# The benefits of community participation in rural health service development: where is the evidence?

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## Introduction

The term 'community participation' is commonly understood as the collective involvement of local people in assessing their needs and organising strategies to meet those needs.[1] The importance of community participation in rural health service development is uncontested. The rural health policy framework Healthy Horizons Outlook[2] includes the principle, 'participation by individuals, communities and special groups in determining their health priorities should be pursued as a basis for successful programs and services to maintain and improve their health'. The document also states that 'social capability and the physical capacity to plan and implement local programs are required for communities to improve and maintain their health'.[2 (p7)]

This is not an isolated pronouncement. The origins of the concept of community participation in rural health lie in its application by international organisations, such as the World Health Organization,[3] in developing countries in an attempt to improve health, social and economic conditions. In Australia, government agencies at the national and state level[4] have maintained an interest in community participation because of the perceived benefits. Community participation in rural health service development has been argued to result in more accessible, relevant, and acceptable services.[5, 6] In addition it is often implied that community participation will result in higher community satisfaction with health services, and indeed better health outcomes, yet evidence to support this assertion is limited.[7]

Rural and remote Australian communities support community participation and sometimes demand it. There is a long tradition of community contributions to all kinds of health services including hospitals, general practice services and preventative health programs.[8-10] Community participation, in helping develop these services and programs, is often premised on the assumption that the health of the community, its vitality, and sustainability is threatened if health services and programs are unavailable or inappropriate.[6] However, this type of community participation, if it is largely driven by community members, may fall outside the radar of the health system[11] and is rarely reported in the academic literature. Our motivation is to review the evidence to determine whether community participation does make a difference to health outcomes.

Clearly, there are quite different perspectives on what community participation is, how it should occur, and whether it should be top-down or bottom-up.[12] In spite of the popularity of the concept in policy frameworks and in practice, there is no equivalent commitment to measuring the outcomes of community participation as an intervention, or analysing the processes of community participation in order to improve them. For example, in reporting progress against the Healthy Horizons framework, no attempt is made to measure levels or types of community participation even though the framework clearly articulates benefits of it. The document claims that 'forums [have been] established in the Australian states and territories so that health departments can build partnerships with communities and key stakeholders to identify and address community health problems, disseminate information and support the advocacy role of communities and health professionals'.[5] However, we know that the existence of these forums does not necessarily equate with broad-based and vigorous participation.[13]

The reluctance by policy makers to analyse and measure community participation arises in part because governments are primarily interested in measuring outcomes in relation to health system components they control. Secondly, because of its illusive and multi-layered nature it is difficult to design good quality trials to measure the effectiveness of community participation as an intervention (separate from other interventions), but this lack of evidence does not necessarily equate to a lack of outcomes.[7] Finally, there are definitional disputes about what constitutes 'community participation.' Terms such as 'community involvement', 'community development', and 'community mobilisation' could all describe collective involvement of local people in assessing health needs and implementing programs. More recently, the terms 'community capacity building' and 'community engagement' have gained popularity and both of these processes involve community participation.

In order to strengthen the knowledge-base about the benefits of community participation we undertook a review of the literature. The aim was to synthesise the evidence for outcomes from community participation in rural health service development. Our work builds on that of Andrews et al[14] who conducted a literature review about the use of community health workers in research; Rifkin et al[12] who undertook a review of participatory approaches to health planning and promotion; Rosato et al[15] who examined community participation in maternal, newborn, and child health, and the World Health Organization's review of the evidence on the effectiveness of empowerment to improve health.[16] It adds to Kilpatrick's[7] review of community engagement in health development.

## Methodology

### Working definitions

#### Community participation

We defined 'community participation' as people from a community of place[17] or of interest[18] participating together in advisory groups, fundraising, attending consultations, planning, or in other activities.

#### Rural health service development

We defined 'rural health service development' to include activities such as planning for, creating access to, implementing, and evaluating health services. It also includes creating access to and operationalisation of all types of community-based health programs including health promotion, health planning, priority setting and community capacity building.

### Outcomes of community participation

We defined outcomes of community participation as all those aspects positive, neutral, and negative, which are reported and demonstrated to show that community participation was a key component.

### Review process

#### Literature search

A search of international and Australian peer reviewed published literature, in particular, empirical studies about community participation and rural health service development was undertaken (Appendix 1). 'Community participation' was chosen as the key search term because of its habitual usage in international and national rural health service development literature. However, because terms can be used interchangeably we also searched for 'community involvement' and 'community engagement'.

Databases including the Cochrane Collaboration, PubMed, CINAHL and INFORMIT were searched for publications in English published between 1997 and 2008. This search yielded 309 publications. In addition, the National Rural Health Alliance conference proceedings, public forums and concurrent papers CD (1995-2007) yielded 186 documents and the on-line Journal of Rural and Remote Health (http://www.rrh.org.au) yielded 140 documents. The 'Communication Initiative Network' website (http://www.comminit.com) was searched and four relevant documents were identified. Two relevant documents were identified from The World Health Organization website (http://www.who.int). Australian Policy on-line (www.apo.org.au) revealed no relevant documents. The Australian Aboriginal and Torres Strait Islander Health Worker Journal provided three documents. Forty-five relevant articles and reports already known to the authors were included in the review.

The authors ran duplicate searches and cross-checked each other's review results to ensure methodological rigour. In total 689 papers formed the basis of a data review to identify publications that were relevant to ascertain the benefits of community participation in rural health service development.

### Data review

The 689 publications were reviewed by at least two of the authors for eligibility using the following inclusion criteria.

- Rural: activities were undertaken predominately outside of capital cities.
- Community participation took place.
- Community participation was directed towards rural health service development.
- Outcomes (positive, neutral, or negative) were demonstrated and reported.

This step resulted in 161 papers being accepted for further analysis. These papers were entered into EndNote.

### Data synthesis

The authors conducted further analysis to reach agreement and ensure that the final results included only papers that met all of the inclusion criteria. This resulted in 37 publications being synthesised using the following categories.

- Country/contextual factors
- Who initiated community participation
- Community participation process
- Type of health service development
- Conceptual approach to community participation: contributions, instrumental, empowerment or developmental[6] (Table 1)
- Level of evidence: The NHMRC levels of evidence were used as a framework against which to assess the strength of the evidence for the effectiveness of community participation on outcomes.[19 (p.8)] We added the category of level 5 evidence from the Cochrane Collaboration.
- Outcomes (positive, neutral or negative): reported and demonstrated.

We have used a typology to define, illustrate, and clarify the different conceptual approaches to community participation (Table 1).[6] This typology consists of four approaches; the contributions, instrumental, empowerment, and developmental. In this evolving categorisation, these various conceptual approaches to community participation often overlap and are difficult to distinguish in practice.

**Table 1 Four conceptual approaches to community participation[6] (p88)**

| |
|---|
| **The contributions approach**<br>The contributions approach considers participation primarily as voluntary contributions, to a project, such as time, resources, or community-based knowledge. Professional developers, usually external to the community, lead participation and make the decisions about how the contributions will be used. |
| **The instrumental approach**<br>The instrumental approach defines health and wellbeing as an end result, rather than as a process, with community participation as an intervention supporting other public health or primary health care interventions, health planning, or service development. Participation is usually led by professionals and the important components of the interventions or programs are predetermined according to local and national priorities. |
| **The community empowerment approach**<br>The community empowerment approach seeks to empower and support communities, individuals, and groups to take greater control over issues that affect their health and wellbeing. It includes the notions of personal development, consciousness-raising, and social action. |
| **The developmental approach**<br>The developmental approach conceptualises health and social care development as an interactive, evolutionary process, embedded in a community of place or interest. Local people, in partnership with professionals, have a role in decision-making and in achieving the outcomes they consider are important. The developmental approach is underpinned by principles of social justice. |

A number of publications which were not included in the final results remained relevant to the research question and have been referenced in this document where appropriate.

## Results

The results of the data synthesis are presented in Appendix 2.

This paper provides a broad synthesis of outcomes associated with community participation in rural health service development. It is intended as an introductory step on the journey towards exploring some of the contexts and processes that might facilitate the trialling and measurement of community participation as an independent strategy or intervention towards improving the health of people in regional and remote areas.

From our review we have evidence that community participation can result in beneficial health outcomes and increased uptake of services. Fourteen (38%) of the studies presented in Appendix 2 reported improved health outcomes associated with community participation providing evidence at level 4 or above. In some cases the health improvements were profound. For example, Mandahar et al[20] using an empowerment and developmental approach to community participation reported significant improvement in birth outcomes in a poor rural population using a participatory intervention with women's groups.

We also have evidence that community participation can result in other outcomes that may be related to achieving health improvements. Outcomes such as better access to health services,[11, 21-25] more

relevant and culturally appropriate services,[11, 26-29] or just maintaining a service in the face of a threat to remove it[30] have been achieved through community participation. Sixty-five per cent (n=24) of studies reported in Appendix 2 achieved this type of outcome from community participation. However, the level of evidence presented in these studies is at the lower end of the evidence scale, often in the form of a single descriptive case study, or a satisfaction survey.

A further important finding is that the studies demonstrated a spread of approaches to community participation. Twelve studies (32%), primarily in developing countries, used a contributions approach.[23-25, 28, 31-38] Ten studies (27%) used an instrumental approach using community participation as an intervention.[21, 27, 29, 39-45] Four studies (11%) used an empowerment[22, 26, 46, 47] approach and eleven (30%) used a developmental approach where community participation was conceived of as an evolutionary process with community members achieving community initiated goals as well as those of health systems.[9, 10, 20, 30, 48-54]

When analysing studies we have reported on the **overall** outcomes resulting from community participation as an intervention or an approach. We have not reported on **the role of** community participation in **creating** these outcomes. We found too few studies reporting exclusively on the specific role of community participation, independent of other elements of the program, to provide us with a broad platform of knowledge about our research question.

## Discussion

We note that although community participation is a complex and multi-level process it is nonetheless able to be measured and even trialled as a health intervention impacting on health outcomes. What might assist in building better knowledge about community participation is better designed studies where the role of community participation is reported upon independently of other aspects of the intervention or program. Randomised controlled trials which provide a higher level of evidence about community participation are costly, rare, and require a historical build up with the community. Health improvements are not gained and demonstrated without an extended timeframe, sound methodology, adequate and sustained resources, and strong relationships. The community's experience in Yalata demonstrates that it takes many years of sustained community action to change health policy.[10] However, we consider that the considerable improvements that can be made to health through community participation justify increased resources to support and analyse it.

In addition, we acknowledge that writing about community participation sometimes describes what governments, health systems and organisations intend to occur rather than what does actually occur. The use of terms does not necessarily categorise discrete or different processes. Rather than the terms it is the processes involved that are important to analyse in an attempt to elucidate their effectiveness in different contexts.

From the analysis of these papers it is impossible to align a particular conceptual approach to community participation with the achievement of particular types of health and health related outcomes. However, we consider it of the utmost importance for policy makers and practitioners to be aware of the approach they use. The contributions approach, which draws on voluntary contributions from community members, must have built in safeguards to ensure sustainability. The developmental and empowerment approaches require a long timeframe (up to ten years) to demonstrate health and health related outcomes. So the approach must be explicit and related to the task, timeframe, the community concerned, and the available resources.

It is clear from our review that this is not always the case. There are numbers of reports of projects that aim to build community capacity for health promotion that have a very short timeframe. Evaluations of these projects and programs have claimed outcomes such as increased 'social capital' and 'empowerment' without quantifying them even though there are tools to measure these.[35] Results are often based on questionnaires asking about participation and implying that because people came together and enjoyed an activity then social capital was raised. The authors had to scrutinise activities and not rely on language to determine what was actually occurring. This is not to say that community participation did not happen or social capital was not built but the report did not clearly demonstrate how this occurred.

The other point arising about the conceptual approaches is that they are not discrete. For example, in some studies local people are recruited into health systems as employees and they act as 'boundary crossers' where they draw on their community connections to create links between health systems and communities.[11, 21, 24-26, 28, 31-33] This could be seen as both an instrumental and contributions approach to community participation. In addition, the developmental and empowerment approaches usually overlap.

Finally, allocating a 'conceptual approach' (as per Table 1 above) may well depend on from whose perspective we are categorising it. For example a health service may be seeking ideas through a process of consultation (contributions approach), when a community is seeking to steer and own a program (empowerment approach). These conceptual approaches to participation may also change or develop over time.

It is important to note that the wealth of information at the community level about community participation may not have been captured in this review. Community initiated developmental projects, which often demonstrate sound outcomes, are unlikely to be reported in the peer reviewed literature. Academics, non-government development agencies, and government departments are more likely to publish about projects that they have funded and have a stake in. Therefore, community perspectives on community participation are rarely captured. It would be worthwhile to investigate how communities have viewed and valued their own participation in many of the programs reported here.

Additionally, it is disappointing that weight is not given to reporting upon how community participation processes are related to achieving health outcomes. Often studies reported improved health outcomes and extensive participation but the connection between the two were not clearly described and quantified.

## Study limitations

This literature search was not exhaustive and was limited by time and resources. A thorough search may have used all possible terms to capture articles about community participation such as 'community involvement', 'community capacity building', 'community engagement, 'community initiated', 'community-based', 'community driven', 'community developed', 'community directed' or 'community controlled'. Community engagement is a more recent term and is usually used by governments or health systems rather than communities in describing aspects of policy implementation or consultations. Because we were interested in actions by communities in addition to those by governments and health systems we chose to focus on 'community participation' rather than community engagement. Unpublished reports and PhD theses were not included in this review.

There were problems with both the methodology and the reporting of the studies that made it difficult to determine whether or not the paper met our criteria for inclusion. These problems included a lack of

specificity about the intended outcomes of community participation compared with those that occurred, limited use of comparison or control groups, and a lack of clarity about the specific benefits of the community participation aspect of the intervention.

## Conclusions

While there is some evidence to establish the benefits of community participation in producing health and health-related outcomes; only a few good quality higher level studies have been conducted. Few, if any, studies have definitively demonstrated that community participation provides better health outcomes than no community participation in the same circumstances. However, further attention to the analysis and reporting of the community participation aspect of primary health care and public health interventions is warranted, as absence of evidence of an effect is not the same as absence of an effect. Improved analysis of community participation could be achieved by comparative studies, longitudinal studies as well as randomised controlled trials.

Achieving further clarity about the benefits of community participation requires tools to measure and analyse it as a collective phenomenon. To date there has been less interest in this than in measuring more tangible outcomes of public health and primary health care interventions.

Finally, we would stress the value of genuine community/health sector partnerships to develop health services for rural communities. Using a developmental approach will enable communities to work in partnership with health systems to employ resources to the health issues that are of most concern to communities. However, governments, practitioners, and health systems must recognise and accept that community health development requires a long term and consistent investment, with health system reform processes and restructures managed so that they do not impact negatively on the processes. If this can be achieved then improved community health can be expected.

This review has provided new information from a novel synthesis of the literature about the benefits of community participation for health outcomes in the rural and remote context. However, it highlights the areas in which the existing evidence is lacking, and raises a number of issues for future exploration and clarification.

## Presenters

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# Appendices

## Appendix 1 Literature sources and search strategies

| We searched these literature sources | We used these search terms and strategies |
|---|---|
| Cochrane Collaboration<br>PubMed/MEDLINE<br>CINAHL<br>INFORMIT<br>Web of Science/Web of Knowledge | We searched for each of these groups of terms:<br>(1) ("community participation" OR "community involvement" OR "community engagement")<br>(2) ("health" OR "health service*" OR "health sector")<br>(3) (evidence OR outcome*)<br>(4) (accept* OR access* OR appropriate*)<br>(5) (rural OR remote OR regional OR Aboriginal OR Indigenous OR "Torres Strait Islander")<br>Then we combined the groups of results to capture only those publications containing ALL of the desired search terms:<br>(6) (1) AND (2) AND (3) AND (4) AND (5) |
| National Rural Health Alliance conference proceedings, public forums and concurrent papers CD 1995-2007 | We searched 'key terms' using the term:<br>'community participation' |
| Online Journal: Rural and Remote Health | We searched 'key words' using the term:<br>'community' |
| Communication Initiative Network website | We searched the site using the terms:<br>'community participation' and 'health'<br>'community engagement' and 'health'<br>'community involvement' and 'health' |
| Australian Aboriginal and Torres Strait Islander Health Worker Journal | We hand searched for articles meeting the criteria. |
| World Health Organization Website | We searched the site using the terms:<br>'community participation' and 'health'<br>'community engagement' and 'health'<br>'community involvement' and 'health' |
| Australian Policy On-line Website | We searched the site using the terms:<br>'community participation' and 'health'<br>'community engagement' and 'health'<br>'community involvement' and 'health' |

## Appendix 2 Data synthesis of eligible papers

| | Doc ref number<br>Author and date<br>Country/<br>contextual factors | Initiator | Community participation process | Type of rural health service development | Conceptual approach to participation (see Table 1) | NHMRC Level of evidence incl. Level 5 Cochrane collaboration | Reported and demonstrated outcomes |
|---|---|---|---|---|---|---|---|
| 1 | 000006<br>Abelson et al 2007[39]<br>Provincial<br>CANADA | Four Canadian Universities | Deliberative public consultation process | Health planning: allocation of resources | Instrumental | Level 5 | Enhancement of decision-making processes in some settings |
| 2 | 000048<br>Adatu et al 2003[25]<br>Central<br>UGANDA | National TB and leprosy program. TB DOTS (Directly Observed Treatment Strategy) | Community health aides mobilised to monitor TB amongst patients in the community | Operationalising community-based primary health care program | Contributions | Level 4 | Enhanced access to TB treatment leading to increased number of treated cases |
| 3 | 000128<br>Bang et al[31] 2000<br>Gadchiroli District<br>INDIA | SEARCH (Society for Education, Action, and Research in Community Health) | Village health workers received training in neonatal care, health education and supervision | Operationalisation of home-based neonatal care | Contributions | Level 3.2 | Reduction in neonatal, stillbirth and newborn mortality rates |
| 4 | 000127<br>Baqui et al 2008[32]<br>BANGLA-DESH | United States Agency for International Development and Saving Newborn Lives Programme, Save the Children (US) | Community health workers (female) provided antenatal and postnatal in-home care | Operationalising in-home neonatal preventative and curative care | Contributions | Level 3.1 | Reduction in neonatal mortality |

| | Doc ref number<br>Author and date<br>Country/<br>contextual factors | Initiator | Community participation process | Type of rural health service development | Conceptual approach to participation (see Table 1) | NHMRC Level of evidence incl. Level 5 Cochrane collaboration | Reported and demonstrated outcomes |
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| 5 | 000059<br>Bedelu et al 2007[21]<br>Lusikisiki: Rural SOUTH AFRICA | Medicins Sans Frontiers (MSF) | Nurses and health workers giving drugs, counselling locally with community support as opposed to centralised hospital dispensing | Operationalising community-based HIV clinical program | Instrumental | Level 3.3 | More people receiving treatment |
| 6 | 000129<br>Bhutta et al 2008[33]<br>The Hala and Matiari Sub-Districts<br>PAKISTAN | Department of Paediatrics and Child Health, Aga Khan University, Karachi, Pakistan. | Lay Health Workers and Traditional Birth Attendants trained in perinatal care | Operationalisation of community-based perinatal care through establishment of local community health committees, community outreach and education | Contributions | Level 3.2 | Reduced still-birth and neonatal mortality rates |
| 7 | 000147<br>Bradley 1997[34]<br>Busselton WA<br>AUSTRALIA | Vasse Health Service in collaboration with the surfing community in Margaret River | Partnership to attract funding, access to local networks for health professionals. Community people on health promotion committees | Health promotion to reduce surfing injuries | Contributions | Level 5 | Higher local awareness of community developed surfing code of ethics |
| 8 | 000100<br>Brady et al 2003[10]<br>Yalata Aboriginal community, SA<br>AUSTRALIA | Yalata Aboriginal community | Community lobbying government with the intent to control the availability of alcohol locally. | Community controlled health priority setting, prevention and capacity building | Developmental | Level 4 | Local change in alcohol legislation |

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| 9 | 000083<br>Braun et al 2006[22]<br>Hawaii,<br>USA | Center to Reduce Cancer Health Disparities | Community engagement with Native Hawaiians :training, technical assistance, resources to reduce cancer disparities | Health planning, developing culturally appropriate education, primary and secondary prevention and research | Empowerment | Level 5 | Enhanced access to cancer information and screening services in some locations |
| 10 | 000111<br>Eyre & Gauld 2003[48]<br>Lawrence,<br>NEW ZEALAND | Rural community of Lawrence, NZ. | Community Trust involvement in needs assessment, resource input and community governance | Health service planning, governance, and resourcing of local health services | Developmental | Level 5 | Developed community health trust to provide health services and evaluated the process |
| 11 | 000148<br>Field et al 2001[49]<br>Aboriginal Community NT<br>AUSTRALIA | National Heart Foundation | Community involvement in needs assessment, planning, resource allocation,<br>service delivery and evaluation | Implementation of primary health care model and programs initially to address diabetes | Developmental | Level 5 | Changed nutrition patterns Improved primary prevention through council, CDEP, school & store. Community directed intersectoral action plans and programs. Community management of some initiatives |
| 12 | 000103<br>Fitzpatrick & Ako 2006[46]<br>Highlands<br>PAPUA NEW GUINEA | Erima Empowerment Research Project in PNG | Kewapi language group took responsibility for the acquisition, distribution and effective use of 400 WHO approved bed nets in the village. | Primary prevention | Empowerment | Level 3.3 | Improved health and eliminated mortality from malaria |

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| 13 | 000099<br>Fleming et al 2007[40]<br>Remote Community<br>QLD<br>AUSTRALIA | Queensland Health,<br>Queensland Universities,<br>Not-for profit<br>Organisations. | Community involvement to identify needs, prioritising funding for health promotion initiatives, and establishing Health Promotion Committee | Health planning and promotion | Instrumental | Level 5 | Increased numbers of community participants in planning groups and programs |
| 14 | 000080<br>George et al 2007[26]<br>4 Aboriginal Communities<br>Alaska USA | Canadian Institutes of Health Research –Institute of Aboriginal Peoples' Health (Universities) | Local women and Health Workers involved in designing culturally appropriate foetal alcohol spectrum disorder prevention programs | Health promotion, prevention, health planning | Empowerment | Level 5 | Design of four culturally appropriate community interventions |
| 15 | 000090<br>Goodrow et al 2004[41]<br>Rural Appalachia<br>USA | Community Partnership Program, East Tennessee State University | Partnership between university and local community; enquiry-based learning model to identify and plan strategies | Operationalisation of primary prevention to improve road safety | Instrumental | Level 4 | Reduction in road fatalities |
| 16 | 000051<br>Hancock et al 2001[42]<br>20 rural towns<br>AUSTRALIA | University of Newcastle (NSW) and Cancer Council NSW | Local community action groups formed to initiate and to monitor intervention | Operationalisation of primary prevention to reduce smoking | Instrumental | Level 3.1 | Smoking rates reduced |

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| 17 | 000149<br>Hill 2007[35]<br>Rural QLD<br>AUSTRALIA | Royal Flying Doctor Service | Voluntary coordinator provides local liaison and staff and communities work together to schedule field day and topics | Health promotion with clinic | Contributions | Level 5 | Enhanced community connectedness and capacity for health through partnership networks, problem solving, and knowledge transfer<br>Increased sense of community and increased leadership potential |
| 18 | 000150<br>Hodgson 2003[27]<br>Yorke Peninsula SA<br>AUSTRALIA | Wakefield Health Service | Consultation<br>Working advisory committee established<br>7 Community forums<br>Community survey (500 responses)<br>Service provider consultations | Local rural health planning | Instrumental | Level 5 | Refocusing health service towards community needs<br>Expansion of health services to meet community needs<br>Consolidation of providers into more flexible teams<br>Strongly locally supported health plans<br>Unintended consequence—emergence of local leadership |
| 19 | 000089<br>Jacobs & Price 2006[23]<br>Kirivong District, Takeo Province<br>CAMBODIA | The Swiss Red Cross | Local community people identified other poorest locals for financial support to access health services | Improving access for poorest community members to health services | Contributions | Level 3.2 | Improved access to health services for poorest community members |

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| 20 | 000151<br>Kenny 1999[50]<br>Far West Aboriginal Health Service NSW<br>AUSTRALIA | Far West Aboriginal Health Service NSW government | Community and health provider Youth Working Groups. Communities involved in developing, running, and evaluating programs | Operationalising youth development strategy | Developmental | Level 5 | Working Groups have put in place a broad range of projects, employing the resources of many stakeholders relevant to the well being of young people. |
| 21 | 000125<br>Kidane & Morrow 2000[36]<br>Tigray Province<br>ETHIOPIA | John Hopkins University, Baltimore USA | Self-formed community groups selected a mother coordinator (MC) trained to refer sick children. In the intervention MCs were trained to recognise symptoms of and treat malaria. | Screening, primary prevention, health promotion and treatment | Contributions | Level 2 | Major reduction of under 5 mortality |
| 22 | 000117<br>Kilpatrick 2009[11]<br>Rural and Remote AUSTRALIA | Rural communities and Universities/<br>Centres for Rural Health | Individual community members who are also health professionals act as 'boundary crossers' to activate community-based projects to improve health and wellbeing | Developing community-based health services, general practices, and community market. | Developmental | Level 5 | Development of health services in rural communities that may not otherwise have been there |
| 23 | 000141<br>Kironde & Kahirimbanyi 2002[28]<br>Rural<br>SOUTH AFRICA | District Health Service, Northern Cape Province | Lay volunteers involved in supervision of TB treatment Directly Observed Treatment | TB treatment, surveillance, and referral | Contributions | Level 5 | No difference in treatment outcomes for new patients supervised from the community compared to other treatment modes. Community-based treatment superior to self-administered therapy for re-treatment patients. |

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| 24 | 000058<br>Lobo et al 2007[43]<br>WA<br>AUSTRALIA | Western Australia Centre for Health Promotion Research, Curtain University | 70 people trained in issues for Same Sex Attracted Youth (SSAY) | Heath promotion including capacity building | Instrumental | Level 4 | Improved awareness in community about issues. Improved knowledge and confidence about issues amongst the target group |
| 25 | 000152<br>Loos et al 2007[43]<br>The Wide Bay /Burnett Region QLD<br>AUSTRALIA | Queensland University of Technology (QUT)<br>Health Promotion Council of QLD | QUT conducted interviews and workshops with local stakeholders. Small number of community members recruited for advisory committee. | Injury prevention program including training and promotion | Instrumental | Level 5 | Injury surveillance thought to be onerous by organisations. Community not mobilised as injury prevention was not high on agenda. Subsidised first training for 200 people resulted in 29 take-ups |
| 26 | 000020<br>Manandhar et al 2004[20]<br>NEPAL | International Perinatal Care Unit, University College London. | PAR facilitation with local women to identify issues and developed local strategies to address them | Primary prevention and perinatal care | Developmental | Level 2 | Reduction in neo-natal and maternal mortality. |
| 27 | 000142<br>Ndiaye et al 2003[37]<br>NIGER | National Immunisation Program Centre for Disease Control and Prevention US | Community sponsored health promotion campaigns and surveillance | Disease surveillance | Contributions | Level 5 | Increased community surveillance. Voluntary participation unsustainable |
| 28 | 000067<br>Nikniaz & Alizadeh 2007[47]<br>Azerbaijan<br>IRAN | The East Azerbaijan provincial health centre based on WHO healthy villages program | Men's and women's health committees, staff training, training for community, collaboration between organisations | Primary prevention | Empowerment | Level 4 | Reduced parasites and parasitic diseases. Increase in sanitary toilets and safe water. |

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| 29 | 000153<br>O'Meara & Houge 2003[30]<br>Rural Gippsland<br>VIC<br>AUSTRALIA | Gippsland community Helimed auxiliary | Political action and information provision to stop closure of HELIMED service | Provision of emergency transfer to urban hospitals by helicopter | Developmental | Level 5 | Service continued |
| 30 | 000064<br>Parker et al 2006[45]<br>Cherbourg and Stradbroke Island QLD AUSTRALIA | Queensland University of Technology (QUT) and communities | Community forums to monitor project—the introduction of traditional games | Health promotion including capacity building | Instrumental | Level 5 | Process evaluation indicated satisfaction with games. Games included in activities of a range of community organisations. |
| 31 | 000027<br>Peddle et al 2007[52]<br>Port Loko District<br>SIERRA LEONE | Amazonian Women's Initiative (NGO) | Establishing, monitoring, resourcing and evaluating community action groups to prevent Female Genital Mutilation (FGM) | Health promotion, education, capacity building, in women's reproductive health | Developmental | Level 5 | Changes in knowledge, skills and attitudes. Formalised agreements between action group and FGM practitioners not to practice |
| 32 | 000139<br>Rowley et al 2000[53]<br>Kimberley Region North WA<br>AUSTRALIA | Community initiated with Monash University (VIC) partners | Community identified lifestyle health problems and directed strategies to address them including food availability. | Primary prevention, health promotion and operationalisation of clinical programs in partnership | Developmental | Level 5 | Improved dietary intake and physical activity. Reduced fasting insulin levels, with protection from increased plasma glucose and triglycerides for high risk group. After 6yrs program run entirely by community members. |

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| 33 | 000154<br>Sare & Kirby 1999[38]<br>Millicent Community SA<br>AUSTRALIA | South East of South Australia Division of GP Inc. | Public meeting<br>Widely representative voluntary committee<br>Local Council financial contributions | Operationalisation of injury prevention strategies | Contributions | Level 5 | Reduction in road injury patterns predicted fatalities. |
| 34 | 000053<br>Sirivong et al 2003[24]<br>Luangprabang Province<br>LAOS | Provincial Health Department, Luangprabang, Lao | Community-based Traditional Birth Attendants' (TBA) trained | Creating access to antenatal postnatal and child health services | Contributions | Level 4 | 50% of women used<br>trained TBA.<br>Increased use of antenatal care. Increased immunisation and feeding of colostrum |
| 35 | 000116<br>Taylor et al 2006[9]<br>Rural SA<br>AUSTRALIA | Rural communities | Community members through hospital boards recruited GPs, fund raised, & provided governance for practice | Participation in the development of general practice services | Developmental | Level 5 | High levels of community participation in developing general practice services but participation unsustainable. |
| 36 | 000155<br>Warchivker et al 2001[54]<br>Remote NT<br>AUSTRALIA | Pintubi Homeland Health Service,<br>Ngintaka Women's Centre, the community store, the Centre for Remote Health | Community members developed the structure of the program. Researchers in consultation developed a revised form of individual growth monitoring. | Childhood nutrition and growth program development and operationalisation. | Developmental | Level 3.3 | Significant improvement in the growth status and the prevalence of malnutrition. Except for 0–4 months, lower incidence of diarrhoea. |

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| 37 | 000156<br>Wilson 2001[29]<br>Rural NSW<br>AUSTRALIA | Mid Western Area Health Service | Consultation committees/ planning teams to identify local priority issues | Local rural community health planning | Instrumental | Level 5 | 6 out of 16 sites have plans. Extra funding, significant structural and clinical practice change, increased community participation, and a shift in service provision to include marginalised target groups.<br>Interagency planning group |