torres Strait Islander people) since the higher rate of smoking were observed among these populations. Ambitious milestones were set during program planning including a reduction of ~3,000 smokers by 2020', 'a reduction of ~14,000 smokers by 2025' and 'a reduction of ~20,000 smokers by 2030'. <sup>33</sup>

### Input: Resources and costs

A senior project officer (SPO, Administrative Officer Grade 5) was recruited in December 2017 to coordinate the planned activities and manage the implementation of the program

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strategies. Other resources utilised in the project included communication materials (e.g., Posters and leaflets, emails, news, website and social media content), promotion materials (e.g., information containing postcards, coffee cups, fridge magnets, water bottles and bags), materials required for mobile stalls to display the project activities in community or health events (e.g., display table, carbon monoxide breath testing for smokers), organising summits and workshops, and ground signage. The approximate cost for running the program for 24 months (January 2018-December 2019) was \$280,748 (AUD) including the amount \$64,164 (AUD) for the research and evaluation component (**Table 2(a)**). The initiative was approved by the CQHHS board and solely funded by CQHHS.

In addition to the direct resource and costs, the initiative utilised in- kind support from the CQPHU for administrative activities including administration staff support and operational support during the period between starting the program planning in July 2017 and the official launch of the initiative in November 2017. Also, the initiative utilised the existing resources available for smoking cessation in CQ which included combination of a 12-weeks-free Nicotine Replacement Therapies (NRTs) and telephone counselling via the Queensland Quitline's Intensive Quit Support Program, subsidised smoking cessation pharmacotherapies through the Pharmaceutical Benefits Scheme, Queensland Health's Quality Improvement Payment (an incentive program for clinicians), and the collaborative support from existing smoking cessation programs (i.e., "Quit for You...Quit for Baby", "Quit for You", "Yarn to Quit", B.strong).

### Input: Partnerships

Developing partnerships and involving stakeholders in the implementation of "10,000 Lives" was a key strategy of the initiative. A strategic partnership was made with the Queensland Quitline<sup>13</sup> for enhancing the promotion of their existing Intensive Quit Support Program which was available to rural, regional and remote communities with a higher than average smoking prevalence and accessing a monthly report to track Quitline registrations and participation status for smokers in CQ. Extensive in-kind support was provided by the Board and Chief Executive of CQHHS by arranging the project fund, and the Preventive Health Branch of Queensland Health by giving strategic advice and advocacy for implementing the smoke-free policies. Partnerships were built with different units and programs within CQHHS (e.g., Oral health, Mental health, 'CQ Youth Connect'), community organisations (e.g., Rotary<sup>34</sup>), a foundation for youth mental health called 'Headspace',<sup>35</sup> a targeted brief intervention training

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program for Aboriginal and/or Torres Strait Islander people named 'B.strong',<sup>36</sup> a health promotion initiative for Aboriginal and/or Torres Strait Islander people called 'Deadly Choices',<sup>37</sup> local councils (city council and local government staff) and a non-government organisation (NGO) supporting and developing businesses and projects in CQ called "Capricorn Enterprise"<sup>38</sup> to promote and support smoking cessation activities for their staff and client population (patient, youth, community and Aboriginal and/or Torres Strait Islander people who smoke). The project collaborated with the University of Queensland for academic support for the program evaluation. Partnerships were developed with "Cancer Council Queensland"<sup>39</sup> for conducting training and workshops for the local clinicians, social workers and volunteers who were interested in supporting the initiative. The local Primary Health Network actively collaboratored with "10,000 Lives" initiative by promoting the initiative's interventions (e.g., referral to Quitline, smoking cessation advice to patients who smoke) to General Practitioners (GPs). Local sports clubs and radio stations also supported the initiative to promote the available smoking cessation interventions to their audience.

### Activities

The SPO coordinated the activities of "10,000 Lives" under the guidance of the director of CQPHU. The SPO took a pre-set plan and continuously adapted strategies (described in planning section) for implementing the program. The following range of activities were delivered to increase smoking cessation in CQ:

- 1. **Organising tobacco summits** to develop partnerships with clinicians, GPs, social workers, local council and industry staff, and local politicians.
- 2. Establishing a clinical and community organisation taskforce for smoking cessation to identify clinical and community organisation personnel to become a champion for smoking cessation. CQHHS clinicians were encouraged to conduct inpatient hospital and health care facility-based documentation and brief intervention<sup>a</sup> via a standardised 'Smoking Cessation Clinical Pathway (SCCP)'<sup>40</sup> form among patients who smoke, and to refer them to Quitline for accessing the Intensive Quit Support Program. The SCCP is an evidence-based decision support tool for screening smoking status and delivering a brief intervention to patients for smoking cessation. Community champions were encouraged to

<sup>&</sup>lt;sup>a</sup> Brief smoking cessation advice and referral embedded opportunistically into clinical practice.

promote the Quitline program and other smoking cessation support (e.g., My QuitBuddy app) to people who smoke.

- 3. **Promoting smoking cessation** through emails, newsletters, local radio, social media pages (i.e., Facebook), digital billboard and ground signage, and exhibiting in various community expos and health-related events. The SPO explored various communication pathways to promote the available smoking cessation support, particularly the Quitline program. These included; conducting events on the local radio station ('Triple M'), posting messages on Facebook pages ("10,000 Lives", CQHHS and 'Triple M' Facebook pages), local newspapers (The Morning Bulletin and Gladstone Observer) and in the daily news and weekly bulletin of CQHHS and e-newsletters for GPs, and electronic billboard display in the center of the main city of the CQ region (i.e. Rockhampton CBD) (Figure 3).
- 4. Advocating for smoke-free policies and programs that could support smokers to quit. For example, the initiative established the ground signage and delivered tear off flyers promoting Smoke-free Healthcare in each of the hospital and community health campuses of CQHHS.
- 5. Implementing mini-projects to give extra attention to priority populations. For example, a film competition on 'smoke-free teens' was organised to deliver a youth-centric smoking cessation message designed by youth for youth, and a workshop was conducted by the SPO to introduce carbon monoxide breath monitors with *Gumma Gundoo Indigenous Maternal & Infant Care Outreach team*<sup>41</sup> to increase awareness of the adverse effects of antenatal smoking on mother and baby amongst Aboriginal and Torres Strait Islander pregnant women.

### **Outputs**

The quantitative output measures from the "10,000 Lives" activities are shown in **Table 2(b) and 2(c)**. Overall, the "10,000 Lives" initiative conducted seven smoking cessation summits and one Tackling Tobacco Forum, promoted and celebrated World No Tobacco Day regionally, completed at least twenty education sessions for newly recruited CQHHS staff, and conducted a combined smoking cessation workshop for the clinical and community champions. The SPO encouraged all the clinicians of CQHHS to attend the Smoking Cessation Masterclasses conducted by Queensland Health (Metro South HHS and Metro North HHS), with 70 clinicians completing, and a three-day training course on nicotine addiction and smoking cessation,<sup>42</sup> which was completed by six clinicians. Forty Aboriginal and/or Torres Strait Islander volunteers were trained in performing Brief Intervention for smoking cessation

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conducted by the Menzies School of Health Research (B.strong).<sup>36</sup> The "10,000 Lives" initiative was exhibited in twelve community expos and nine health-related events(e.g., World Cancer Day, World COPD day). The initiative implemented two mini-projects for priority population (Aboriginal and Torres Strait Islander pregnant women, younger people). "10,000 Lives" collaborated with 15 different organisations including Hospital and Health Service, regional councils, University, Community Organisations and other initiatives to promote smoking cessation in CQ. The SPO shared updated resources and information about smoking cessation to ~3,400 staff of different partner organisations through emails and 4,800 staff of CQHHS through posting in the daily news and a weekly bulletin called 'The Drift'. As a result of communication through email, phone call, posting messages and in-person meetings by the SPO, at least seven clinical champions, two community champions, two political champions and a champion GP centre became actively involved and worked on the ground as the smoking cessation taskforce in CQ.

### Discussion

This article explains why and how the initiative was implemented, and describes the way it operated over the 26 month period following its official launch in November 2017. This study also outlines how success of the program will be measured.

The "10,000 Lives" initiative was launched to reduce the daily smoking rate in CQ, which is higher than the state average. Policymakers realised the high disease burden that is due to smoking and included the ambitious aim to reduce the smoking rate to 9.5% by 2030 in the Destination 2030 plan. The implementing organisation of the initiative is the local Public Health Unit which explored the existing and available smoking cessation support available in its region. A number of effective tobacco control and smoking cessation interventions were already available in the region, and the "10,000 Lives" initiative aimed to increase awareness and uptake of these interventions. In this way, the initiative focused on maximising the use of existing services available in the region.

The initial plan of the initiative was guided by the standard principles (described in the *Planning* part of the results section) of program implementation. The initiative was officially launched in each of the local government areas of CQ region at a Smoking Cessation Summit. Participation of the people from multiple sectors including Health and Community Services and state and local government in the inaugural summits ultimately facilitated the initiative to

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build the partnerships and identify champions. Partnerships with various government and nongovernment organisations opened and enhanced the opportunities to increase the coverage of workplace-based smoking cessation intervention (e.g., smoke-free policies, referrals to Quitline). Partnership with Quitline Queensland assisted the initiative to promote their intensive Quit support program among the partnering organisations (e.g., Hospitals, Councils, NGOs). Besides, the regular communication and motivation to the stakeholders (clinical and community champions) helped the SPO to identify the opportunities (e.g., arrange training and workshop on smoking cessation) and tackle the barriers of smoking cessation work for them. For example, if any champion talked about any organisational challenge to perform or promot smoking cessation, the SPO took initiative to escalate the issue to his/her supervisor and discussed to resolve the issue. While not all opportunities and barriers were able to be successfully resolved, a reasonable proportion (~32 %) led to successful outcomes (Table 2(c)). These integral strategies of building partnerships and communication became useful to build a clinical and a community taskforce of smoking cessation in CQ which leveraged the existing smoking cessation program and policies available in the region. This approach is an exemplar of running a health promotion campaign in a resource constrained environment.

The 10,000 "Lives" initiative was built on the success of a previous health promotion campaign "10,000 Steps Rockhampton" in this region.<sup>18,19</sup> The Rockhampton area was chosen for "10,000 Steps Rockhampton" program because of the high prevalence of obesity.<sup>18</sup> Again, "10,000 Lives" initiative was launched in CQ to address the higher prevalence of smoking in this region. The "10,000 Lives" utilised the program strategies (e.g., media campaign, partnerships with clinicians, focusing on priority populations) that were also used in the "10,000 Steps Rockhampton" program.<sup>18</sup> Other similarities include the use of technology to measure exhaled carbon monoxide in "10,000 Lives" and pedometers in "10,000 Steps Rockhampton" to measure activity levels. The use of the carbon monoxide breath monitor provided a teaching moment to discuss the health impacts of smoking by demonstrating the person's exposure to one of the toxins in cigarette smoke, leading to increased autonomousmotivation to quit smoking . Creating autonomous motivation in people who smoke, explained by the 'Self-Determination Theory',<sup>43</sup> is effective for promoting smoking cessation. <sup>44</sup>

However, the implementation of the program was sometimes challenging, such as increasing clinician participation in delivering brief smoking cessation advice and Quitline referrals. Some stakeholders expected "10,000 Lives" to directly deliver smoking cessation services. Future

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program planning may need to think about how cost-effective and talilored services can be incorporated in the smoking initiative like "10,000 Lives". The "10,000 Lives" initiative is quite different from other smoking cessation programs in Australia (e.g., B.strong, Quitline) which deliver smoking cessation assistance. Rather, "10,000 Lives" intended to increase motivation to quit, and raise awareness of existing smoking cessation assistance that is available via these other programs. While the National Tobacco Campaign <sup>21</sup> and statewide anti-smoking campaigns primarily use paid advertisement to disseminate the quit smoking message, the "10,000 Lives" program focused on low cost and targeted approaches to disseminating the quit smoking message via partnerships with local media and local clinical and community champions for promoting the smoking cessation interventions. This model has also been used in other health promotion programs implemented in New South Wales, Australia and in a community of North East England.<sup>45,46</sup>

The strategies for achieving the goal of the "10,000 Lives" initiative reflect ecological models of health promotion' which explain the multiple levels of influence on health behaviour. <sup>47</sup> The initiative put substantial efforts to increase the use of interventions of smoking cessation programs by involving the service providers in the community (e.g., clinicians, NGO personnel) such this is a 'downstream' approach. For example, the "10,000 Lives" initiative encouraged clinicians to deliver brief interventions with their patients and refer them to Quitline, and other relevant smoking cessation programs. The use of local radio, which involved sports stars discussing smoking cessation and posting messages on Facebook pages are examples of 'midstream' strategies. While the advocacy of state level policies and programs (e.g., smoke-free hospitals) are 'upstream' strategies. Thus the "10,000 Lives" program fits the multi-level population based health promotion model of McKinlay.<sup>48</sup>

The current study had some limitations. Some outputs may have been missed due to lack of documentation of all activities within the project field notes. Reporting the process of a program through a specific model might limit the information reported, therefore we used a standard health promotion evaluation framework to increase rigour. Achievements of the "10,000 Lives" program include the formation of a tobacco control alliance with health professionals, local authorities, communities and the media in CQ, dissemination of knowledge to health professionals on how to deliver brief interventions, distributed promotional material that raised the profile of smokefree policies and smoking cessation support available in CQ, and conducted events and local campaigns to increase awareness of smoking cessation among

the general community and specific priority populations. The immediate and short- term impacts of the "10,000 Lives" initiative assessed via a stakeholder survey and analysis of Quitline data will be reported in detail elsewhere. However, we found good responses from the stakeholders in sharing their experience, role and recommendation for the continuation of the initiative. Our analysis of Quitline data indicated a significant positive impact of the introduction of "10,000 Lives" in CQ on referrals calls and use of Quitline services in comparison to a comparable control group.

### Conclusion

The "10,000 Lives" is an example of a health promotion program which coordinates smoking cessation activities in a regional area by harnessing and improving awareness of existing resources (e.g. employing only one project officer). Utilising existing resources and programs can be a cost-effective approach in countries like Australia where effective smoking cessation interventions are already widely available, but uptake is suboptimal. Evaluation of impact and outcome of this initiative could inform the development of future regional smoking cessation programs.

#### **Contributors**

AK, GK, SL and CG conceived and designed the study. AK conducted the key informant interviews. AK and KG extracted the data from different sources. AK performed the analysis of the data. AK, KG, GK, SL and CG interpreted the results. AK drafted the manuscript and all authors contributed with critical revisions to the contents of the manuscript. The final version of the manuscript was approved by all authors.

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### **Competing interests**

No, there are no competing interests for any author.

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**Data sharing statement** 

No additional data available.

### Patient Consent for Publication

Not applicable.

### **References:**

- Australian Institute of Health and Welfare. Australian Burden of Disease Study 2015: Interactive data on risk factor burden. 2019; <u>https://www.aihw.gov.au/reports/burden-of-disease/interactive-data-risk-factor-burden/contents/tobacco-use</u>. Accessed 17/06/2019.
- 2. Data tables: ABDS 2015 Risk factors estimates. 2019. https://www.aihw.gov.au/getmedia/28658401-d7f2-4e93-bb6f-9cbd2d5fa64c/ABDS-2015-Risk-factor-data.xlsx.aspx.
- 3. Queensland Health. Full 2020 Chief Health Officer report. 2020; 29. Available at: https://www.health.qld.gov.au/research-reports/reports/public-health/choreport/current/full.
- Australian Bureau of Statistics (ABS). National Health Survey: First Results, 2017-18, cat. no. 4364.0.55.001. Released at 11:30 AM (CANBERRA TIME) 07/02/2019 2018; http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2017-18~Main%20Features~Smoking~85. Accessed 30/8/2019.
- Queensland Health. The health of Queenslanders 2016. Report of the Chief Health Officer Queensland. Queensland Government. 2016; <u>https://www.publications.qld.gov.au//dataset/chief-health-officer-reports</u>. Accessed 07/08/2019.
- 6. Queensland Government. Central Queensland Hospital and Health Service. 2016; https://www.health.qld.gov.au/cq. Accessed 26/01/2019, 2019.
- Queensland Health. Detailed Queensland and regional preventive health survey results. *Preventive health surveys* 2019; <u>https://www.health.qld.gov.au/research-</u> <u>reports/population-health/preventive-health-surveys/detailed-data#documentation</u>. Accessed 29/08/2019.
- Queensland Regional Profiles. Queensland Government; 2019. <u>https://statistics.qgso.qld.gov.au/qld-regional-profiles</u>. Accessed 29/07/2019.
- 9. Queensland Health. *The Health of Queenslanders 2018. Report of the Chief Health Officer Queensland; Hospital and Health Service profiles.* 2018.
- 10. Australian Government the Department of Health. National Tobacco Strategy. 2018; <u>https://www1.health.gov.au/internet/main/publishing.nsf/Content/tobacco-strategy</u>. Accessed 07/08/2019.
- 11. AUSTRALIAN COUNCIL ON SMOKING AND HEALTH. National Tobacco Control Scoreboard. 2019; <u>https://www.acosh.org/what-we-do/national-tobacco-control-scoreboard/</u>. Accessed 04/06/2020.
- 12. Queensland Health. Queensland trends. 2020; https://www.health.qld.gov.au/researchreports/population-health/preventive-healthsurveys/data-trendsAccessed 27 January 2021.
- 13. Queensland Health. Where Quitters Click. 2019; <u>https://www.health.qld.gov.au/news-alerts/campaigns/tobacco/where-quitters-click-campaign</u>. Accessed 08/08/2019.
- 14.Queensland Health. Smoking Prevention Strategy 2017 to 2020. 2017;<br/>https://www.health.qld.gov.au/<br/>data/assets/pdf\_file/0022/651802/health-wellbeing-<br/>strategic-framework-smoking.pdf. Accessed 04/06/2020.
- 15. Central Queensland Hospital and Health Services. Destination 2030. 2017; https://www.health.qld.gov.au/\_\_data/assets/pdf\_file/0037/669772/destination-2030full.pdf. Accessed 08/08/2019.
- 16. World Health Organization (WHO). Tobacco. 2019; <u>https://www.who.int/news-room/fact-sheets/detail/tobacco</u>. Accessed 05/08/2019, 2019.
- 17. Queensland Health. 10000 Lives CQ Smoking Cessation Project. 2020; https://clinicalexcellence.qld.gov.au/improvement-exchange/10000-lives-cq-smokingcessation-project. Accessed 08/05/2020.

55

56

57

58 59

Australia. 2003;14(2):95-100.

Canberra2017.

2003;12 Suppl 2:ii40-44.

Medical Journal. 2014;348:g1646.

*Journal for Equity in Health.* 2019;18(1):74.

2008;19(3-4):68-71.

2015;5(12):619-623.

785.

16.

05/05/2020. Headspace.

2):ii9-ii14.

58.

Activity and Health. 2006;3(1):1-14.

Brown WJ, Eakin E, Mummery K, Trost SG. 10,000 Steps Rockhampton: Establishing a multistrategy physical activity promotion project in a community. *Health Promotion Journal of* 

Wendy JB, Kerry M, Elizabeth E, Grant S. 10,000 Steps Rockhampton: Evaluation of a Whole Community Approach to Improving Population Levels of Physical Activity. *Journal of Physical* 

Jackson H, Shiell A. Preventive health: How much does Australia spend and is it enough?.

Hill D, Carroll T. Australia's national tobacco campaign. Tobacco Control. 2003;12(suppl

Carroll T, Rock B. Generating Quitline calls during Australia's National Tobacco Campaign: effects of television advertisement execution and programme placement. *Tob Control.* 

Cotter T, Perez DA, Dessaix AL, Bishop JF. Smokers respond to anti-tobacco mass media campaigns in NSW by calling the Quitline. *New South Wales public health bulletin*.

Miller CL, Wakefield M, Roberts L. Uptake and effectiveness of the Australian telephone Quitline service in the context of a mass media campaign. *Tob Control.* 2003;12 Suppl 2:ii53-

Kmietowicz Z. Plain tobacco packaging in Australia increases calls to Quitline. BMJ : British

Power J, Grealy C, Rintoul D. Tobacco interventions for Indigenous Australians: a review of

Prevention and Population Health Branch 2010, Evaluation framework for health promotion and disease prevention programs, Melbourne, Victorian Government Department of Health. <u>https://www2.health.vic.gov.au/about/publications/policiesandguidelines/Evaluation-</u> <u>framework-for-health-promotion-and-disease-prevention-programs</u>. Accessed 10/12/2018. Boykan R, Messina CR. A Comparison of Parents of Healthy Versus Sick Neonates: Is There a

Lovett R, Thurber KA, Maddox R. The Aboriginal and Torres Strait Islander smoking epidemic: what stage are we at, and what does it mean? *Public health research & practice*. 2017;27(4).

Rockhampton, Queensland, Australia Central Queensland Public Health Unit; 2017:Page 2 of

Rotary Club. Rotary Districs 9570, Central Queensland. https://rotary9570.org/. Accessed

Menzies School of Health Researc. B.strong; Quit, Eat & Move for Health.

https://headspace.org.au/headspace-

current evidence. *Health Promotion Journal of Australia*. 2009;20(3):186-194. Walker RC, Graham A, Palmer SC, Jagroop A, Tipene-Leach DC. Understanding the experiences, perspectives and values of indigenous women around smoking cessation in pregnancy: systematic review and thematic synthesis of qualitative studies. *International* 

Difference in Readiness and/or Success in Quitting Smoking? Hospital pediatrics.

Leventhal AM, Bello MS, Galstyan E, Higgins ST, Barrington-Trimis JL. Association of Cumulative Socioeconomic and Health-Related Disadvantage With Disparities in Smoking Prevalence in the United States, 2008 to 2017. *JAMA Internal Medicine*. 2019;179(6):777-

QSR International. NVivo Qualitative Data Analysis Software [Software]. . 1999;

Central Queensland Hospital and Health Services. Project Plan: 10,000 Lives. In.

Rockhampton.

https://qsrinternational.com/nvivo/nvivo-products/.

Headspace

centres/rockhampton/. Accessed 05-05-2020.

https://www.bstrong.org.au/. Accessed 01/08/2019.

2 3 4 5	18.
6 7 8	19.
9 10 11	20.
12 13	21.
14 15 16	22.
17 18 19 20	23.
21 22 23	24.
24 25	25.
26 27 28	26.
28 29 30 31	27.
32 33 34 35 36	28.
37 38 39 40	29.
41 42	30.
43 44 45 46	31.
47 48	32.
49 50 51 52	33.
53 54	34.
55 56	35.
57 58 59 60	36.

37. Deadly Choices. Deadly Choices. <u>https://deadlychoices.com.au/</u>.

- 38. Capricorn enterprise. CAPRICORN ENTERPRISE. <u>https://capricornenterprise.com.au/</u>. Accessed 05-05-2020.
- 39. Cancer Council Queensland. Cancer Council <u>https://cancerqld.org.au/</u>. Accessed 05-05-2020.
- 40. De Guzman KR, Snoswell CL, Puljevic C, Gupta D. Evaluating the utility of a Smoking Cessation Clinical Pathway tool to promote nicotine prescribing and use among inpatients of a tertiary hospital in Brisbane, Australia. *Journal of Smoking Cessation*. 2020;15(4):214-218.
- 41. Queensland Health. Gumma Gundoo Indigenous maternal and infant outreach. 2019; <u>https://www.health.qld.gov.au/cq/services/gumma-gundoo</u>. Accessed 06/05/2020.
- 42. The Australasian Professional Society on Alcohol and other Drugs. NICOTINE ADDICTION & SMOKING CESSATION TRAINING COURSE. 2018; <u>https://www.apsad.org.au/news-a-media/209-nicotine-addiction-smoking-cessation-training-course</u>. Accessed 20/3/2020.
- 43. Deci EL, Ryan RM. Self-determination theory. In: *Handbook of theories of social psychology, Vol. 1*. Thousand Oaks, CA: Sage Publications Ltd; 2012:416-436.
- 44. Williams GG, Gagné M, Ryan RM, Deci EL. Facilitating autonomous motivation for smoking cessation. *Health Psychology*. 2002;21(1):40-50.
- 45. Campbell MA, Finlay S, Lucas K, Neal N, Williams R. Kick the habit: a social marketing campaign by Aboriginal communities in NSW. *Australian Journal of Primary Health*. 2014;20(4):327-333.
- 46. McGeechan GJ, Woodall D, Anderson L, Wilson L, O'Neill G, Newbury-Birch D. A Coproduction Community Based Approach to Reducing Smoking Prevalence in a Local Community Setting. *Journal of environmental and public health.* 2016;2016:5386534.
- 47. Promoting Health: Intervention Strategies from Social and Behavioral Research. *American Journal of Health Promotion*. 2001;15(3):149-166.
- 48. McKinlay JB. The promotion of health through planned sociopolitical change: challenges for research and policy. *Social science & medicine (1982).* 1993;36(2):109-117.

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Theme	28	Data sources	<b>Collection method</b>
Inputs			
Plannir	ng	Project planning documents and policy document 'Destination 2030'	Document review and internet search
Resource	ce	Project management documents	Document review
Partners	hip	Project planning and management documents, Key informant interviews	Document review, Key informant interviews
Activities		Project management documents, Master file for project management, Key informant interviews, Working group documents, Websites and Social media	Document and content review Websites, Social media, Observation, Key informant interviews
Outputs		Project management documents, Master spread sheet, Stakeholders meeting documents, Attendance sheet, and Key informant interviews	Document review, Key informant interviews
Anticipated impac outcome	t and	Project management documents, Policy documents, Key informant interviews	Project document review, Policy documents review, Key informant interviews

### Table 1. Summary of data sources and collection method for each evaluation topic

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Inputs			Activities	Outputs
Planning	<b>Resources and Cost</b>	Partnerships development	-	
Aims and objectives	Human resource	Implementing intervention	Organised summit and forum	Numbers of different
<ul> <li>Reducing smoking prevalence</li> <li>Saving lives from smoking-related deaths</li> </ul>	<ul> <li>One senior project officer</li> <li><i>Communication material</i></li> <li>Poster</li> <li>Leaflets</li> </ul>	<ul> <li>Quitline</li> <li>CQHHS</li> <li>Local community development service</li> <li>GP</li> <li>Headspace-works</li> </ul>	<ul> <li>Launched initiative</li> <li>Invited clinical, community and political partners</li> <li>Identified champions</li> </ul>	outputs are shown in below tables (Table 2(b) and 2(c))
<ul><li>Strategies</li><li>Establish a smoking cessation taskforce</li></ul>	• Media documents (e.g., newsletter, Facebook pages)	for Youth Mental Health; funded by Department of	<ul><li>Developed taskforces</li><li>Identified champions</li><li>Repeated</li></ul>	
Guiding principlei.A Population approachesii.Whole system approachiii.Evidence-based approachiv.Reducing inequality v.	<ul> <li>Promotion material</li> <li>Digital Billboard</li> <li>Ground Signage</li> <li>Information marked gift items (e.g. coffee mug, water bottle, bag, fridge magnets)</li> <li>Postcard</li> </ul>	<ul> <li>Health of the Australian Government</li> <li>Every child CQ- community service initiative-,</li> <li>My Health for Life, B. strong)</li> </ul>	<ul> <li>communication and motivation</li> <li>Identified opportunities</li> <li>Tackled barriers of work</li> <li>Advocated training and capacity development</li> </ul>	
<ul> <li>vi. Building capacity</li> <li>vii. Effective implementation and evaluation</li> <li>Pre-set milestones</li> </ul>	<ul> <li>Materials for exhibition</li> <li>Carbon monoxide breath monitor Poster</li> <li>Leaflet</li> </ul>	<ul> <li>Preventive Health Branch of Queensland Health</li> <li>Primary Health Network (PHN)-</li> </ul>	Campaigned and promoted smoking cessation interventions • Newsletter • Local radio	

### Table 2. Description of project planning, resources, partnerships, activities and outputs in first 26 months of project launched

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 BMJ Open

2020 • A red ~14,0 (by 2) • A red ~20,0 (equa ~10,0 smok	uction of00 smokers1 to saving00 Lives froming-relatedature deaths)	Display board Labour cost Non-labour cost Cost for research and evaluation Expenditure is shown in <b>Table 2(a)</b>	Agency • Rotary Club • Six local councils within the district • Business industry association (Capricorn enterprise) of CQ <b>Research and Evaluation</b> • PhD project	<ul> <li>Digital billboard</li> <li>Community expos</li> <li>Health events</li> </ul> Advocated policy <ul> <li>Smoke-free hospitals</li> </ul> Implemented mini projects <ul> <li>Smoke-free teens</li> <li>Reduce smoking rate among Aboriginal and Torres Strait Islander pregnant women</li> </ul>
	Monetary cost spent f 019) after launch	or "10,000 Lives" ini	tiative in 24 months (Janua) Amount in Australia	$v_{0}$

Item of cost	Amount in Australian Dollar	
Labour cost (human resource)	\$199,600.0	
Non-labour cost (Materials, supplies, travel etc.)	\$16,984.0	
Evaluation and research cost (PhD project)	\$64,164.0	
Net cost	\$280,748.0	

Table 2 (b). Occurrence of different activities and events implemented by "10,000 Lives"
initiative in first 26 months

Event name	Frequency = N
Smoking cessation summits organised	7
'World No Tobacco Day' campaign (including a tobacco forum)	2
Number of mini-projects implemented for priority populations	2
Film competition with the theme of smoking cessation for young	1
people, organised	
Attended health event with "10,000 Lives" stall	9
Attended community expo and event with "10,000 Lives stall"	12
Brief education sessions delivered to newly recruited CQHHS staff	20
In-person meeting conducted	97
Facebook pages (10000 Lives CQ, CQ Health and Triple M central	206
Queensland) discussed posts	
Occasional share of the updated information and resources to	4,800
CQHHS staff through daily news and the weekly bulletin (Drift)	
Occasional emails with updated information and resources to the	3,409
personnel from partner organisations other than CQHHS	

### Table 2 (c). Numbers of partners and champions contacted, and numbers who supported the "10,000 Lives" initiative in first 26 months

Group/Organisation	No. contacted = N	No. Champions <sup>†</sup> /Supporter <sup>‡</sup> / Partner <sup>§</sup> /Participants¤	
		identified = n(%)	
Clinical Staff <sup>†</sup>	133	7 (5.3)	
Community Service Staff <sup>†</sup>	26	2 (7.7)	
GP centres <sup>†</sup>	76	1 (1.3)	
Regional and local council staff <sup>‡</sup>	15	6 (40)	
Politicians <sup>‡</sup> including Minister, MP, Mayor,	24	24 (100)	
Councillors	27	24 (100)	
Organisations <sup>§</sup> for collaboration	18	15 (83.3)	
Clinicians <sup>II</sup> for having smoking cessation	133	70 (52.6)	
masterclass training	155	70 (32.0)	
Students/teens¤ registered for film competition	on 21	6 (28.6)	
Indigenous volunteers <sup>II</sup> trained for Brief			
intervention training by B.strong collaborated	90	40 (40)	
by "10,000 Lives"			
Total	536	171 (31.9)	

<sup>†</sup> *Champion:* The people or the unit who routinely worked for smoking cessation, kept regular communication with feedback to SPO of "10,000 Lives" of his smoking cessation activities.

\* Supporter: Provided support and did advocacy for '10,000 lives" initiative

§ Partners: Collaborated and worked together with "10,000 Lives" initiative

*¤Participants:* Participated in training/program/competition

### **Figure legends:**

Figure 1 title: Logic model for evaluation of "10,000 Lives" initiative.

**Figure 2 title:** Study Area Map; "10,000 Lives" initiative's catchment area. *Figure 2 caption:* Map showing the "10,000 Lives" initiative's target area (highlighted in green) which is the *CQHHS catchment area.* Red dots are indicated for the hospitals of *CQHHS* (Source: <u>https://www.health.qld.gov.au/maps/mapto/centralqld</u>)

Figure 3 title: Examples of communication materials utilised in "10,000 Lives" initiative.

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Mapping plans, strategies, activities, outputs including prospects and challenges of the program



Data Extraction from project document, observation and key informant interviews



Data analysis and interpretation

Online survey among stakeholders. In-depth interviews if required



Data analysis and interpretation

## **Evaluation Framework of "10,000 Lives" Initiative**

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Outputs

Taskforce

Increased

awareness

Widespread

information

developed

**Capacity built up** 

### Impact

Increased smoking cessation conversations through documentation and brief interventions



Increased referrals to smoking cessation support (e.g. Quitline,)



Increased use of cessation supports (e.g., Quitline and Free NRTs)

Exploring stakeholder's role, experience and perception about "10,000 Lives")

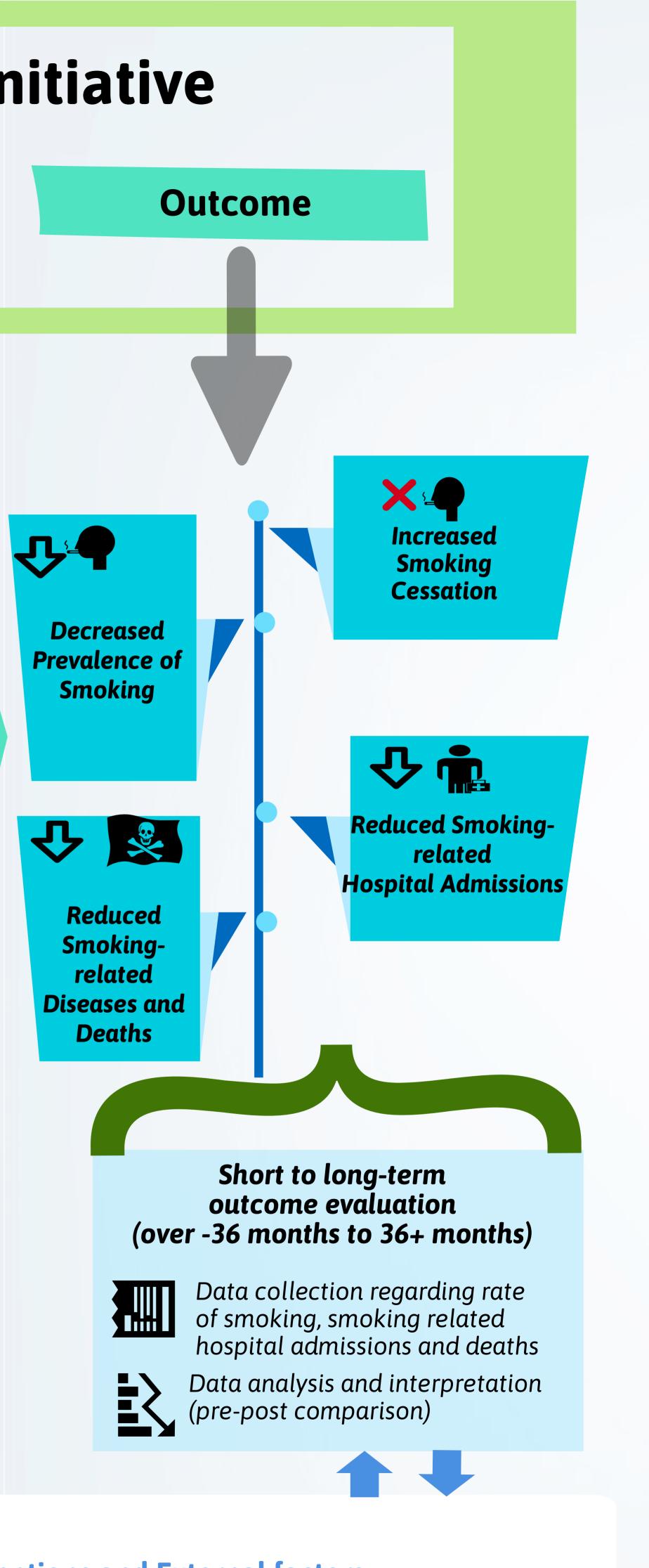
Immediate impact evaluation (over -36 months to +24 months)



Quitline and Hospital data collection

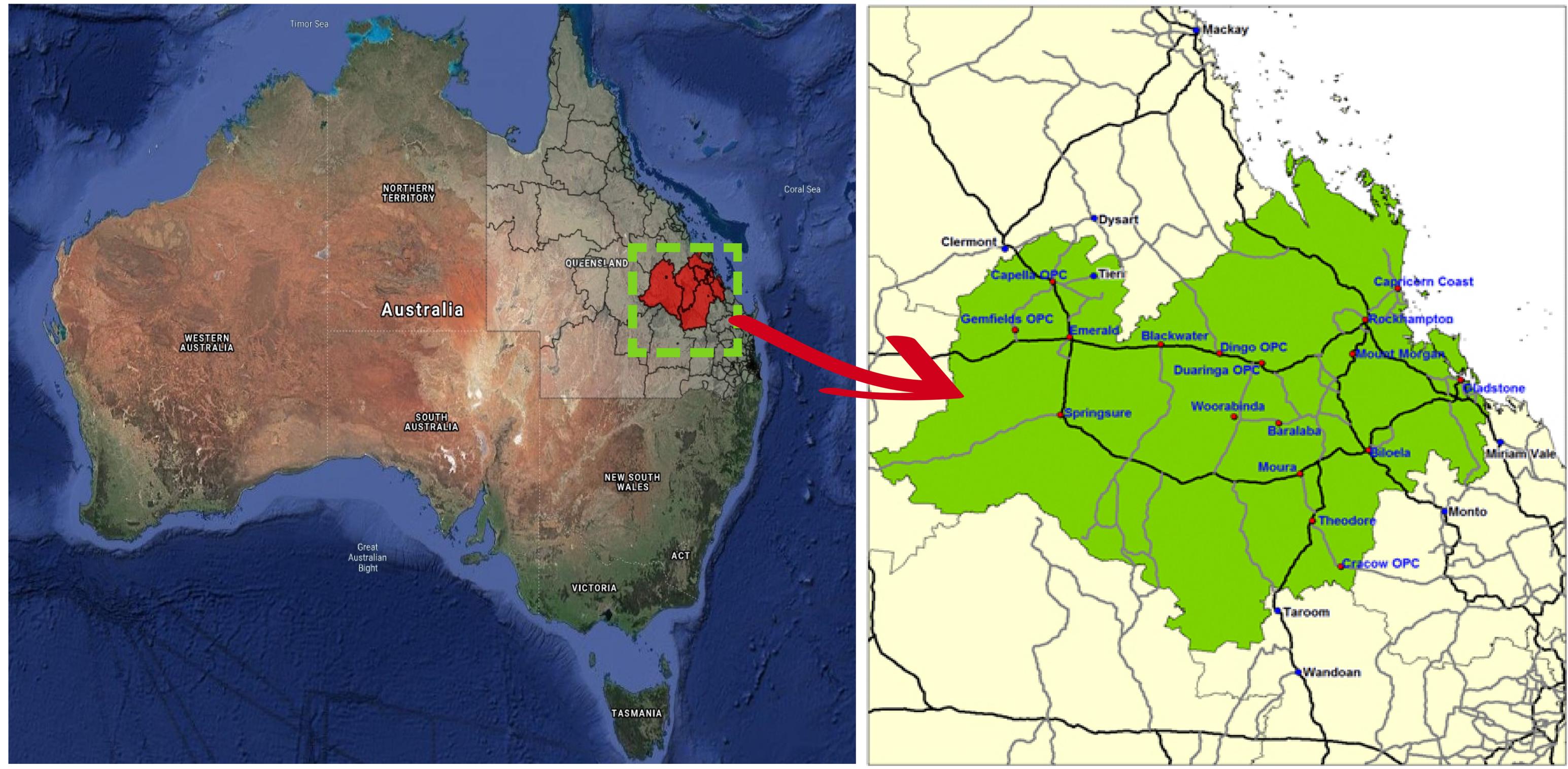


Data analysis and interpretation (pre-post comparison)



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### **Assumptions and External factors**



## Map of Australia (Central Queensland highlighted in red, inset)

## Central Queensland Hospital and health Service catchment area (highlighted in green) is the target area of "10,000 Lives" initiative

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# Newspaper

## Weekly bulletin

# Facebook page

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10000 Lives | Stop Smoking



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### 24 Mar 2018

Gladstone Observer, Gladstone QLD

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Section: General News • Article type : News Item • Classification : Regional Audience : 4,546 • Page: 9 • Printed Size: 218.00cm\* • Market: QLD • Country: Australia ASR: AUD 229 • Words: 175 • Item ID: 930419097



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Page 1 of 1

Photo: contributed



QUIT IT: Capras captain Jack Madden (left), CQ Hospital and Health Service's Steve Williamson and Claws captain Tia Konul.

### CQ teams' smoke-free living

YOU don't get to be an elite athlete by smoking a pack a by smokers, Tia chose an al- important the club promote

day. Joining CQ Health's the healthy lifestyle she lives could access. "It's impor 10,000 Lives movement to today. reduce the high rate of daily

"It's important for the Ca-"I have grown up sur- pras to support our smoking smoking in Central Queen- rounded by smokers in both fans by informing them they sland, Capricorn Claws cap- my family and friends and I can access 12 weeks of free tain Tia Konui and Capras don't like the smell or effect it nicotine replacement ther captain Jack Madden say they are proud to be smoke-free. has on their health," Tia said. With their home ground, Browne Park, being a smoke-(13QUIT)," he said.

Growing up surrounded free venue, Jack said it was

ternative path, leading her to the help their smoking fans



### 31 MAY 2019 - CENTRAL QUEENSLAND HOSPITAL AND HEALTH SERVICE



Health Worker Lorgay Iles (left) and 10,000 Lives Senior Project Officer Kalie Green congratulate mum-to-be Rhondeen Booth on her decision to quit smoking to give her new baby the best possible start in life. 5000 seek Quitline help

On World No Tobacco Day Rhoning or to never start in the first deen Booth can breathe easy place. knowing she's given her unborn Senior Project Officer Kalie Green child the best possible start in life. said 17% of Central Queensland Rhondeen is one of 5000 Cenwomen smoke when pregnant. tral Queenslanders who have registered with Quitline for free quit-smoking support and resources as part of CQ Health's 10,000 then children as they grow up in a partner Dwayne has also cut right Lives project which was launched smoking household," she said. in November 2017. "Our Gumma Gundoo Indigenous The project recognises that smoking is one of the biggest preventable causes of health conditions and aims to save 10,000 lives by healthy choices." encouraging people to quit smok- Rhondeen is keen to welcome her

new baby daughter in the next few days and is happy she'll be acting as a positive role model for all four of her children.

provide a healthy environment for

the best outcomes through making access to free support and resources to help quit smoking. Just call Quitline on 13 78 48.

Health worker Lorgay Iles is proud "This is a big target with CQ Health of Rhondeen, having worked with clinicians who explain the effects her over the past few months while smoking has on unborn babies and she made the choice to guit. Her back on his smoking habit, keen to Maternity Service team are fantas- his family

tic at supporting their clients to get All Central Queenslanders have



We encourage all CQ smokers to call Quitline on 137848 and ask about tailored phone support and 12 weeks of free patches, gum and lozenges posted to your home.

Choosing to quit could save you thousands very quickly - just look at what one packet of smokes can buy you in healthy food.

What would you spend your savings on? 🤔 Information and support visit https://quithq.initiatives.qld.gov.au #cqhealth #tobaccofree #quithg #moneysaver #quitsmoking

Poster



Poster

Poster



Q Search Facebook



Welcome! The 10,000Lives Stop Smoking support group is for anyone from Central Queensland (CQ) preparing to quit smoking or has quit smoking. If... See more

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Q

Private Only members can see who's in the group and what they post.

O Visible Anyone can find this group.

General group

About

m

### Congratulations! You are on your way to being a non-smoker

### Facts about Nicotine Replacement Therapy (NRT)<sup>1</sup>

- Nicotine from other sources such as patches, inhalers, gum or lozenges (NRT) enters the body slower and at a much smaller dose than smoking.
- NRT provides nicotine into the body without the harmful chemicals found in cigarette smoke.
- This is less likely to raise your heart rate or blood pressure than smoking. It is safe to use patches if you have heart disease and it is always safer to use patches than it is to smoke.
- Continue to use NRT for at least 8-12 weeks or as directed by your doctor. It is also safe to use more than one NRT product at the same time, e.g patch, gum, lozenge,

to help with cravings, not less.

If you use enough NRT, smoking should become

less enjoyable, so make sure you use more NRT

### Here are some tips to help you stay smoke free<sup>1</sup>

	s, use more NRT not less and seek sup cigarettes, you have not failed. Contir Don't give up!	
<ul> <li>Doing some exercise can help with cravings, so can drinking less coffee.</li> </ul>	<ul> <li>Make your house and car smoke free, and avoid being around other smokers.</li> </ul>	cigarette intake.
<ul> <li>Eating breakfast will help with cravings, so can eating a small dessert after a main meal.</li> </ul>	<ul> <li>Drinking less alcohol can increase your chances of successfully quitting.</li> </ul>	<ul> <li>Changing routines that you normally associated with smoking can help you decrease your daily</li> </ul>

inhaler.

### MORE INFORMATION

- Call Quitline 13 7848 or visit http://www.quitnow.gov.au/
- Download the 'My QuitBuddy' app on your smartphone to track your progress
- See your local doctor, pharmacist or healthcare provider when you are at home

Aboriginal and Torres Strait Islander Support: http://quit.nosmokes.com.au/



### Smoking... What is it costing you?

Cigarettes	Weekly Cost	Monthly Cost	3 months (quitline offers 12 weeks free NRT)	Yearly Cost	Over 5 Years
10 cigarettes a day	\$98	\$392	\$1,176	\$4,704	\$23,520
20 cigarettes a day	\$196	\$784	\$2,352	\$9,408	\$47,040
30 cigarettes a d <i>a</i> y	\$294	\$1,176	\$3,528	\$14,112	\$70,560
ased on a 25 pack of cigarette	s at \$35.				
Roll your owns	Weekly Cost	Monthly Cost	12 weeks (quitline offers 12 weeks free NRT)	Yearly Cost	Over 5 Years
50 grams a week	\$82.75	\$331	\$993	\$4,303	\$21,515

Check out how much smoking is costing you by visiting www.quithq.qld.gov.au

### Quitline. 137848 #10000LivesCQ Join the movement!

All Central Queensland smokers are eligible for Quitline's tailored program of: ☑ 12 weeks of free nicotine replacement therapy posted to your home

☑ 4 confidential call backs with a Quitline counsellor to support you through quitting

Call Quitline now on 13 78 48 (7am - 10pm, 7 days a week) or visit www.quithq.qld.gov.au

## Fridge magnet

#10000LivesCQ Join the movement!



### All Central Queensland smokers are eligible for Quitline's tailored program of:

☑ 12 weeks of free nicotine replacement therapy posted to your home

☑ 4 confidential call backs with a Quitline counsellor to support you through quitting

Call Quitline now on 137848

### **Quitline**. **FREE! Nicotine Replacement Therapy to CQ Smokers** 1 3 Ø U I T

Research shows that the best way to quit smoking is to use nicotine replacement therapy (NRT) or quit smoking medication in combination with support from Quitline or a health professional.

> Quitline is offering Central Queensland smokers a tailored quit smoking program which includes 12 weeks of free NRT posted to your home.

Be one of the 10,000Lives saved in Central Queensland -Call Quitline on 137848

### #10000LivesCQ Join the movement!

# Footpath Sign

### Ne are SMOKE-FREE

# Quitline 137848



Health #10000LivesCQ Join the movement!

## **Digital Display Board**



## Exhibition



( Health Great care for Central Queenslanders

### Join the movement!

#10000LivesCO

10000lives@health.qld.gov.au

Quitline