Heart Safe Community (Tatura site) Learning Focused Evaluation

Final Report

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HSCTaturaFinal

Please note this Final Evaluation Report has been prepared with the knowledge that evaluation activities regarding the sustainability of the Heart Safe Community (Tatura) benefits are yet to occur.

Acknowledgement

The evaluation was funded by Heart Foundation (Victoria). We particularly thank Catuscia Biuso (previous Chain of Survival Program Manager, Heart Foundation (Victoria); Danielle Saxton (Manager - Chain of Survival Project, Heart Foundation (Victoria); Eugene Lugg (Project Officer- Chain of Survival Project, Heart Foundation (Victoria); Melinda Whitehouse (Former Manager - Community Education and Engagement, Ambulance Victoria) and Marie Tanner (Former Community Education Coordinator, Ambulance Victoria). I also wish to thank all the evaluation participants, as without their cooperation this evaluation work would not have been possible.

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Executive Summary

Heart Safe Community is a public health initiative that aims to improve survival rates from out of hospital cardiac arrest in a specified location. It is currently being implemented in Victoria by the National Heart Foundation of Australia (Victoria) in partnership with Ambulance Victoria. The Heart Safe Community initiative is premised upon building community infrastructure, skills and confidence in bystander response to an out of hospital cardiac arrest to give a person the best chance of survival.

In 2017, the Heart Foundation commissioned the University of Melbourne to support and evaluate the implementation, effectiveness, partnerships and sustainability of the Heart Safe Community initiative in the pilot community - Tatura, Victoria. A participatory realist evaluation approach was conducted using mixed methods: 1) reflective sessions with Heart Foundation, Victoria and Ambulance Victoria; 2) synthesis of local (Tatura) evaluation data; and 3) a key stakeholder workshop.

The local evaluation data and key stakeholder workshop confirmed that the pilot program was reaching targeted community populations and organisations. It has increased community knowledge, skills, and confidence to have a go at CPR and use a defibrillator in an out of hospital cardiac arrest, and increased community commitment and shared responsibility to take action and try to save someone's life.

Key tangible results of the HSC Tatura pilot include the delivery of over 21 community presentations on bystander resuscitation and 855 participants exposed to the call to action, 'Call, Push, Shock' and 'anyone can save a life'. These presentations were delivered in multiple community settings where locals interact and meet, including schools, community groups, workplaces, and government facilities. Tatura now has more registered defibrillators available for bystander use with 23 public AEDs available in the small town, two of which are 24-hour access AEDs in high density areas.

Overall, the evaluation activities have revealed that the pilot program is building Heart Safe Community capacity in Tatura, in particular: building Heart Safe Community *literacy (knowledge and skills); leadership*; *networks and partnerships*; and *infrastructure*. Existing known dimensions of community capacity can begin to explain and assist our understanding of what makes the HSC Pilot work, for whom, and in what circumstances at a community level.

At an operational level, the HSC Pilot has clear strengths, including: a strong visible local partnership between Heart Foundation (Victoria), Ambulance Victoria and local community members; professional and engaging Ambulance Victoria Pilot Coordinators and presenters; and a commitment to community engagement to ensure the implementation model is community-lead.

The HSC Pilot is a community driven and place-based initiative which capitalises on Heart Foundation (Victoria) and Ambulance Victoria identities to engage local community members, and to build reputable local community partnerships to deliver the HSC initiatives. Key contextual enablers and barriers exist to the HSC Pilot, and key requirements (individual, organisation and community level) still exist to sustain the HSC benefits.

The evaluation reflective session with Heart Foundation and Ambulance Victoria further revealed that in the early stages of the HSC Pilot implementation, key partnership related challenges existed, including: *partnership functioning* (i.e. partnership engagement; leadership; management; accountability and governance) and *partnership synergy* (i.e. partnership assets and relationships; partner characteristics and external environment). We do recognise and acknowledge that the Partnership Reflective Session occurred early in the pilot and that major strategic, structural and staff changes have occurred in both organisations. We also recognise that optimal partnership functioning and synergy at a central and local level are essential ingredients to building HSC success.

It is acknowledged that all the evaluation activities for the HSC Pilot in Tatura are yet to be completed, and that building community capacity is beyond the sphere of influence of any one entity. In order to build upon and consolidate the investment by Heart Foundation (Victoria) and Ambulance Victoria partnership and the local Tatura community, four propositions are presented: 1) Backbone Organisation to 'Network for change'; 2) Improvement to movement-oriented transformational leadership; 3) Community Advisory to Community Engagement and Inclusion; and 4) Community Capacity Building Sustainability focused evaluation.

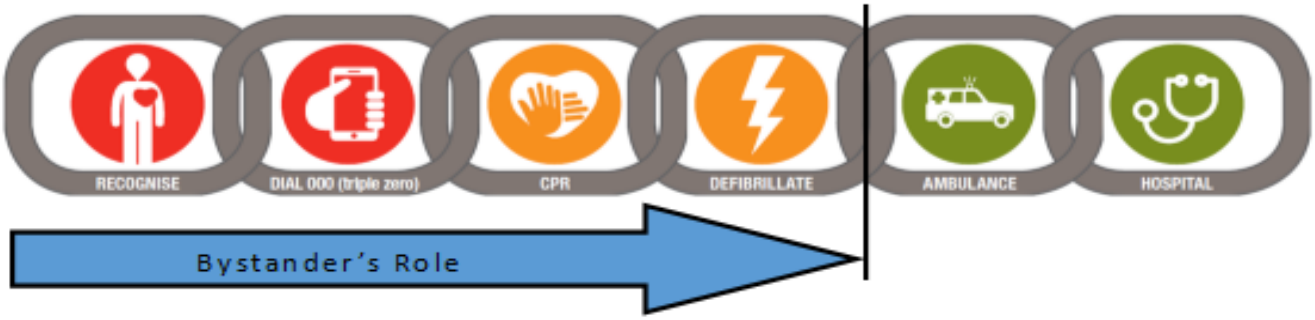
We do acknowledge that this evaluation only provides a snapshot of the HSC Pilot – at a point in time - and that the sustainability and benefits of the HSC community capacity building dimensions require further evaluation.

1. Background

Heart Safe Community (HSC) is a public health initiative that is currently being implemented by the National Heart Foundation of Australia (Victoria) (NHFA) in partnership with Ambulance Victoria (AV). It aims to improve survival from out of hospital cardiac arrest (OHCA) in a specified locality.

The HSC concept works by building the capacity of a community to activate the 'Chain of Survival'. The Chain of Survival is a series of linked actions known to be critical to survival from cardiac arrest. The initial links are the same for a cardiac arrest in any setting (including medical facilities), however the first few links are the most critical, and can often be performed by people without previous training, including bystanders in community settings.

Diagram 1: The Chain of Survival



Focusing on the bystander's role in the Chain of Survival, HSC aims to build confidence and skills in immediate bystander response to a cardiac arrest and initiation of life-saving actions. These life-saving actions (or links) have been summarised to "Call, Push, Shock". With these skills and initiatives to improve local access and availability of Automated External Defibrillators (AEDs) in the location, a Heart Safe Community shares responsibility, and is effectively primed to respond to give a person the best chance of survival in an OHCA.

The HSC Pilot aimed to achieve this through multiple community capacity building strategies, including:

- Providing awareness sessions to ensure the community recognises the signs and significance of cardiac arrest, understanding the importance of early call to triple zero (000) (i.e. "Call") and outline a bystander's vital role in commencing chest compressions (i.e. "Push") and using an AED (i.e. "Shock")
- Supporting community members to have increased access and availability of AEDs
- Support the community to register all AEDs with Ambulance Victoria
- Promoting the community to engage in first responder and smart phone technology (Good Sam).

2. Methods

In 2017, the NHFA commissioned Associate Professor Lucio Naccarella from the University of Melbourne to support and evaluate the implementation, effectiveness, partnerships and sustainability of the HSC initiative in Tatura, Victoria.

The evaluator's roles and responsibilities included:

- Developing an evaluation plan, comprising both local evaluation and external evaluator data collection activities for the HSC Pilot
- Reviewing and refining local evaluation forms, and developing external evaluation activities as required (e.g., Transformational Partnership workshops)
- Co-producing Interim Evaluation Report/s, for: Effectiveness and Adoption data; Partnerships and Sustainability reflection sessions and workshops with Pilot key stakeholders and NHFA staff; and Pilot Reach, Effectiveness, Adoption, Implementation and Sustainability phases

- Presenting overall evaluation findings toward ends of Pilot to NHFA, AV and key stakeholders.

To refine the funded evaluation plan, questions and data collection methods, a HSC Program logic model/Theory of Change (Funnell,1997)[1] was developed. Logic models/Theory of Change provide a visual representation about the assumptions about how a program is supposed to work, and the causal linkages between context, inputs, activities, outputs, and outcomes.

Key evaluation questions included:

1. What assumptions exist about how the HSC Pilot and community capacity building strategies are supposed to work? **(Program Logic/Theory of Change)**
2. To what extent have the targeted populations and organisations been reached by the HSC Pilot and community capacity building strategies? **(Reach)**
3. To what extent have the HSC Pilot and community capacity building strategies had an impact on the targeted populations and organisations and beyond? **(Effectiveness)**
4. To what extent has the HSC Pilot and community capacity building strategies been implemented as intended and what contextual factors (enablers, barriers) exist at the individual, organisational, and community level? **(Implementation)**
5. To what extent have the organisational and **community partnerships** functioning and synergy contributed to the benefits/impacts of the HSC Pilot and community capacity building strategies targeted at populations and beyond? **(Transformational Partnerships)**
6. To what extent are the HSC Pilot and community capacity building strategies resulting in sustainability of the benefits/impacts to the targeted communities and beyond? **(Sustainability)**

A mixed methods evaluation was conducted comprising of four evaluation activities – see **Table 1**.

Table 1: Summary of Evaluation Activities, Purpose, Sample and Timing

Evaluation Activities	Purpose	Sample	Timing
1. Reflective session with NHFA (Victoria)	To document and understand: • What assumptions exist about how the HCS and CCB strategies are supposed to work? • What is working well and what isn't working well? • What contextual factors (enablers & barriers) exist and how are they being responded too?	HSC Pilot Team (Catuscia Biuso, Danielle Saxton, Eugene Lugg)	26th Feb, 2018
2. Reflective session with NHFA (Victoria) and AV	To assess: • To what extent the organisational and community partnerships functioning and synergy contributed to the benefits/impacts of the projects to targeted populations and beyond?	HSC Pilot Team from AV (Melinda, Maree) and NHFA (Danielle Saxton)	19th April, 2018
3. Synthesis of local (Tatura) evaluation data	To assess: • To what extent the HSC strategies are having an impact on the targeted populations and organisations and beyond?	Data from 4 local evaluation activities: 1. HSC Pre- and Post- Session Evaluation Forms 2. HSC TatFest 2018 Evaluation Form 3. Restart a Heart Day Evaluation Data	

[1]Funnell S. (1997). Program logic: An adaptable tool for designing and evaluating programs, *Evaluation News and Comment*; 6 (1)

		4. Feedback from Kids 8 questions- Sacred Heart Primary School	
4. Key stakeholder workshop	To document and understand: • What is working well and what isn't working well? • What contextual factors (enablers & barriers) exist and how are they being responded too? • What is required to sustain benefits of HSC?	HSC Tatura key stakeholders (n=6) recruited by HSC Pilot NHFA team	22nd October, 2018

3. Results

Heart Safe Community Key Outputs and Achievements:

- In a town of 4400 residents, over 855 Tatura residents or visitors were exposed to HSC community presentations
- Before HSC, there were 3 Registered AEDs in town. As of Jan 2019, the town has 23 Registered AEDs
- Two 24-hour access AEDs are available in high density areas
- 21 community presentations were delivered in multiple unique settings, including:
  primary schools, sporting clubs, prisons, large industry employers, small businesses (bakery) kindergartens, museums, community groups (such as Lions), as well as public street and festival presentation
- Local paramedics and community ambulance officers have committed to sustain HSC activity at the close of the pilot
- Evaluation of community presentations revealed an average **four-fold** increase in the confidence of participants to know when to start CPR, how to perform CPR and report being willing to take action in an OHCA. Participants reported an average **seven-fold** increase in their confidence to use an AED, how to use an AED and willingness to use an AED in an OHCA.

Please note this section summarises evaluation findings from the four evaluation activities.

3.1. Reflective Sessions

3.1.1. HSC Project Team Reflective Session # 1

A reflective session was held on 26th February 2018 at the NHFA involving the HSC Pilot team. A Sustainability Evaluation Framework was used covering four domains: 1) Benefits of HSC; 2) Pre-conditions for sustainability of HSC; 3) Attributes of HSC Pilot; and 4) Actions for HF, AV and Communities of Interest. Key emerging themes included:

- **Community understanding and empowerment** – importance of having a clear vision about the HSC Pilot that the community understands and is empowered to own
- **Whole of organisation buy in** - importance of having whole of organisation (HF and AV) buy in to provide a supportive authorising environment for the HSC Pilot
- **Continual focus on workforce development -** importance of recognising the existing capabilities (knowledge, skills) of staff in HF and AV
- **Continual focus on building relationships with key partners -** importance of recognising the need to keep building, reinforcing and consolidating working relationship between HSC Pilot key partners due to dynamic influence of internal and external organisational factors on the HSC Pilot planning, implementation and sustainability.

3.1.2. HSC Partnership Reflective Session # 2

A reflective session was held on 19th April 2018 at Ambulance Victoria, Port Melbourne, with the AV and NHFA HSC Project team members. A Collaborative Partnerships Evaluation framework was used covering three areas that are key to assessing if the collaborative partnerships are contributing to sustainable system change: 1) Member engagement; 2) Governance structures and processes; and 3) Accountability systems. Key emerging themes included:

- **Variable shared understanding about HSC Pilot and its system change focus:**
  - at an individual level - HSC Project team have a clear, shared understanding. However, the value of HSC with staff peripheral to the community engagement project team is not guaranteed.
  - at an organisational level - In the dynamic and complex environment that AV and NHFA operate, priority and ownership across levels of organisational hierarchy for the HSC Pilot varied. Perception of HSC within strategic priorities of both partner organisations was not unanimous across all levels of operations and management. Whole of organisation buy-in is essential.
  - changing roles and relationships between NHFA and AV from historical partnerships. NHFA usually played an advocacy role/relationship with AV, whereas in the HSC Pilot, NHFA and AV are in a collaborative partnership relationship with HF leading actual project implementation.
- **Variable clarity about HSC Pilot roles and responsibilities exists**:
  - a framework that articulates the capabilities of each organisation and synergies is required. For example, AV Team Manager at local community level can provide an opportunity to HSC Pilot. However, it is not being realised.
- **Variable alignment of HSC Pilot with Organisational goals**:
  - HSC Pilot aligns with AV strategically (via Strategic Plan) and operationally (via Community Capability Plan). However, HSC is "off-strategy" for NHFA, with cardiac arrest not clearly identified as a priority heart health condition in the recent strategic plan and OHCA activities retrofitted into heart attack prevention.
- **Evidence of sustainability of HSC Pilot effects (right place at the right time)**:
  - NHFA staff members relayed an example of a recent community meeting at Tatura, where through the efforts of a Committee Chairman and other community members, the HSC is being perceived as a community-led initiative. In this example, the community was asking how many people are to be involved and where the Committee is committed and accountable to the HSC. This this led to discussion about:
    - What model is most appropriate to engage and sustain communities in being "capable heart safe communities"
    - What "sustainability" terminology and model was most appropriate to: "*finish the Pilot in Tatura*"; to "*handover the Pilot to the Tatura community*"; or *to "transition the Pilot to the Tatura community*".

3.2 Synthesis of Local Data

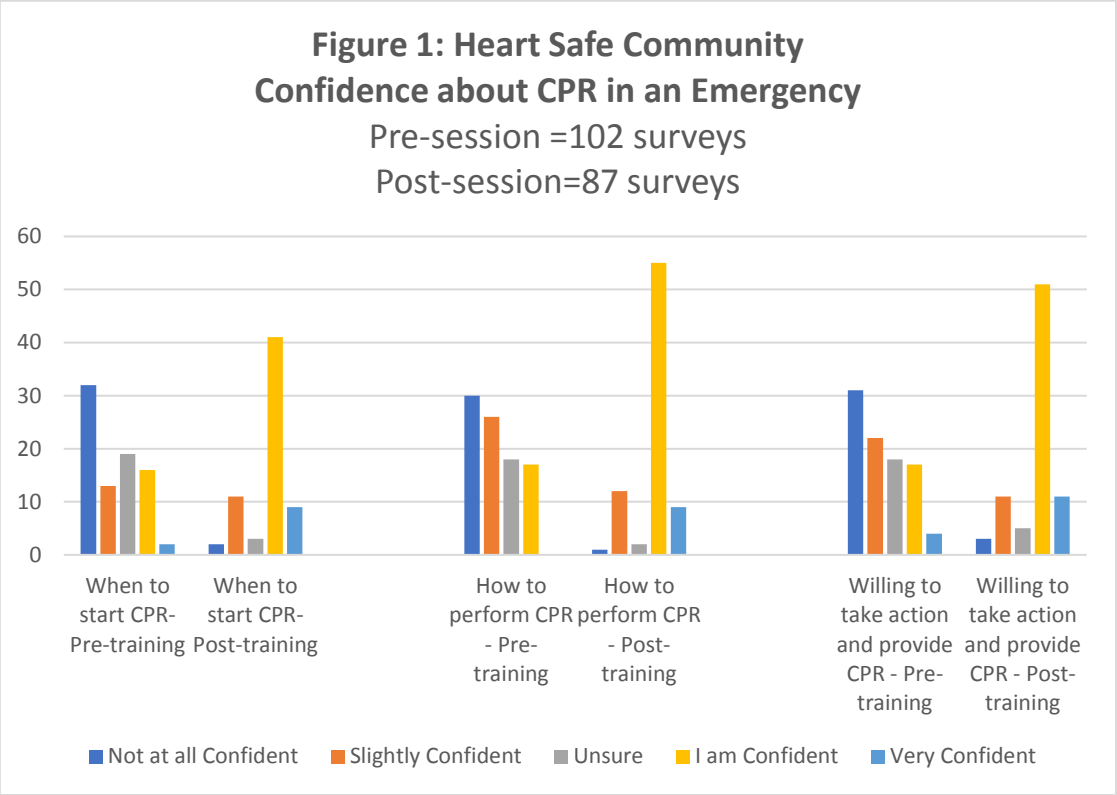
This section provides a brief synthesis of the four HSC local evaluation data collection activities:

1. Heart Safe Community Pre- and Post-Session Evaluation Forms
2. Heart Safe Community TatFest 2018 Evaluation Form
3. Restart a Heart Day Evaluation Data
4. Feedback from Kids 8 questions- Sacred Heart Primary School

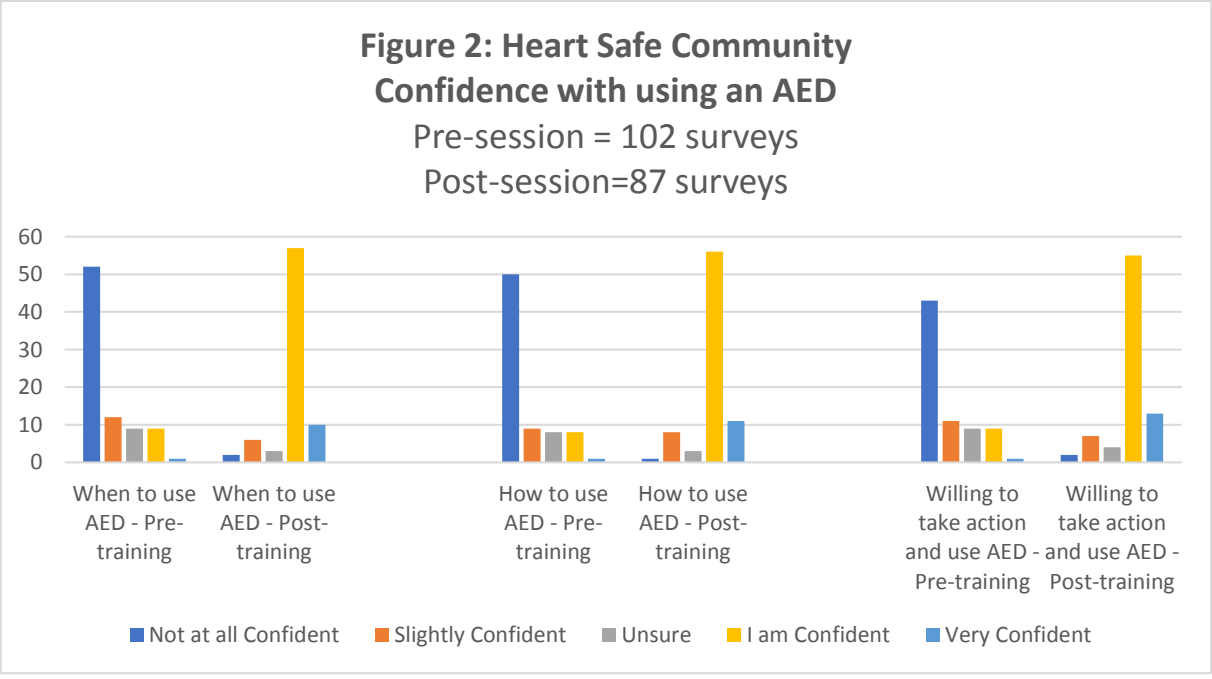
3.2.1 Heart Safe Community Pre- and Post-Session Evaluation Forms

Profile: A total of 102 individuals participated in the HSC Pre-session, of whom over half (56%) were females. A total of 87 individuals participated in the Post-session, of whom over half (54%) were female. No apparent gender differences existed in responses.

Confidence about CPR in an Emergency: As can be seen in **Figure 1** – pre-training, most were *"not at all confident about When to start CPR, How to Perform CPR and Being Willing to take action and provide CPR" in an emergency*. Whereas, post-training, most reported "*being confident about When to start CPR, How to Perform CPR and Being Willing to take action and provide CPR"* with some individuals being "*very confident*".



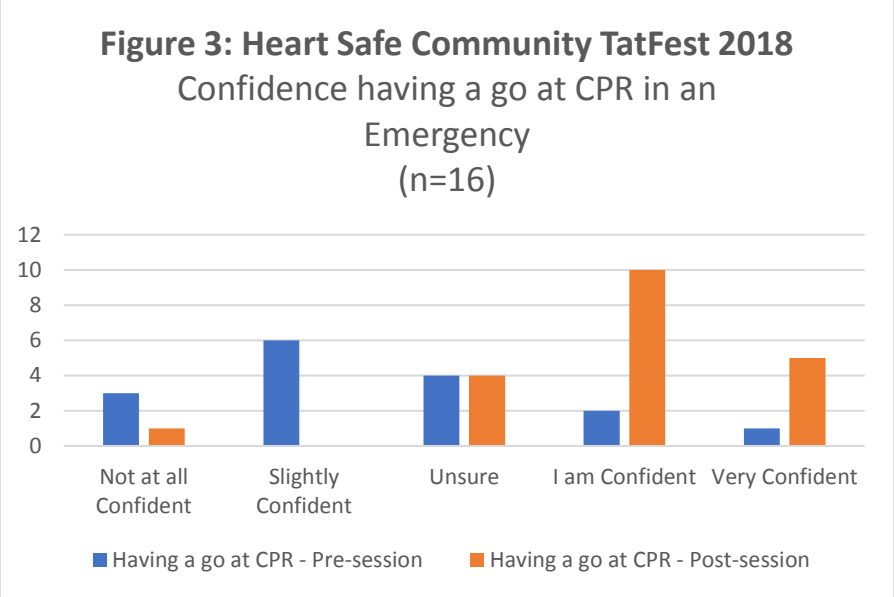
Confidence with Using an AED: As can be seen in **Figure 2** – pre-training, most were "*not at all confident about "When to use, How to use and Being Willing to take action and use an AED during a cardiac arrest* in an emergency". Whereas, post-training, most reported "*being confident about When to use, How to use and Being Willing to take action and use an AED during a cardiac arrest* in an emergency" with some individuals indicating being "*very confident*".



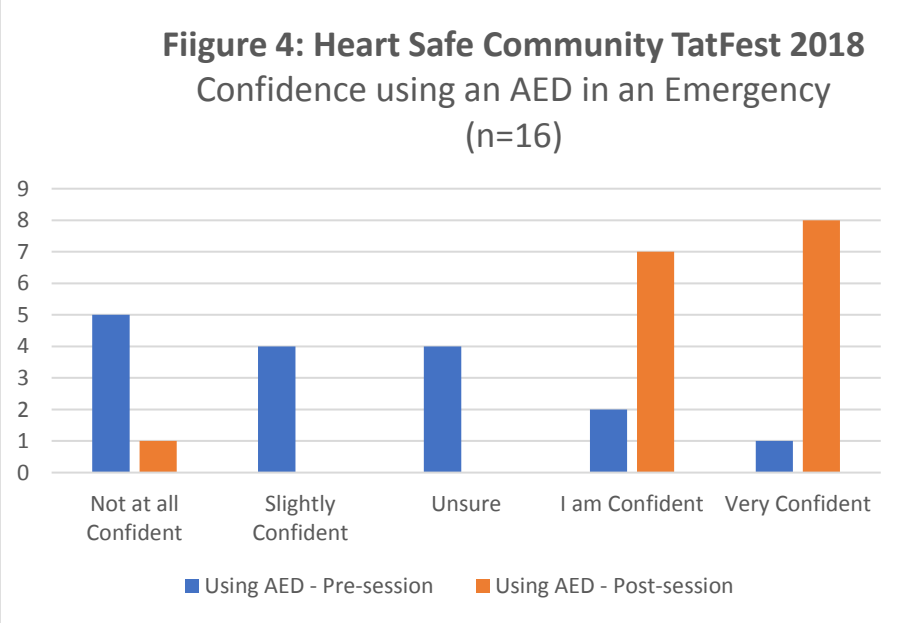
3.2.2 Heart Safe Community TatFest 2018 Evaluation Form

Profile: a total of 16 individuals completed the evaluation form, of whom over half (56%) were females. No apparent gender differences exist in responses.

Confidence having a go at CPR: as can be seen from **Figure 3** - pre-session, most were '*not at all confident'* or *'slightly confident'* at having a go. Whereas, post-session, most indicated that they were '*confident'* or *'very confident'* at having a go at CPR in an emergency.



Confidence using an AED in an Emergency: as can be seen from **Figure 4** - pre-session, most were *'not at all confident*' or *'slightly confident'* at using an AED. Whereas, post-session, most were *'confident'* or *'very confident'* at using an AED.



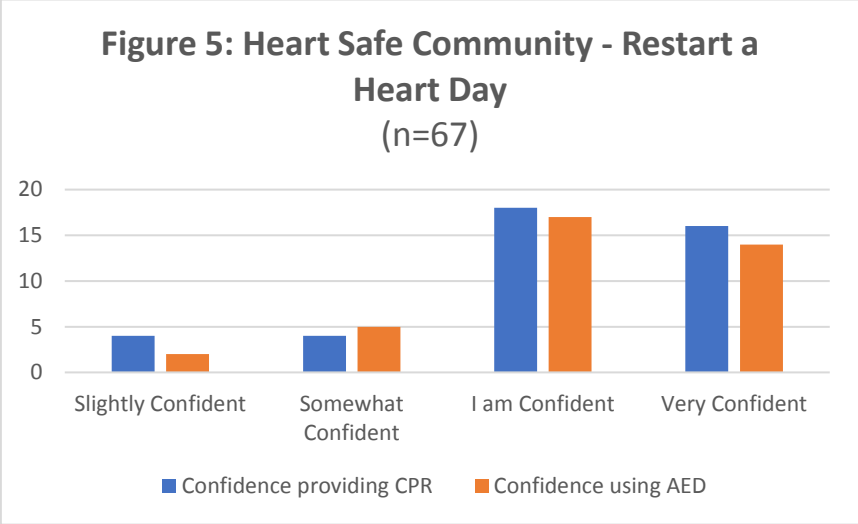
3.1.3. Restart a Heart Day Evaluation Data

Profile: a total of 67 individuals completed the Restart a Heart Day evaluation form, of whom half (51%) were females. No apparent gender differences exist in responses. Over three-quarters (79%) of participants had a go at CPR and AED on the day and over two-thirds (68%) wanted to learn more. When asked – "*What are you interested in learning more about?"* - over a third (32%) were interested in "everything", with many not asked the question. When asked "*Would you be willing to use an AED?"* – over two thirds (67%) said "yes", with only 1 "unsure".

When asked - "*What was the main lesson you learnt today?"* - most responded with "*Have a go – Call 000- think about dangers*", followed by "*Have a go at CPR*", How to save a life and new knowledge about compression techniques and how simple it is.

Confidence providing CPR: as can be seen from **Figure 5,** most were *'confident'* or *'very confident'* at providing CPR.

Confidence using an AED: as can be seen from **Figure 5,** most were *'confident'* or *'very confident'* at using an AED.



3.1.4. Feedback from Kids 8 questions- Sacred Heart Primary School

Profile: a total of 12 primary school children provided feedback to key questions. A rapid thematic analysis of responses is provided below:

- ***Do you think you would be able to save someone's life before you did this program?*** Most responded with a 'NO' (9 out of 12)- as they recognised that they had limited knowledge about what to do to save someone's life. Those who responded with a 'YES' had a belief that it is possible to save someone's life.
- ***Do you think kids have more life saving kids than adults realise?*** Most responded with a 'YES' (10 out of 12) - that kids are underestimated by their parents and families and that kids were capable and had the skills.
- ***What message should we give adults about kids being able to take action in emergency situations?*** Most common responses included: "kids are capable to take action" and that "it does not matter how old you are – all can do CPR".
- ***Who have you shared this learning with? What bits were most important to tell them?*** Most common responses included- sharing the learnings with their parents, families, neighbours, brothers and sisters.
- ***Are you able to teach others how to do this?*** Most responded "YES" - that they were capable of teaching others, as they could show others that they now know how to do it.
- ***Tell me who you think should know this?*** Most responded that "*Everyone or Every single person should know".*
- ***Being part of this Chain Of Survival program has taught me that I can……:*** The most common response included*: "How to Save lives"*
- ***Other things that would be good to learn related to emergencies would be:*** Most common responses included: "*Other lifesaving skills", "Administering medicine" and "Stopping bleeding".*

3.2. Key Stakeholder Workshop

A workshop was held on the 22nd October 2018 with six HSC Tatura key stakeholders to provide an opportunity for them to reflect upon what was making the HSC pilot work (or not work), for whom, and in what circumstances. This section provides a brief summary of emerging themes in relation to: 1) Perceived benefits arising from HSC pilot; 2) Contextual factors influencing HSC pilot; and 3) Sustainability requirements for HSC Pilot benefits.

3.2.1. Perceived Benefits arising from HSC pilot

Multiple benefits were mentioned by key stakeholders that can be clustered into four domains:

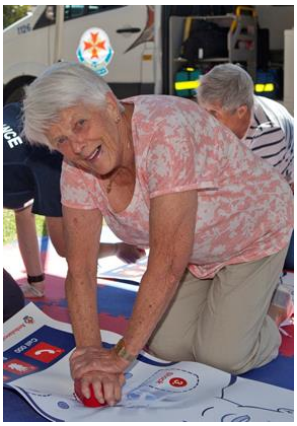
1. **Building Heart Safe Community *literacy (knowledge and skills)*** i.e., increase in community members trained in CPR and AED use; increased awareness, knowledge and confidence about CPR & AED use; increased discussions about AEDs in local community media (newspapers).

2. **Building Heart Safe Community *leadership*** i.e., increased responsibility amongst community members to look after AEDs, and community members inspiring and advocating heart safe thinking and approaches within their local community, organisations and networks.

3. **Building Heart Safe Community *networks and partnerships*** amongst local community members and organisations to facilitate heart safe literacy knowledge transfer and exchange; identified HSC advocates in organisations (e.g., DPI, Primary School, Lions Club).

4. **Building Heart Safe Community *infrastructure*** i.e., increased access to AEDs (e.g. two 24-hour AEDs); an Ambulance presence in Tatura; increase in organisation staff (e.g. DPI) trained in CPR and AED use; increased awareness of which organisations need to be targeted.

1. CALL 000



2. PUSH

3. SHOCK

REGISTER

GoodSAM

3.2.2. Contextual factors influencing HSC pilot

Key stakeholders mentioned multiple contextual **enablers and barriers** influencing the HSC pilot that can be clustered at the community and organisational level. **Table 2** provides a summary of key enabler and barriers.

Table 2: Summary of Key Enablers and Barriers.

Enablers	Barriers
Community level: • Community member buy in • Involvement of local AV in HSC initiatives (presentations, training etc) • Involvement of local Ambulance Community Officers (ACOs) • Willingness of volunteers in community groups • Clear, engaging HSC presentations • Local Ambulance Victoria Champions (Scott & Ben) • Community member buy in • Local community knowledge of ways to engage • Community sees HSC as a priority • Existing community networks • Tatura viewed as a resilient community	**Community level:** • Variable understanding of urgency regarding HSC i.e. CPR and AED use • Limited teenager engagement • Variable visibility of Tatura as a HSC • Reliance on volunteers in community groups • Existing AEDs not accessible • Variable media (social, newspaper etc) attention to HSC training • Need to maintain momentum
Organisational level: • Internal organisation champions (right contact person) • AV perceived as professional • Success stories • Social media options exist (e.g. Facebook) • Local organisation buy-in • Organisations (e.g. DPI) have 1st aid Committee • Organisations (e.g. DPI) recognises CPR is an additional skill set for staff	**Organisational level:** • Multiple priorities exist • Limited resources to engage all organisations. • No secondary schools to engage teenagers • Need to maintain momentum

3.2.3. Sustainability requirements

Key stakeholders mentioned multiple requirements to sustain the benefits resulting from the HSC Pilot, which can be clustered into three interconnected levels:

Individual level needs:

- willingness of community members to take it on and keep it going
- to involve local Ambulance Community Officer
- local Ambulance Victoria champions
- Involvement of paramedic students
- to target teenagers more
- to maintain local people's momentum in HSC
- to use real-life scenarios where CPR and AEDs really work

Organisation level needs:

- combination of media
- buy-in and engagement from large businesses (e.g. Tatmilk, Goulburn Valley Water)
- identified HSC advocates within organisations (e.g. Department of Primary Industries, School)

Community level needs:

- a mix of sporting (e.g. football, soccer, cricket) and non-sporting clubs (e.g. Italian Social Club, community house) to be engaged in and supportive of HSC
- to spread success stories
- to promote informal AED training and reinforce that it is achievable for all
- more media HSC coverage via radio and community newspaper announcements to keep HSC at forefront of community mindsets
- to engage farmers as they come into town
- to utilise "sense of pride" e.g. like the "Tidy Town Competition", and increase recognition/visibility/signage using a sign e.g. "Tatura a HSC"
- to promote tangible benefits of HSC e.g. two 24 hr AEDs
- to engage community in the outskirts of Tatura
- AEDs at two ends of town so they are accessible to all

3.2.4 Additional outcomes, learnings, and flow on effects

- The absence of clear guidance in the legal ramifications of bystander resuscitation efforts in OHCA was identified as a persistent barrier to step in and take action by community members. This experience motivated NHFA and Safer Care Victoria to collaborate to produce a discussion fact sheet which explored the Good Samaritan legislation to provide reassurance to people. (Insert as Appendix)
- An unexpected complexity was realised when the relocation of an AED was required from a restricted access area to being externally fixed to allow 24-hour access. The issues of how to fix the unit externally, who had the necessary carpentry skills and tools, and who would pay for this labour, became a source of delay and a considerable project expense. It is anticipated that guidance around how to fix and secure a 24-hour access defibrillator, along with pre-emptive community scoping for this task, will be beneficial in future HSC initiatives (e.g. current proposal to partner with Men's Sheds to offer the completion of these works for communities).
- Sporting clubs are an obvious target for HSC presentations due to broad community involvement in local sports, AED ownership, and potential for dissemination of HSC interventions to a wider audience. In a town like Tatura where many youths spend weekdays out of town in school, sports meetings are the ideal setting to reach this cohort. Despite this, time restrictions and saturation of volunteerism made engagement with sporting clubs challenging. Overwhelmingly, the cohort of teen to young adults were challenging to reach in the HSC pilot, and future HSC activity should anticipate challenges and plan accordingly in order to reach these vital community members.
- Containing HSC activities to a single site can be challenging, as considerable appetite for "Call, Push, Shock" sessions was apparent in Tatura's surrounding towns. While the HSC initiative is likely universally beneficial, broadening interventions more widely can overwhelm staff and resourcing, with potential evaluation ramifications. Additionally, equity issues arise when project teams have to set limits on proximity and density. It was therefore realised that containing HSC community presentations local to the pilot site and encouraging residents in surrounding towns to visit to attend was appropriate.

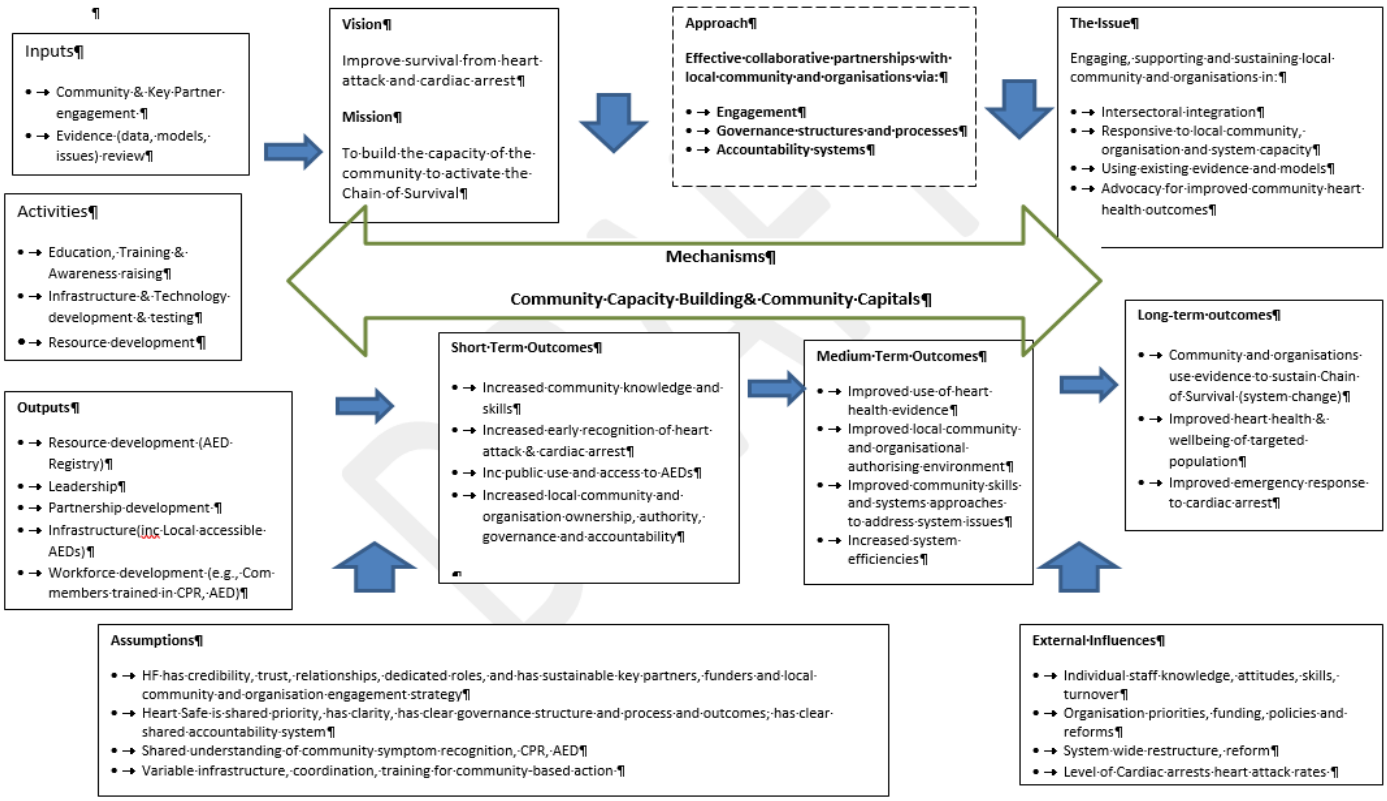
4. Discussion

The evaluation findings are discussed in relation to the six key evaluation questions.

4.1. HSC Pilot Program Logic/Theory of Change

An initial HSC Program logic model/Theory of Change was developed in August 2017 (**Figure 1**) to guide the evaluation plan and activities. On the basis of the evaluation activities, a revised HSC Program logic model/Theory of Change has been drafted (**Figure 2**).

Figure 1: Heart Safe Community – Theory of Change – 18th August 2017 1st Draft



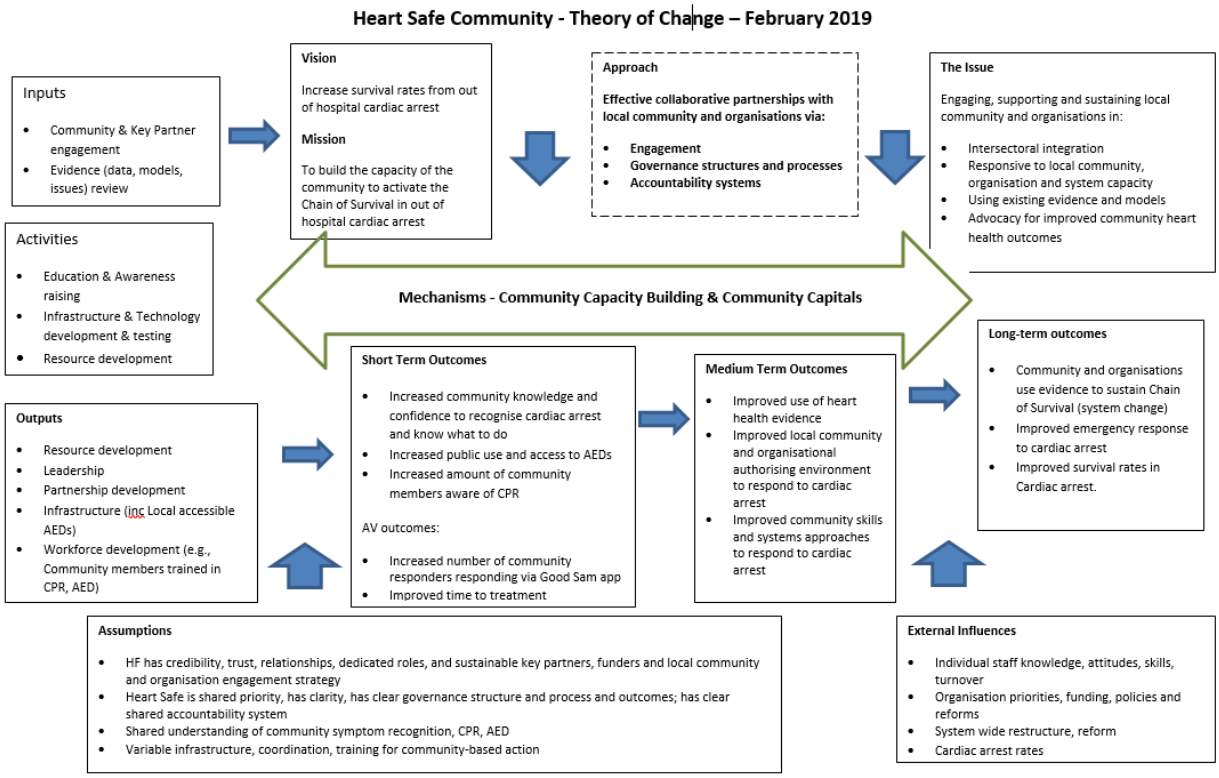
Overall, the evaluation so far provides evidence that: the hypothesised logic model/theory of change underpinning the HSC Pilot is confirmed. The vision statement has been modified briefly (**see figure 2)** removing the phrase 'heart attack', as it was ascertained that the difference between a cardiac arrest and heart attack was confusing not only for pilot community participants, but also for NHFA and AV staff outside of the project team. Indeed, including heart attack in cardiac arrest messaging diluted the potency of the call to action in OHCA and resulted in Warning Signs and heart attack management discussions that bewildered audiences. The hypothesised **assumptions** and **contextual factors** are confirmed and expanded upon, and remain key issues needing to be recognised, including: partnership engagement, accountability; role clarification and governance.

The hypothesised ***inputs*** necessary for the HSC Pilot to work appear to be confirmed, and expanded, including: being an asset-based community development approach; being community led with strong local partnerships and supported by local community members with lived experience and commitment; and endorsement by both health and community services sectors.

The hypothesised ***activities*** appear to be reinforced. It is difficult so far to identify any direct links between activities and actual outputs, as this evidence will emerge from local evaluations. The evaluation so far has led to the revision of the hypothesised HSC Pilot **Outcomes (Short term)** to include: increased community knowledge and confidence to recognise signs of cardiac arrest and what to do during cardiac arrest; increased early recognition of cardiac arrest; increased public use of and access to AEDs; increased community member awareness of CPR; and AV specific outcomes (example only; not an extensive list): decreased delay in activating the Chain of Survival; instant

notification of nearby responders to OHCA; improved time to treatment through activation of community responders.

At this stage of the evaluation, we have limited ability to comment on intermediate and long-term ***Outcomes*** achieved so far. However, the evaluation so far has confirmed that the key mechanisms facilitating the success of the HSC Pilot include its community partnerships and its local community capacity building focus.



4.2. HSC Pilot Reach

The local evaluation data and key stakeholder workshop confirmed that the HSC Pilot was reaching targeted community populations and organisations. However, as was revealed in the key stakeholder workshop, HSC activities reach could be increased to include teenagers, communities outside of Tatura (e.g. farmers), sporting clubs (e.g. football, soccer, cricket) and non-sporting clubs (e.g. Italian Social Club, community house). Given that building community capacity is not a one off-event, but its sustainability is essential, resource implications of increasing HSC reach require reflection.

4.3. HSC Pilot Effectiveness

Overall, the evaluation activities have so far revealed that the HSC Pilot is building Heart Safe Community Capacity in Tatura, in particular: building Heart Safe Community *literacy (knowledge and skills); leadership*; *networks and partnerships*; and *infrastructure.*

The evaluation has also revealed evidence of increased local Heart Safe Community participation, volunteerism, enhanced reciprocity and increased leadership. Overall these community changes resonate with existing theories about community capacity building (Wendel *et al.* 2009)[2]. Community capacity has been viewed as both a means of achieving community health development, as well as an outcome of community health interventions (Burdine *et al*.

[2] Wendel M L, Burdine JN, McLeroy KR, Alaniz A, Norton B, Felix MRJ. (2009). *Community capacity: Theory and application*. In R. DiClemente, R. Crosby, & M. C. Kegler (Eds.), Emerging theories in health promotion practice and research (2nd ed., pp. 277–302). San Francisco, CA: Jossey-Bass Wiley Published.

2007)[3]. Wendel et al (2009) conceptualised community capacity as "*a set of dynamic community traits, resources, and associated patterns that can be brought to bear for community-building and community health improvement*" and identified seven dimensions of community capacity. **Table 3** illustrates the HSC Pilot effects using known dimensions of community capacity.

Table 3: Dimensions of Community Capacity and examples of HSC Pilot Contributions

Dimensions of Community Capacity	Examples of how the HSC Pilot contributes to Building Community Capacity
Skills, knowledge and resources *(Development of and access to resources and skills within the community)*	The HSC Pilot is building local community members' Heart Safe literacy capacity as demonstrated by increased knowledge, confidence and intentions to recognise an OHCA, call an ambulance, have a go at CPR, use an AED and generally to take action to save lives.
Relationships *(Sense of community; social capital)*	The HSC Pilot is supporting local community members to build a sense of community and social capital. The project enhanced relationships between AV and the community and HSC constituted commitment to Tatura's health and wellbeing as well as recognising their capacity to self-determine.
Structures and mechanisms for community dialog *(Social and inter-organisational networks)*	The HSC Pilot and the involvement of local community members and organisations has created opportunities to organise and deliver targeted and responsive HSC events in community settings across multiple cohorts.
Quality leadership *(Effective and sustainable community leadership and leadership development)*	The HSC Pilot is supporting and empowering local community members to become *'HSC change agents'* by sharing information and lived experience on heart safe issues and inspiring others to engage in and advocate for a HSC. Delivery of HSC in collaboration with local AV staff and volunteers saw shared responsibility and leadership harnessed, aiding sustainability at pilot handover.
Civic participation *(Distribution of community power and ability for citizens to participate in community process*)	The HSC Pilot is supporting local community members to volunteer as a resource to their local community and advocate to other organisations and community groups (e.g. Men's Shed) to support HSC initiatives. HSC key messages aimed at inspiring civil responsibility to create an environment ready and skilled to respond to an OHCA.
Value system *(Shared community values that support inclusion and social justice)*	The HSC Pilot is not only supporting local community members to improve their skills and confidence in responding to a cardiac arrest but additionally supporting the community to change their attitudes and mindsets to become a Heart Safe Community, being driven by community benefits (not limited to only their own individual needs) and *Sense of Community Pride*.
Learning culture (*Understanding and awareness of community history and ability to critically reflect on shared experiences)*	The HSC Pilot has supported local community members to critically reflect upon their own assumptions, knowledge and experiences living in Tatura, and to reflect upon opportunities within their communities to take action to become a HSC.

The dimensions of community capacity **(Table 3)** can enhance our understanding of what makes the HSC Pilot work, for whom and in what circumstances at a community level. We do acknowledge that this evaluation only provides a

[3] Burdine JN., Felix MR, Wendel ML (2007) The basics of community health development. *Texas Public Health Association Journal*, 59(1), 10–11.

snapshot of the HSC Pilot – at a point in time - and that the sustainability and benefits of the HSC community capacity building dimensions require further evaluation.

4.4. HSC Pilot Implementation

Overall the evaluation has revealed that at an operational level, the HSC Pilot has clear implementation strengths, including: a strong visible local partnership between NHFA, AV and local community members; professional and engaging AV Pilot Coordinators and presenters; and working through and with local community members, networks and organisations. The HSC Pilot is a community driven and place-based initiative which capitalises on the NHFA and AV brand to engage local community members, and to build reputable local community partnerships to deliver the HSC initiatives.

4.5. HSC Pilot Partnerships

Despite 'buy in' from both partner executive sponsors and project teams, the reflective sessions revealed that in the early stages of the HSC Pilot implementation, key **partnership functioning** challenges existed including:

- **Engagement –** varied engagement amongst individuals but also within organisational strategic priorities**.**
- **Management** – variable transparency about planning, organising, staffing and resourcing by both HF and AV.
- **Accountability** – variable clarity about roles and responsibilities within NHFA and AV within the HSC Pilot
- **Governance** – variable clarity and transparency regarding decision-making processes and structures in both NHFA and AV. An overwhelming need for an agreed guiding document on HSC Roles and Responsibilities is apparent.

The reflective sessions also revealed key **HSC Pilot partnership synergy** challenges for the HSC Pilot implementation including:

- **Partnership assets** – challenges resourcing the pilot within HF, AV and local partner organisations (skills, staff, information, media connections).
- **Partner characteristics** – the existing and dynamic organisational cultures within NHFA and AV and local partner organisations.
- **Partnership relationships** – the existing trust and respect between NHFA, AV and local partner organisations at an individual and organisational level.
- **External environment** – the existing and dynamic nature of the current local community characteristics (needs, priorities) and involvement, and public policies (e.g., Municipal Public Health Plans) related to Heart Safe Communities.

We do recognise and acknowledge that the Partnership Reflective Session occurred early in the HSC Tatura Pilot and that major strategic, structural and staff changes have occurred within both organisations that have had positive local implications on the HSC Pilot in Tatura. We do however, recognise that optimal partnership functioning and synergy at a central and local level are essential ingredients to building HSC success.

4.6 HSC Benefits Sustainability

Given that evaluation activities are yet to be completed, it is too soon to fully discuss the extent to which the HSC Pilot is resulting in sustainability of its benefits to the local community. Despite this, it is important to briefly reflect upon existing evidence about "**What Influences Sustainability?"** We can draw upon the work of Johnson et al. (2013)[4] who developed an innovations sustainability strategy within the community prevention arena (see below). The sustainability strategy addressed three sets of challenges to successfully sustain innovations:

1. Establishing readiness to sustain prevention innovations
2. Designing a stand-alone sustainability strategy, and
3. Developing a support system for implementing the sustainability strategy.

[4] Johnson, K; Colins, D and Wandersman, A. (2013). Sustaining innovations in community prevention systems a data-informed sustainability strategy. *Journal of Community Psychology*, 41(3):322-340.

Johnson et al's (2013) sustainability strategy and its underlying theory of change is driven by their definition of sustainability as *"the process of ensuring an adaptive prevention system and a sustainable innovation that can be integrated into ongoing operations to benefit diverse stakeholders*"

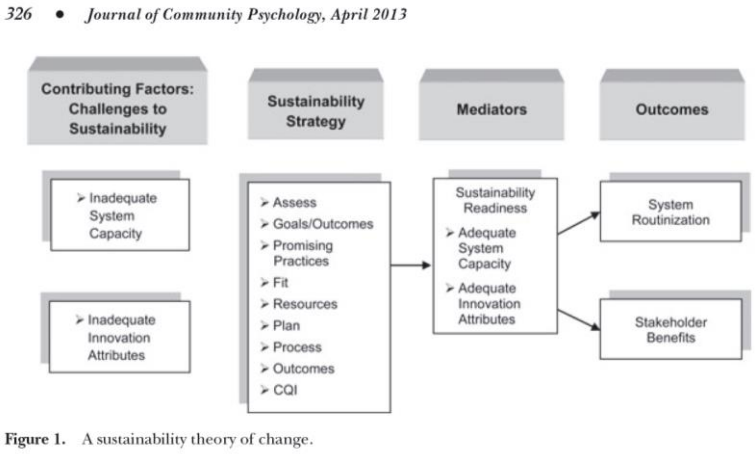


Figure 1. A sustainability theory of change.

According to Johnson et al (2013) for the HSC Pilot, two sets of preconditions to benefit sustainability are required:

1. HSC System capacity and
2. HSC (Innovation) attributes.

The following challenges to **HSC system capacity** are worth reflection:

- **Local Community Stakeholder capacity:**
  - Is the community aware that sustained HSC activity is important to continue to improve the community's readiness and response to an OHCA?
  - Does the community feel that sustained commitment to HSC activity is important, a priority, or is it perceived as achieved and defined in the pilot period?
  - Is there community appetite and support for planning, implementing and evaluating ongoing HSC activities in Tatura?
- **Local Community Infrastructure capacity:**
  - Are there local HSC champions who are committed to advocating and delivering ongoing HSC initiatives?
  - Does the community have the resources and expertise to effectively deliver ongoing HSC activity? (presentations, collateral, qualified staff with established networks and skills)
  - Where can HSC initiatives be integrated into broader community activity? (Ambulance Community engagement, LGA health and wellbeing activity, Worksafe)

The following challenges to **HSC Innovation attributes** are worth reflection:

- How can HSC activity be maintained as a priority activity within the complex health needs of a regional town?
- Are there established and enduring relationships within local community stakeholders to maintain and grow HSC?
- How can the quality and relevance of HSC activity to the community be maintained? (community presentations content and calls to action)
- How can the effectiveness of HSC innovation be measured and assessed?
- Who will own, lead and govern HSC activity amongst community stakeholders? (AV, Council, Rotary)

According to Johnson et al. (2013) a **sustainability strategy** will be mediated by **sustainability readiness:** adequate system capacity; and adequate HSC innovation attributes, resulting in **sustainability outcomes: HSC system routinisation** i.e. integration of HSC innovation into local community operations and **local community stakeholder benefit** – improved outcomes for the local community.

5. Conclusion

Whilst all the evaluation activities for the HSC Pilot (Tatura) are yet to be completed, and acknowledging that building community capacity is beyond the sphere of influence of any one entity, to build upon and consolidate the investment by the NHFA (Victoria) and AV partnership and the local Tatura community, **FOUR** propositions are presented for consideration.

1. **Backbone Organisation to 'Networks for change':** In the words of '*Collective Impact*"[5] the NHFA (Victoria) and AV partnership has been the 'backbone organisation' - inspiring HSC vision and strategy in Tatura; resourcing staff and facilitating local HSC training. Sustainable system change efforts recognise that 'backbone teams' are required to create '*containers for change*' that support individuals, communities and organisations to tackle 'wicked' problems. The NHFA and AV partnership could consider investing in a 'HSC networks for change' strategy (via a Local Communities of Interest strategy) whereby the NHFA and AV partnership role is in supporting a network of change agents (local community HSC mentors) to support local change efforts.

2. **Improvement to movement-oriented transformational leadership:** The NHFA and AV partnership has supported the local Tatura community members to focus on improving community knowledge, skills and confidence to have a go at CPR and to improve access to and use of AEDs. To transform (not just improve), '*movement-building*' approaches (hearts, minds and visions) are now advocated. The NHFA and AV partnership could consider further facilitating a 'movement-oriented transformational leadership' approach with local community members and organisations to support community self-sustaining change efforts. Given that community engagement and momentum remain key issues, a movement approach led by change agents (e.g. via HSC mentorship) may provide a way forward.

3. **Community Advisory to Community Engagement and Inclusion:** The NHFA and AV partnership HSC Pilot has been a catalyst for establishing local community advisory structures (Tatura community members and organisations) to empower the local community to review existing knowledge, skills and confidence to have a go at CPR, access and use AEDs. Change efforts are recognising that 'the *community most affected by the issue*' needs to be at the centre of efforts to disrupt and change existing attitudes. In future HSC initiatives, the NHFA and AV partnership could consider further supporting local community members and organisations to move from being 'community advisory' structures to 'community engagement (interaction and participation) and inclusion (voice in decision making) processes within local communities.

4. **Community Capacity Building Sustainability focused evaluation:** The evaluation revealed that the HSC Pilot is building Heart Safe community capacity in Tatura: building Heart Safe Community *literacy; leadership*; *networks and partnerships*; and *infrastructure*. It also revealed that HSC benefits resonated with existing community building frameworks, and that sustainability strategy frameworks exist. Given the NHFA and AV partnership commitment to sustaining the HSC community building benefits, the following evaluation questions are suggested for consideration for the HSC Pilot Tatura sustainability evaluation activities (mid-late 2019):

    - To what extent have the **Heart Safe community capacity benefits** in Tatura (i.e. building Heart Safe Community *literacy; leadership*; *networks*; and *infrastructure)* been sustained, and what contextual factors have influenced their sustainability?

    - To what extent are the known **dimensions of community capacity** (Wendel et al, 2009) useful for understanding what makes the HSC Pilot sustainable, for whom, and in what circumstances?

    - To what extent can the Johnson et al. (2013) **sustainability theory of change** inform the planning, implementation and evaluation of a HSC sustainability strategy?

[5] Kania, J., and M. Kramer. (2013). Embracing Emergence: How Collective Impact Addresses Complexity. Blog entry, January 21, Stanford *Social Innovation Review*.

Appendix 1: Legal Fact Sheet generated after community concern as to legal ramifications of bystander participation in resuscitation.

Safer Care Victoria

Providing first aid in emergencies

Whether it's holding someone's hand or providing cardiopulmonary resuscitation (CPR), you can give someone much-needed comfort or even save a life in an emergency. This fact sheet aims to help you feel safe and confident in approaching someone who needs help. It should also reassure you that if you act honestly, you are legally protected – regardless of the outcome.

WHAT IS CONSIDERED TO BE EMERGENCY CARE?

Emergency care is unplanned help. It can range from a lifesaving action – such as performing CPR or applying pressure to control bleeding – to simply holding someone's hand while waiting for an ambulance.

If you think you can help, please do so.

If you think an ambulance is required, call **triple zero (000).**

DO I NEED SOMEONE'S CONSENT TO PROVIDE HELP?

If the person is conscious and able to communicate with you, please ask for their permission before you touch them.

WHAT IF THEY ARE UNABLE TO CONSENT?

This may be the case if the person is unconscious, affected by drugs, alcohol or their injuries, or if the person is very young.

In these situations, you can provide emergency care if:

- it is reasonable in all the circumstances
- you believe it is in the person's best interests.

There are two exceptions to this rule.

1. Do not provide care when more qualified people are available. That is, please hand over to paramedics when they arrive.
2. Do not provide care when it is contrary to the person's known wishes.

This second point can be difficult to assess, as you may not know what their wishes are, even if someone tells you the person doesn't want CPR.

If in doubt it is better to take steps to save a person's life.

Health professionals, the patient's family and their advisers can determine whether treatment should be continued at a later time.

WHAT ABOUT 'DO NOT RESUSCITATE' ORDERS?

Someone with a formal 'Do not resuscitate' order is unlikely to be in public without a carer, so you are unlikely to be in a position where you would help.

Some people have a formal Advanced Care Directive that says they do not want CPR. If you see this document, and have no doubt the person before you is named on the document, then do not start CPR.

CAN I BE SUED?

The risk of being sued for providing first aid or CPR is **very low**. There are no reported cases of anyone being sued for this in Australia.

In Victoria (and all Australian states and territories), good Samaritan laws protect people who provide assistance, advice or care in good faith at the scene of an emergency or accident.

Under the *Wrongs Act 1958*, legal protections from civil liability apply if:

- the patient is injured, or appears to be at risk of injury or death
- the good Samaritan acts with honest intent, and didn't expect financial reward for providing assistance.

These laws seek to reassure people that if they step up to help in an emergency, they will not be liable for their honest attempts to help, regardless of the outcome.

WHAT ABOUT DEFIBRILLATORS?

Early access to defibrillators saves lives for patients in cardiac arrest.

If there is a defibrillator available and you feel comfortable doing so, use it.

Modern defibrillators are intended to be used by untrained people. Just follow the simple instructions.

If you don't feel comfortable, don't use it. You are not under a legal duty to.

The rules discussed above apply.

- If the person is unable to communicate their wishes, you can touch them provided you do so with the honest intention of helping them.
- You can provide care that is reasonable and in their best interest.
- You are protected from civil liability if your actions are in good faith.

Disclaimer

This fact sheet is a brief overview of relevant laws. It can't cover every circumstance and every eventuality.

It is written for the good Samaritan – that is, a person (including a registered health professional) who comes across an accident or emergency and helps people in need.

The situation is different for registered health professionals (e.g. doctors, nurses and paramedics) when they are at work or place of practice. It also does not apply to those with a legal responsibility to care for the patient (e.g. teachers and their students, prison wardens and their prisoners, appointed guardians, etc.).

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Appendix 2- HSC Evaluation form

BEFORE today have you ever performed CPR?	Yes ☐	No ☐
BEFORE today's session how would you rate your confidence to perform CPR in an emergency?	Not confident ☐	Pretty confident ☐	Confident ☐
AFTER today's session how would you rate your confidence to perform CPR in an emergency?	Not confident ☐	Pretty confident ☐	Confident ☐
BEFORE today have you ever used an AED?	Yes ☐	No ☐
BEFORE today's session how would you rate your confidence to know when and how to use an AED?	Not confident ☐	Pretty confident ☐	Confident ☐
AFTER today's session how would you rate your confidence to know when and how to use an AED?	Not confident ☐	Pretty confident ☐	Confident ☐