Using a competition model to help rural communities become healthier: lessons from the NSW Healthy Town Challenge quality assurance process

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\textbf{Intervention}

The New South Wales (NSW) Healthy Towns Challenge (HTC), an initiative to encourage small rural communities in NSW to develop strategies to be healthier, was designed by combining multi-level\textsuperscript{1} approach to health promotion with a competition-based model.\textsuperscript{2,3} Applications were invited from towns with a population between 1000 and 15 000 in the 2011 Census\textsuperscript{4} outside the Sydney metropolitan area. Towns could team up with adjacent towns and satellite townships if they were too small or shared local services such as health facilities. Of the 12 towns that applied, five were selected competitively to participate due to available funding for grant awards.

HTC was implemented from October 2014 to June 2015. Participating towns were required to involve local stakeholders, and develop and implement healthy-living activities that focused strategically on people-, place- and policy-based activities. Access to existing free state-wide preventive health programs was facilitated for the towns and a National Heart Foundation guide, Creating Heart Healthy Towns,\textsuperscript{5} was developed to help the towns plan their activities. Each town was awarded a grant of $15 000 to support their activities. In addition to other people-based healthy-living activities, the towns were required, over a 6-week period, to recruit adults over 18 years of age into the Get Healthy Information and Coaching Service (GHS), a free telephone-based lifestyle service. On average, GHS participants lose 4 kg of weight and 5 cm waist circumference.\textsuperscript{6} The towns competed against each other to win a first prize of $5000 based on the total weight loss by GHS participants in proportion to the town size at HTC completion. Weight loss was chosen as the only criterion for selecting the winner as it made sense to the community members and was relatively easy to compare across the towns. Each participating town nominated one HTC coordinator to coordinate the activities.

\textbf{Quality assurance}

\textbf{Monthly feedback forms}

The five HTC coordinators completed semi-structured monthly feedback forms about town activities, successes and challenges and financial and in-kind contributions by local partners.

\textbf{Group discussions}

The five HTC coordinators also participated in two group discussions (one face-to-face and one by telephone) at four and six months from challenge start. Notes were taken during the discussions.

\textbf{GHS participant data}

GHS participant data including self-reported weight was collected by GHS as part of routine data collection at HTC commencement and completion. The weight of participants who dropped out from GHS was collected by the local HTC committees.

\textbf{Data analysis}

The monthly feedback reports and the group discussion notes were analysed thematically. GHS participant’s self-reported weight data was used to compare the difference in the weight of participants at the start and completion of HTC.

\textbf{Ethics}

Ethical guidelines\textsuperscript{7} applicable to quality assurance activities including voluntary participation, informed consent and right to withdrawal were adhered to. GHS participants provided consent for their program data to be used for evaluation purposes when enrolling into the service. Confidentiality of participants was protected by de-identifying discussion notes and GHS data before analysis. The de-identified data were stored electronically in a password protected server.
**Results**

Issues raised by the towns in the monthly reports were similar in nature, largely regarding the impact of the timing of the project. HTC committees had two weeks lead time from selection to challenge commencement, which did not allow sufficient time to plan and launch HTC locally. The resource implications of the focus on GHS enrolment during the early stages of HTC resulted in other activities not being initiated until much later in the program. Each HTC committee developed plans and emphasised their intention to continue healthy-living activities after HTC, but monthly reports indicated that the interest of community members declined over time within the HTC period.

In the semi-structured discussions, informants noted that HTC generated interest and spurred action among people who had not previously participated in healthy-living activities. During the initial six to eight weeks of HTC, all participating towns focused their efforts on GHS enrolments, with policy and place strategies being addressed in the latter period of HTC. HTC committees worked in partnership with local stakeholders and used their grant to generate financial and in-kind support to implement policy and place strategies such as improving signage and lighting at walkways, reassessing the local council catering policy, setting up community gardens and installing outdoor exercise equipment. Positive social outcomes, such as better connected neighbourhoods and social well-being, emerged as strong themes across all towns.

A total of 475 eligible adults from the five towns registered their interest in GHS during the six-week eligibility period, with 424 (89.2%) enrolling in the GHS. HTC participants lost on average 1.2 (±3.4) kg at the GHS midpoint data collection (3–4 months after commencing GHS) compared with an average weight loss of 2.0 (±4.8) kg by regular GHS participants at the midpoint.6

**Implications of findings**

The findings from HTC provide important insights into how rural communities respond to competition-based health-promotion initiatives and how such initiatives need to be structured to achieve optimal community participation. There were some tangible place- and policy-related outcomes in the towns. Although costs were not quantified, the HTC funding was used effectively by the town committees to leverage financial and in-kind support from local stakeholders to develop strategies far beyond the grant value. Place and policy strategies would probably have garnered even more attention if they had been included in the award criteria.

People who enrolled in GHS via HTC lost less weight than those enrolled in regular GHS. However, this could be expected because those who enrolled in GHS via HTC did so primarily to support their towns rather than intrinsically to achieve behaviour change.6 Nonetheless, these people’s achievements signify a key strength of the HTC: that it facilitated positive health changes in the segments of the communities that were not prepared to make lifestyle changes.

The above findings, within the constraints of a feasibility study design, suggest that a competitive health promotion model can generate substantial community interest and local financial and in-kind support. Finding the right balance between the competition and the place and policy components is essential to ensure that these components are implemented.

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**References**