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Transforming health professionals into population health change agents

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Significance for public health

With decreasing health and wellbeing of whole populations, increasing inequities among specific population groups, health professional educators are increasingly turning their attention to population health. This has implications for implementing evidence into practice. Professional development short courses are being conducted to equip participants (health service managers, health promotion managers and coordinators, health planners, population health planners and senior executives) with knowledge, skills and tools to implement population health approaches and transform them into population health change agents. The findings of this study indicate there were mixed outcomes in facilitating participants' implementation of population health approaches and their transformation into population health agents upon their return to their workplaces. The study findings informed the evolution of the short courses, from a *one off event* to a *program* of interdependent modules, and further reveal that professional development is not an event but part of an on-going transformative process, suggestions to further align recognition of population health professional development programs are presented.

Abstract

Background. With the recognition that professional education has not kept pace with the challenges facing the health and human service system, there has been a move to transformative education and learning professional development designed to expand the number of enlightened and empowered change agents with the competence to implement changes at an individual, organisation and systems level.

Design and Methods. Since 2010, the Department of Health and Human Services in Victoria, Australia, in collaboration with The University of Melbourne's School of Population and Global Health, has delivered seven population health short courses aimed to catalyse participants' transformation into population health change agents. This paper presents key learnings from a combination of evaluation data from six population health short courses using a transformative learning framework from a 2010 independent international commission for health professionals that was designed to support the goals of transformative and interdependent health professionals. Participatory realist evaluation approaches and qualitative methods were used.

Results. Evaluation findings reveal that there were mixed outcomes in facilitating participants' implementation of population health approaches, and their transformation into population health agents upon their return to their workplaces. Core enablers, barriers and requirements, at individual, organisational and system levels influence the capability of participants to implement population health approaches. The iterative and systemic evolution of the population health short courses, from a *one off event* to a *program* of inter-dependent modules, demonstrates sustained commitment by the short course developers and organisers to the promotion of transformative population health learning outcomes.

Conclusions: To leverage this commitment, recognising that professional development is not an event but part of an ongoing transformative process, suggestions to further align recognition of population health professional development programs are presented.

Introduction

With the recognition that professional education has not kept pace with the challenges facing the health and human service system, there has been a move by health professional educators to transformative education and learning professional development.[1] Transformative learning is concerned with empowering the learner as a critical, reflective, lifelong learner, with the aim of facilitating change at the individual, organisational and wider system levels.[2] It is about developing leadership attributes to produce *enlightened change agents,* and it involves a shift from informative learning to transformative learning with the outcome being *change agents* and not just experts. In 2010 an independent International Commission, consisting of professional and academic leaders from across the globe, came together to develop a shared vision and strategy for health professionals for a new century based upon a transformative learning framework.[3] The Commission suggested reforms to *six educational instructional domains* (Competency driven; Interprofessional and transprofessional education; IT empowered; Local-Global; Educational resources; New Professionalism), and *four educational institutional domains* (Joint planning; Academic systems; Global networks; Culture of inquiry), coupled with *four enabling actions* (Mobilise leadership; Enhance investments; Align accreditation; Strengthen global learning) to achieve the goals of transformative and interdependent health professionals.

Converting evidence on transformative education into practice is challenging. Therefore, educators have also invested in building learners capability to act as *change agents* with diverse roles, including opinion leaders, outreach educators, academic detailers, clinical champions and facilitators.[4,5] While a change agent has been defined as *a person responsible for organising and coordinating the overall change effort,*[4] the role of the change agent is often defined or conceptualised according to the role he or she performs, including being a catalyst for change, one who leads change or one who facilitates change.[5] Professional development courses also aim to equip participants to return to their workplaces as ambassadors or social entrepreneurs to promote new vision, new thinking and new actions. A social entrepreneurship lens has been used to improve methods of delivering and assessing professional development programs, in particular, to

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discover the barriers and enablers that people encountered upon their return to work.[6] Key Insights drawn from relevant research on social entrepreneurship is summarized below.[6]

A social entrepreneurship lens

Social entrepreneurs act as agents of innovative organisational change act to connect the streams of policy, problem solving, and politics inherent in all organisations.[7] They work to create empowering organisational settings in which stakeholders can work together to identify innovative solutions to long-standing problems, develop opportunities for leadership, and build on organisational capacity to foster reflective action, or praxis.[8,9]

Successful social entrepreneurs need knowledge, skills and confidence to analyse, envision, communicate, empathize, mediate, enable and empower across individuals and organizations; to think holistically, proactively, reflectively; to seize opportunities to broker more effective political relations; to act as *boundary spanners*; and to help ensure innovative policy.[7,10,11] As social entrepreneurs, participants need to embrace a style of *catalytic* leadership, in which they i) focus attention by elevating the issue to the public and policy agendas; ii) engage people in the effort by convening the diverse set of individuals, agencies and interests needed to address the issue; iii) form new, non-traditional partnerships between and across organisations; iv) stimulate multiple strategies and options for action; and v) sustain action and maintain momentum by managing the interconnections through appropriate institutionalisation and rapid information sharing and feedback.[12]

Design and Methods

This paper reflects upon a current population health professional development short course opportunity that is striving to create population health *change agents*, using the Frenk *et al*.[1] transformative learning framework for health professionals, with the intent of informing future investment in maximally effective population health professional development short courses. With decreasing health and wellbeing of whole populations, and increasing inequities among specific population groups, attention has turned to population health as an approach to planning.[13-15] Population health aims to improve the health and wellbeing of whole populations, reduce inequities among specific population groups, and address the needs, rights and aspirations of people who are most disadvantaged.[13] Since 2010, the Victorian Department of Health and Human Services in collaboration with The University of Melbourne (Melbourne School of Population Health) has developed and delivered seven annual two-day population health short courses.[16,17] The courses are designed to equip participants with knowledge, skills and tools to implement population health approaches and transform them into population health change agents. The short courses were attended by mid-level and senior managers from regional government health departments, local government departments, primary care organisations, community health services, Primary Care Partnerships, acute/hospitals services, and non-government organisations across Victoria, Australia.

The short courses were specifcially aimed to: i) build a shared understanding among participants of key concepts in population health; ii) develop understanding of the key benefits and challenges in implementing a population health approach from a range of perspectives; and iii) develop a set of practical actions at an individual, organisational and inter-organisational level, that each participant could lead on their return to their workplace.

A population health short course for professionals working in the sector was believed to be an ideal medium for engaging with the regional workforce.[18] A total of seven short courses have been conducted from 2010-2015. Six of these short courses were commissioned to be evaluated by the University of Melbourne.

The 2010, 2011 and 2012 short course occurred over two days providing an intensive immersion experience for participants and were aimed i) at mid-level health service managers employed within the Departments' of Health; and ii) service delivery organisations, local councils and other sectors that aims to engage, strengthen and serve communities across Victoria.

The 2013 two-day short course was held over two weeks, with the intention of providing participants with the opportunity to reflect upon course learning outcomes upon their return to their workplaces. In addition to mi-level health service mangers, the 2013 short course was also aimed at senior health sector executives to facilitate a supportive authorising environment for course participants upon returning to their workplace.

The 2014 short course occurred over two days and were aimed at both mid-level health service managers and senior health sector executives.

In 2015 two short courses were conducted in two separate metropolitan regions in Victoria. The short courses occurred over two days and were aimed at both mid-level health service managers and senior health sector executives.

Overall the short courses typically covered two main themes, such as: (Day 1) Definitions of population health and the role of population health in reducing inequality; and (Day 2) Implementing population health approaches and other regional initiatives supporting population health planning. The short courses involved presentations from academics, service providers, and service users. Group work was used to provide participants with an opportunity to consider and discuss the ideas raised in the course, build knowledge and skills, and facilitate cross-sectorial linkages among participants.

Over four consecutive years, an evaluation team from The University of Melbourne, Victoria, Australia, has been engaged to evaluate the implementation of the population health short courses held between 2011-2015. Each evaluation has been conducted as a project in and of itself and reported on separately. Overall evaluation questions have included: to what extent have the Population Health Short Courses built population health knowledge, mobilised population health leadership, and built capability to apply population health approaches amongst short course participants?

Specific evaluation questions have included: i) To what extent have the Population Health Short Course components been implemented as intended? ii) What contextual factors (enablers, barriers) have influenced the Population Health Short Course implementation? iii) What impact has the Population Health Short Course had on participants, organisations, and systems? iv) To what extent has the Population Health Short Course built capacity (knowledge, partnerships, infrastructure, leadership)? v) To what extent are the impacts and outcomes of the Population Health Short Course sustainable? vi) What contextual factors (enablers, barriers) will influence the sustainability of the Population Health Short Course achievements?

Evaluation questions i) and v) are not specifically addressed in this paper. To increase rigour, the evaluations have used several approaches, multiple longitudinal data collection activities, and a transparent analysis and interpretation process. To enhance the use of the evaluation findings, participatory and realist evaluation approaches have been used.[19,20] A participatory evaluation approach has enabled the engagement of short course developers and organisers,[19] as it was viewed necessary to generate useful information for informing future courses. This evaluation approach has enabled a working partnership to grow between the evaluation team and the short course developers

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and organisers to ensure all were engaged and involved within the evaluation processes and evaluation learnings. To understand how and why the short courses have (or have not) worked, a realist evaluation approach has been used because it strives to examine what works,[20,21] for whom and in what circumstances. Realist evaluation is a theory-driven approach to understand how the outcomes (*e.g.*, implementation of population health approaches by participants) result from the interplay between intervention mechanisms (*e.g.,* short course) and the context (individual, organisational, system) within which the short course learnings were to be implemented. Realist evaluation is underpinned by the principle that Context will trigger Mechanisms (intervention enablers and barriers) to yield Outcomes.

The evaluation methodology has built upon traditional approaches to evaluating professional development courses, focusing on: participant learning outcomes, intentions and confidence to use their newly-acquired knowledge and skills; participant use of knowledge and skills gained; and participant perception of organisational support required to implement participant learning outcomes.[22,23] The evaluation approach has also been designed to provide short course participants with additional opportunities to reflect upon their implementation of population health approaches within their workplaces over time. The data collection methodology is designed specifically to engage short course alumni in practice-oriented reflection, thereby offering an extension of each short course itself. Three data collection activities are being used: i) two-week post short course on-line survey of short course participants; i) three and six month post course interviews with short course participants; and iii) three months post course interviews with short course participant organisation Senior Managers. Each evaluation has informed the subsequent short courses. Ethics approval from the Melbourne University Melbourne School of Population and Global Health Human Ethics Advisory Group was obtained for each iteration. Surveys and interview transcripts have formed the primary data for the evaluation. Field notes taken during the courses have been used to supplement the interview data. All interviews have been transcribed verbatim by an independent transcribing organisation, to capture accurately the experiences of course participants. The data analysis occurred through an iterative coding process, using a three step coding process - open, axial and selective coding.[24]

Results

A total of 165 people have participated in the course iterations (2011=26; 2012=31; 2013=39; 2014=20; 2015=49). Of these 67 participants completed post-course on-line surveys, and 50 have participated in semi-structured *interviews (Please Note: the 2015 six month post course interviews with course participants are still occurring)*. This section presents key findings from the three evaluation data collection activities under three headings: i) contextual implementation enablers and barriers; and i) capability to implement a population health approach; and iii) key evaluation findings and actions taken to revise the short course iterations.

Contextual implementation enablers and barriers

The evaluations show that there are a core set of enablers and barriers to implementing population health approaches. Table 1 provides a summary of the enablers and barriers mentioned by course participants at individual, organisational and systems levels to implementing population health approaches.

Capability to implement a population health approach

Population Health Short Course participants have been able to articulate clearly what they require at individual, organisational and systems levels to implement population health approaches. Table 2 provides a summary of requirements voiced by short course participants with illustrative quotes.

Key evaluation recommendations and actions taken

Each course has been revised to build iteratively on evaluation findings. Table 3 provides a summary of consecutive short course evaluation recommendations and actions taken to revise the short course iterations.

Discussion

The evaluation findings suggest there were mixed outcomes in assisting participants' implementation of population health approaches following their return to their workplaces. These findings require reflection for several reasons. Firstly, professional development courses are recognised as a means and not an endpoint and part of a transformative change process, involving a process of ongoing change, adoption, implementation, dissemination and sustainability of innovation into practice.[22,23]

Secondly, key ingredients of effectively designed professional development courses exist.[25-28] These include, but are not limited to: occurring over an extended duration; having a clear purpose and carefully expressed strategies; providing collaborative learning experiences; having supportive leadership; adhering to a philosophy of continuous reflection and learning; providing multiple contacts which allow for trial of, and feedback on newly acquired knowledge; content that is responsive to participants' concerns, contexts and requests; relying upon proven theories and are evidence-based; and the need for course participants to return to a supportive working environment that authorises the implementation of course learning outcomes. However, whilst vital, these ingredients are not a guaranteed recipe for successful professional development. We recognise that empowerment outcomes can manifest in behaviour across different times, places and contexts. While participants may not be able to utilise their training immediately, this does not mean that they will not use this new knowledge and skills in future – perhaps in their next job or outside of work.

Based upon the list of enablers and barriers (Table 1), and perceived requirements at individual, organisational and systems levels (Table 2), the short courses initially might appear not to be sufficiently based upon current professional development best practice. However, the actions taken by the short course developers (Table 3) demonstrate they have embraced, learnt from and utilised the consecutive evaluation findings. More broadly, the evaluation findings highlight the reality of conducting professional development courses, and their ability to equip participants with knowledge and skills to create changes in their work practices and workplaces, and to meet the individual, organisational and system challenges they face in performing their ongoing roles. We recognise that evidence is still required about: the specific changes made by course participants over time; the success of the short course modifications; and changes to course participants as enlightened and empowered change agents.

Based upon the Frenk *et al.* transformative professional development framework the following reflections are made.

Instructional/curriculum reforms

Adoption of competency-based curricula: the Population Health Short Courses are responding to participants' rapidly changing needs, irrespective of whether they are mid-level managers or senior executives. Along with theory, the courses have become more HOW TO oriented (competency based) with clear examples of implementing population health theory into practice. Existing population health planning frame-

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works are used to facilitate the planning, development of content, identification of presenters to deliver sessions, and structuring of the short courses. The frameworks themselves are critiqued during the course

Promotion of transprofessional education: the Population Health Short Courses are helping to break down the health and non-health professional silos and enhance collaborative and non-hierarchical relationships which are required to implement population health approaches. Alongside population health technical skills, the courses focus on facilitating relationships based upon shared goals, shared knowledge, mutual respect and problem solving to implement population health approaches.

Responsiveness to local contexts: the Population Health Short Course content is tailored to participants' population health know-how and local context, by using panels of local presenters to demonstrate the implementation of population health approaches.

New professionalism: the Population Health Short Courses are contributing to a *new professionalism* amongst health professionals, who come to understand and embrace that population health involves promoting health and well-being by decreasing inequities among and between specific population groups, and addressing the needs of those most disadvantaged by implementing population health as an approach to planning.

Institutional reforms

Domains which align individual, organisational and system-based efforts for implementing population health approaches, include the following.

Expanding joint planning mechanisms: the Population Health Short Courses have engaged all health and non-health key stakeholders in planning and delivering the courses and demonstrating the implementation of population health approaches.

Culture of critical inquiry: the Population Health Short Courses have encouraged a culture of critical inquiry as demonstrated by the sharing of experiences, knowledge, and problem solving by those implementing population health approaches and planning frameworks by health and non-health professionals.

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Table 1. Summary of implementation enablers and barriers.

Level	Implementation enablers	Implementation barriers
Individual	Having leadership, committed and involved change champions; having time; having relationships/partnerships/networks with key individuals and organisations; having knowledge about other organisations' planning cycles; having motivation derived from experiencing an expanded sphere of influence	Having limited time; funding cuts; resistance to change; lack of understanding of terms used and the concept itself; limited good examples of implementing population health approaches; limited sphere of influence; insufficient training on the *how to* implement a population health approach
Organisational	Having an existing organisational and/or region-wide vision/plan which aligns with and enables a population health approach; having organisational platforms for collaboration	Having a lack of structure and leadership; lack of organisational flexibility lack of a supportive authorising environment
Systems	Having a regional shift towards a population health approach; having resources to implement population health approaches; having involvement and buy-in from multiple partners across sectors	Lack of appropriate governance structures limited funding; lack of good data; uncertainty due to the dynamic political context due to changing government

Table 2. Individual, organisational and systems levels requirements.

Level	Summary	Illustrative quotes
At an individual level I require	Practical solutions; further/deeper understanding of the concepts; strong relationships; continued effort; access to data; authority to act; shared responsibility and shared leadership; to be able to promote the message and keep population health on the agenda; time to commit	*… at the individual level it's about that level of support that you get through forums like the population health short course. It's the networks you develop during those courses for the opportunity to reflect on what you do…*
At an organisational level I require	Time – to ensure a comprehensive approach can be implemented; funding for longer term projects; understanding what we're trying to achieve; continued focus and effort; supportive authorising environment; human resources; staff buy in; embedded deliverables; adoption of the approach at an organisational level; inclusion in strategic plans/at strategic level	*… at an organisation level it's more - it comes back to the partnerships and the resourcing and particularly the certainty around resourcing and the timeframes that we deal with…*
At a systems level I require	Wider intersectoral collaboration; resources to conduct research and develop evidence-based practice; alignment of effort; strong governance; direction from funding bodies; development of shared; intentions/commitments; evaluation and meaningful data	*...I guess at a higher level, the systems level, it's about recognition of what the importance of population health is and why it's worth investing in... it's probably bringing some of the rest of the sector on board I think Department of Health and Medicare Locals around the region are very on board with what population health is planning to do*

Table 3. Summary evaluation findings and actions taken (2011 to 2014).

Key evaluation findings	Actions taken
More *How to focus* with examples; supportive authorising environment required; provide train-trainer opportunity; review application process; involve health and non-health professionals; provide on-going mentoring opportunities	Modules developed for Senior Managers and CEOs; expanded focus on leadership (Day 1); expanded success and applications (Day 2); *trainer-the-trainer* offered as a follow-up leadership development program; engaged health and non-health professionals; connecting to the workplace

Enabling actions

Domains which create a supportive authorising environment conducive to implementing population health approaches, include the following.

Mobilisation of leadership: In keeping with a distributed leadership framework, the Population Health Short Courses have facilitated broad engagement of leaders at all levels – frontline, mid and senior management – creating a supportive authorising environment conducive to implementing population health approaches.

In 2014 a shift occurred from the population health course as a *one off event* to a Population Health *program* of inter-dependent components, demonstrating a shift in thinking and actions, and the responsiveness of the short course developers to the requirements, enablers and barriers to implementing population health approaches voiced by short course participants. A Population Health Program has been developed with a stronger emphasis on population health leadership, positive case studies from industry, and facilitated workplace application of population health approaches, using five inter-dependent components including:

CEOs' breakfast: aims to build the authorising environment for a whole-of-organisational operational commitment to implementing population health approaches. Features a leading locally- or internationally-recognised speaker, often from outside the health sector, who communicates the importance of working intersectorally to address the non-medical determinants of health and wellbeing.

Half-day introductory module for Senior Managers: Population Health – what is it? – to cement the authorising environment for all personnel to attend the two-day program and for their managers to understand and support the overall intent of the Short Course.

Two-day Population Health Short Course comprises four modules: i) Population Health – what is it?; ii) Leadership for Population Health; iii) Population Health – local successes; and iv):Applying Population Health in My Workplace.

Two-day Training of Trainers[29] *in Population Health/Population Health Dissemination and Advocacy Course* to foster leadership in population health by drawing on peer education principles and role influence of peer referents and other stakeholders. In line with adult peer learning principles, the *Training of Trainers* is not just about equipping people to run training sessions, although this will be a key outcome. Rather, it is also about capturing the opportunity to influence and engage: peers; line managers; teams and work units; and external stakeholders through the informal adult learning and reflection that takes place in all interactions.

Connecting the Program to Workplace Practice to further facilitate the application and mainstreaming of population health practice by graduates in their work places, by means of several post-course strategies and activities.

Conclusions

This paper has provided reflections from an evaluation of a series of Population Health Short Courses designed to create transformative population health change agents. The iterative and systemic evolution of the Population Health Short Courses, from a *one off event* to a *program* of inter-dependent modules demonstrates a commitment to promoting transformative population health change agents. To further leverage this commitment, given the recognition that professional development is not an event but part of an ongoing transformative change process, the program developers and implementers need to consider *further aligning recognition of population health professional development programs* – in other words: future population health professional development programs need to: i) articulate with existing education and training accreditation and certification systems; ii) develop agreed upon criteria for assessment, and defined metrics of outputs, and iii) develop agreed capabilities of participants to implement population health approaches upon return to their workplaces.

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Key words: Professional development; population health; change agents; evaluation; health professional education.
Acknowledgments: this evaluation was funded by the Victorian Department of Health and Human Services, North and West, Southern and Eastern Metropolitan Regions, Australia. We particularly thank Dr. Iain Butterworth (Manager Liveability and Sustainability, Eastern and Southern Metropolitan Health, Department of Health & Human Services). We also acknowledge the contributions of short course participants who participated in this evaluation, as without their cooperation this work would not have been possible.
Contributions: LN, IB, TM have all contributed to drafting of the article and/or revising it for important intellectual content and final approval of the version to be published. LN was responsible for the initial evaluation concept, data collection, analysis and interpretation. IB and TM were responsible for short course concept, evaluation data interpretation and implications. LN, IB and TM all provided important content and gave final approval of the version to be published.
Conflict of interest: the authors declare no potential conflict of interest.
Received for publication:20 November 2015.
Accepted for publication: 27 January 2016.
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Licensee PAGEPress, Italy
Journal of Public Health Research 2016;5:643
doi:10.4081/jphr.2016.643
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