

Community Health Worker Preventive Care in PHC: Systematic Review Protocol

Background

Chronic diseases contribute to most of the burden of disease in Australia and internationally (Begg S, 2007). Interventions to prevent these by managing the behavioural and physiological risk factors are thus a priority for health systems especially primary health care (WHO., 2013). However, there are concerns about capacity of primary health care providers to deal with this additional workload effectively (Yarnall et al., 2009). This has given rise to calls for greater sharing of responsibility within existing primary health care teams and to extend the teams to include new workers (Ghorob & Bodenheimer 2012).

The burden of chronic disease is not shared equally. Those in the lowest fifth of the Australian population by socioeconomic position have higher mortality, higher rates of most long term conditions and higher lifestyle and physiological risk factors than those with a higher socioeconomic status (Australian Institute of Health and Welfare, 2016). This makes it especially important that they have access to preventive interventions. There are numerous barriers preventive care for low socioeconomic groups and certain ethnic groups (Ali, Baynuna, & Bernsen, 2010; Caperchione, Kolt, & Mummery, 2009; Stimpson, Wilson, Murillo, & Pagan, 2012). They may also suffer from low health literacy which in turn is associated poorer uptake of preventive care and preventive behaviours (Berkman ND, 2011; Kobayashi, Wardle, & von Wagner, 2014; Wagner, Knight, Steptoe, & Wardle, 2007; Wolf, Gazmararian, & Baker, 2007). Therefore, primary health care needs to address language and cultural and health literacy barriers to uptake of preventive care and preventive behaviours.

Lay community health workers have been accepted as having valid roles in primary care in a number of overseas countries. Their roles in prevention include reaching out (by phone or home visits) to improve screening rates in disadvantaged communities and population groups; individual or group education, supporting navigation to health care services and follow up. Their uptake in Australian primary health care has been much more limited – confined largely to Aboriginal health workers working with community-controlled health services, volunteers and ethnic health workers attached to specialized services (such as diabetes centers).

Aims and Research questions:

Aim:

Review effective models of CHW involvement in preventive care for CALD patients in primary care that may be applicable to the Australian context.

Research questions

1. What is the effectiveness of CHW interventions in improving access and use of preventive care and patient risk behaviours and physiological risk factors, health service use and quality of life?
2. What is the cost of these interventions?
3. What are the characteristics of effective CHW roles?
4. What are the requirements for implementation of these CHW models?
5. What are the mechanisms of successful CHW interventions

PICO:

Population - CALD patients attending general practices especially where the GP consults in a language other than English;

Intervention - CHW provision of preventive care (screening/assessment, information education, referral navigation, telephone support/follow up)

Comparison - Patients attending practices without CHW

Outcomes - receipt of preventive care, patient reported outcomes, health behaviours, physiological risk factors (weight, BP, Lipids), quality of life

Logic model:

Inputs: Three level: practice (audit, training, team meetings), CHW (funding, training/competencies/registration, resources, supervision/peer support, access to EMR); Clinical (5As - individual, group, remote (phone and e-health follow up care)

Intervention: CHW role, function, scope, supervision, part of teams

Impacts: Service accessibility - approachability,, availability/ accommodation (including language and culture), appropriateness; Patient ability to access: Ability to perceive (health literacy), ability to seek (culture), ability to reach (transport), ability to afford, ability to engage.

Outcomes: Patient behaviours, risk factors, use of health services (primary care and referral services, ED/hospital), incidence of disease, quality of life.

Methods

Definitions:

Intervention

• Personnel:

Community Health Workers: Paraprofessionals or lay individuals with an in-depth understanding of the community culture and language, who have received standardised job-related training of a shorter duration than health professionals, and their primary goal is to provide culturally appropriate health services to the community (Olaniran, Smith, Unkels, Bar-Zeev, & van den Broek, 2017).

CHWs can be categorised into three groups by education and pre-service training:

- lay health workers (individuals with little or no formal education who undergo a few days to a few weeks of informal training),
- level 1 paraprofessionals (individuals with some form of secondary education and subsequent informal training), and
- level 2 paraprofessionals (individuals with some form of secondary education and subsequent formal training lasting a few months to more than a year).

Community Health Workers: Community Health workers are defined as community members who work almost exclusively in community settings and who serve as connectors between health care consumers and providers to promote health among groups that have traditionally lacked access to adequate care. By identifying community problems, developing innovative solutions, and translating them into practice, community health workers can respond creatively to local needs (Witmer, Seifer, Finocchio, Leslie, & O'Neil, 1995)

Exclude: Other health professionals such as nurses, social workers, allied health workers

- Role:

Preventive care,

Disease prevention, understood as specific, population-based and individual-based interventions for primary prevention and early detection, aiming to minimize the burden of diseases and associated risk factors (WHO EMRO, 2018).

Target medical condition:

None specified. Also, include specific target condition/process studies? Many on cancer. If yes,

Population

CALD: Culturally and linguistically diverse is a broad and inclusive descriptor for communities with diverse language, ethnic background, nationality, dress, traditions, food, societal structures, art and religion characteristics (Ethnic Communities Council of Victoria, 2012).

Disadvantage, indigenous, rural

Context

Primary health care:

There are many, varied definitions of primary health care (PHC) used across the health sector both in Australia and within the countries that this review covers. We used the following definition developed by the Australian Primary Health Care Research Institute for this review:

“Socially appropriate, universally accessible, scientifically sound first level care provided by health services and systems with a suitably trained workforce comprised of multi-disciplinary teams supported by integrated referral systems in a way that: gives priority to those most in need and addresses health inequalities; maximises community and individual self-reliance, participation and control; and involves collaboration and partnership with other sectors to promote public health”¹.

For the purposes of this review, PHC services include: general practice; Aboriginal medical services; allied health services; community health Services.

Comparison

Usual care

Outcomes

Processes: receipt of preventive care, adherence to recommended guidelines?

PROMs: patient reported outcomes, health behaviours, quality of life

Clinical measures: physiological risk factors (weight, BP, Lipids)

Health service outcomes: ED use, hospitalisation

System measures: Economic measures, provider measures?

Data Collection

Search strategy

Searches of five electronic databases - Medline, Embase, the Cochrane Central Register of Controlled Trials (CENTRAL), CINAHL, PsycINFO, Social Work Abstracts,. For grey literature website searches: UK/Europe, Australia/New Zealand; US; Canada; the World Health Organization.

¹ Definition developed by the Australian Primary Health Care Research Institute (APHCRI) and cited in Primary Health Care Reform in Australia: Report to Support Australia's First National Primary Health Care Strategy.
<http://webarchive.nla.gov.au/gov/20140801042734/http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draftreportsupp-toc>

Search terms:

CHW: community health worker, community worker, Aboriginal health worker, health promoter, lay health worker, health navigator.

Prevention: primary prevention, preventive care, lifestyle behaviours.

PHC: primary health care, family medicine, general practice

CALD: language other than English, ethnicity, culture, racial and ethnic minority, Indigenous, disadvantage, rural

Inclusion

- Published Jan 2000 to Dec 2017, in English
- Based OECD countries,
- Design: intervention studies with control/comparison group,
- Intervention based in PHC or community

Exclusion:

Hospital based

Study selection

Review of articles by title and abstract for eligibility. For all selected abstracts, full text articles will be retrieved and reviewed.

Quality assessment

Included articles will be assessed for methodological quality using standardised scoring tools which were A MeaSurement Tool to Assess systematic Reviews (AMSTAR)(Shea et al., 2017) for systematic reviews and meta-analyses and the Effective Public Health Practice Project (EPHPP) quality assessment tool for the other study designs (Armijo-Olivo, Stiles, Hagen, Biondo, & Cummings, 2012).

Extraction:

The following will be extracted into a spreadsheet: citation, context (country, service), Intervention (type of CHW, role, duration/frequency, mode of contact, communication with health services/providers, recruitment/training), Control, Sample (study pop, sampling, response rate, drop outs), Impacts (health service, patient abilities), Outcomes (SNAP behaviours, weight, BP, Lipids, use of Primary care, use of referral services, ED/hospital admission, disease, quality of life, economic), Quality, Implementation.

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