HEART
HEALTH & EDUCATION ADVICE & RESOURCE TEAM

Helpdesk Report: Empowerment of communities and individuals for greater health self-reliance

Date: 9 April 2014

Query: What is the evidence base for interventions intended to empower communities and individuals for greater health self-reliance? What are the emerging lessons and recommendations for increasing self-reliance?

Content

1. Overview

Progress on achieving the three health Millennium Development Goals on reducing child mortality (MDG 4), reducing maternal mortality (MDG 5) and combating HIV/AIDS, malaria and other diseases (MDG 6) is slow in many countries. The more recent commitment in 2005 by all WHO Member States to achieve universal health coverage (UHC) has been recommended by the UN General Assembly to be included in discussions on the post-2015 MDG agenda. The aim of UHC is to ensure that all people obtain promotive, preventive, curative and rehabilitative health services without financial hardship. The 'UN Conference on Sustainable Development (Rio+20)' emphasised in June 2012 that UHC would play a role in not just enhancing health but also social cohesion, economic growth and development. Current levels of human resources are not enough to meet these goals.

There is growing recognition that human resources beyond a trained health workforce can be considered as 'assets' and be utilised to accelerate MDGs and achieve UHC. Some tasks can be shifted from trained health professionals to persons within the community, remunerated or voluntary, to carry out specific health service provision. Community Health Workers (CHWs) and other Front-Line Health Workers (FLHWs) have been used for many years and some countries already use CHWs on a national scale. Substantial evidence demonstrates that CHWs can provide a key role in delivering primary healthcare care services and referrals, especially in accessing hard-to-reach and underserved populations, in a convenient, high quality and cost-effective manner. But despite their impact in promoting and improving health behaviours over a range of health issues, including exclusive breastfeeding, adherence to HIV antiretroviral therapy, tuberculosis treatment completion, reducing neonatal and childhood mortality, the scale up and sustainability of successful interventions is not yet a reality.

Community intervention programmes are not stand-alone but rather an integral component of the health system. The health system must provide CHW training, supervision, motivation and logistical support whilst also strengthening existing health system provision to enable implementation of CHW policies and planned interventions. Key HRH stakeholders, including governments, civil society, policy advisors, international health organizations and donors, must be involved in supporting, managing the performance and taking overall responsibility for the quality assurance of CHWs.

CHWs cannot achieve their full potential without the active engagement and acceptance by communities. Communities must be involved in the planning, selecting, implementing, monitoring and supporting CHWs. Community engagement from the beginning of an intervention can result in a sense of ownership and acceptance by community members, which helps result in behaviour change. Citizen participation is critical in the creation of realistic expectations of their contribution to improving health and the realisation of what is achievable.

Further research is required on how to effectively scale up, sustain and maintain large-scale community intervention programmes on improving population health in LMICs whilst also learning from and reflecting on the challenges that faced scaling up attempts in the 1980s. Large-scale community intervention programmes are complex involving a diverse group of workers, addressing a wide range of health issues, using multiple interventions targeted to a range of population groups, which must be adapted from a systems perspective to national and local contexts.

This report provides an introduction to the literature on community and individual empowerment to improve health outcomes. Section 2 highlights some of the evidence-base of community intervention programmes with a focus on the role of CHWs. Section 3 explores some tools and approaches that are used to motivate and involve communities in interventions which result in behaviour change to improve health issues. Section 4 provides country examples to see what evidence base or evaluations have been undertaken to document the approach and impact of efforts to empower communities for health improvement. Section 5 focuses on reports, meetings and policies that review the evidence base, identify key themes/principles of successful interventions and provide recommendations for promoting and supporting increasing self-reliance. Finally, Section 6 highlights additional resources, links to useful websites of ongoing projects and networks for and support of CHWs.

2. Evidence base

Lay health workers

Community health workers, close-to-community providers, peer counsellors, treatment supportors, village health workers, community health promoters are just some of the many job titles given to lay health workers (LHW). These are people within the community that have received some training in how to deliver particular healthcare but are not healthcare professionals.

Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis.
Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, Rashidian A. *Cochrane Database of Systematic Reviews* 2013, Issue 10. Art. No.: CD010414. DOI: 10.1002/14651858.CD010414.pub2.
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010414.pub2/abstract

For LHW programmes to be effective there needs to be a better understanding of factors that influence their success and sustainability. This review synthesizes qualitative evidence from 53 studies and identifies barriers and facilitators of LHW programme implementation for maternal and child health in a primary or community healthcare setting.

Many of the findings of this review were based on studies from multiple settings, but with some methodological limitations. Findings from these studies were assessed as being of moderate certainty. Some of the findings were from only one or two settings and with some methodological limitations. These findings were assessed as being of low certainty.

A range of factors can influence the success of LHW programmes. Key factors identified by this review included the nature of the relationship between the LHW and the recipient. The recipient appreciated the LHW's skills and similarities they saw in them, although some shared a concern about confidentiality when receiving home visits.

The nature of the relationship between the LHW and other health workers was also important. Health professionals often appreciated the reduction in their workload by the LHWs, their communication skills and commitment. However, some health professionals thought that LHWs increased their workload and feared a loss of authority.

LHWs were incentivized by altruism, social recognition, knowledge gain and career development. Some unsalaried LHWs wanted payment whilst others thought that a regular payment would compromise their integrity. Some salaried LHWs wanted more pay or were dissatisfied that there was not consistency in the level of pay across regions or institutions.

Generally LHWs thought that their training had been insufficient, of poor quality, irrelevant and inflexible. Where additional training had been given e.g. to traditional birth attendants, some health professionals were concerned that LHWs had become over-confident in their ability and were therefore concerned that patients weren't being referred to health professionals when required. Conversely, LHWs and recipients highlighted their reluctance to refer or be referred because of poor co-operation of health professionals or because of bad experiences with health professionals.

The authors' conclude that LHWs offer a different and sometimes preferred type of health worker because of their close relationship with the recipient. However, programme planners must balance the benefit of this closeness with the potential negative aspects. Other facilitators to the success of LHWs include LHWs providing a service that is perceived as relevant and support from the health system and community. LHWs must also receive appropriate training, supervision and incentives.

Community-based intervention packages for reducing maternal and neonatal morbidity and mortality and improving neonatal outcomes.
Lassi ZS, Haider BA, Bhutta ZA. Cochrane Database of Systematic Reviews (Online), 2010,11:CD007754. PMID:21069697
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007754.pub2/abstract

This review assessed the effectiveness of community-based intervention packages in reducing maternal and neonatal morbidity and mortality; and improving neonatal outcomes from 18 cluster-randomised/quasi-randomised trials.

Delivery of community-based intervention packages by a range of community health workers including outreach workers, lay health workers, community midwives, community and village health workers, and trained birth attendants, collectively reduced maternal morbidity by an average of 25%, neonatal mortality by 24%, stillbirths by 16% and perinatal mortality by 20%. This review did not, however, show any reduction in maternal mortality. In addition, referrals

to health facility for pregnancy related complications increased by an average of 40% and rates of early breastfeeding improved by 94%.

The authors conclude that although skilled delivery and facility-based service for maternal and newborn care remain important, this review provides sufficient evidence to scale up delivery of community-based care intervention packages by a range of community-based workers.

Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases.
Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, Odgaard-Jensen J, Johansen M, Aja GN, Zwarenstein M, Scheel IB.
Cochrane Database of Systematic Reviews 2010, Issue 3. Art. No.: CD004015. DOI: 10.1002/14651858.CD004015.pub3.
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004015.pub3/abstract

This review assessed the effectiveness of LHW interventions in primary and community health care on maternal and child health and the management of infectious diseases. Eighty-two diverse studies were reviewed. The majority of these studies were conducted in high-income countries (n=55) but predominantly among people on low incomes and among minority populations.

LHWs benefit the promotion of immunisation uptake and breastfeeding, improving TB treatment outcomes, and reducing child morbidity and mortality when compared to usual care. For other health issues, evidence is insufficient to draw conclusions about the effects of LHWs.

Scaling up, strengthening and sustaining CHW programmes

Community Health Workers in Low- and Middle-Income Countries: What Do We Know About Scaling Up and Sustainability?
Pallas, S et al.: American Journal of Public Health. 2013. 103:e74
http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2012.301102

There is a growing body of evidence on the positive impact of CHWs in providing primary healthcare. However, less is known about effective approaches to scaling up and sustaining CHW programmes. This systematic review first developed criteria for identifying cases of scale-up, sustainability and success of CHW programmes in the absence of explicit, universal definitions, and then applied these criteria to identify key enabling factors for success.

Nineteen articles on CHW programmes in 16 countries were reviewed. Twenty-three enabling factors and 15 barriers to scale-up and sustainability in LMICs grouped into the following three thematic categories (1) CHW programme design and management, (2) community fit and (3) integration with the broader environment were identified (Table 2).

The authors conclude that scaling up and sustainability of CHW programmes requires effective programme design and management, including maintaining morale and motivation of CHWs, acceptability of the programme within the community and ongoing support, including financial, from political leaders and other healthcare providers.

The authors also list questions in the three thematic areas to guide development of CHW programmes (please refer to the final box of this review for the full list of questions).

Gender roles

Community health workers work within the context of the area where they work, which may be a genderered context. Gender norms shape occupational choice. Gender norms may also influence the ability of community health workers to provide services to their communities and of members of these communities to access services.

The role of social geography on Lady Health Workers' mobility and effectiveness in Pakistan
Mumtaz, Z. et al., 2013. *Social science & medicine (1982)*, 91, pp.48–57.
http://www.ncbi.nlm.nih.gov/pubmed/23849238

This study highlights that gender can be restrictive in the performance of CHWs. In Pakistan, lady health worker performance was constrained by their gender and caste, as mobility was viewed as leading to a loss of status for women, although due to selection of poor and low caste lady health workers this resulted in these lady health workers being able to visit with other households of similar caste to their own in this setting.

Can community health workers increase coverage of reproductive health services?
Viswanathan, K. et al., 2012. *Journal of epidemiology and community health*, 66(10): 894
http://www.ncbi.nlm.nih.gov/pubmed/22068027

Meanwhile in Afghanistan, this study revealed increased use of reproductive health services in areas where there was a female community health worker, but no improvement where the community health worker was male.

Pathways of Empowerment

In addition, there is also opportunity for community health workers to support community health empowerment, although this is an area where there has been limited research conducted to date. The following website http://www.pathwaysofempowerment.org provides more information on women's empowerment through 4 main themes:

1. Conceptualising empowerment
2. Building constituencies
3. Empowering work
4. Changing narratives of sexuality.

Female community health workers can themselves be empowered through the impact of paid work on their lives, although in many cases community health workers are volunteers rather than paid workers. However, the status accrued from their communities as a result may also be a source of empowerment. There is an ongoing debate regarding the relationship between paid work and the position of women, which is further discussed in a paper by BRAC, which examines the implications of women's empowerment in the context of Bangladesh.
http://www.ids.ac.uk/files/dmfile/Wp375.pdf

Citizen Participation, Accountability and Governance

Accountability through Participation: Developing Workable Partnership Models in the Health Sector
Andrea Cornwall, Henry Lucas and Kath Pasteur. Institute of Development Studies Bulletin 13 Jan 2000. Volume 31, Issue 1:1-3
http://onlinelibrary.wiley.com/doi/10.1111/j.1759-5436.2000.mp31001001.x/abstract

This Bulletin reflects on experience of building effective citizen participation with service provision and associated arising issues. Participation of communities is important in improving health outcomes and the performance of health systems.

Well-planned citizen involvement programmes relate the expectations of both the citizens and the planner. Arnstein's "ladder of citizen participation" can assist the planner in determining his or her perceptions of a programme's purpose and compare this with the anticipated perceptions of citizen participants (Figure). How far up the ladder citizen participation goes will determine how much power they hold.

Figure. The Ladder of Citizen Participation

Public Participation in Health: Making People Matter
Rene Loewenson. IDS Working Paper 84
http://www.eldis.org/vfile/upload/1/document/0708/DOC14800.pdf

This paper reviews the experience of participation in Zimbabwe's health system and proposes that participation be improved through two ways (i) creating realistic expectations between communities and health services in their contribution to health and (ii) in the governance of health systems.

Annotated bibliography: Social power, participation and accountability in health
Rene Loewenson, Kemi Tibazarwa. EQUINET with COPASAH, May 2013, Harare.
http://www.equinetafrica.org/bibl/docs/Annotated%20Bib%20social%20emp%20May2013.pdf

This bibliography summarises open access literature on the concepts of social power, social participation and social accountability in health, to provide a resource for developing people-centred health systems and social justice in health. Citizens must assert their health needs including access to influence the allocation of societal resources and to challenge the

distribution of power and resources that block this.

Citizen participation in health governance, Philippines
http://www.healthsystems2020.org/section/where_we_work/philippines

Community/health management committees provide an opportunity for citizens to have a voice on health service delivery and quality whilst also increasing accountability of local officials and health providers to communities for services delivered. The committee is thus usually composed of both healthcare professionals and community representatives. There is little literature on the role and impact of these committees.

In the Philippines a pilot study was conducted to assess the impact of health governance at the facility level on usage of MCH services. Facility-based governance committees were established in three sites to focus on improving quality of health services. Community participation on the committees increased utilization of MCH services.

3. Tools and approaches for community and individual empowerment

Positive deviance approach
http://www.youtube.com/watch?v=CNQjnFHCtvM
http://www.youtube.com/watch?v=v1mtuFkDkBY

The principle of the positive deviance approach is that solutions to most health problems lie within the community. The process involves working with the community to identity uncommon positive behaviours of individuals that have enabled them to find a more effective solution to a problem than others in the community, despite access to the same resources. The positive behaviour is then shared and promoted to the rest of the community by community volunteers to more widely tackle a common problem. The solution is often simple, using existing local resources and because the solution was found within the community there is a sense of ownership and acceptance that helps result in behaviour change by community members. This approach has been applied in many countries to various education and health issues, including nutrition, family planning, maternal and new born health, female genital mutilation and HIV/AIDS.

The Malaria Consortium is the first organisation to apply this approach to malaria prevention and control. Following its success in a six-month pre-pilot study in Sampov Loun district, Cambodia, the Consortium is now conducting a one-year multi country pilot study in Cambodia, Myanmar and Thailand. For example, in a village of the Kyunsu Township in southern Myanmar, a malaria prevention positive behaviour was identified in a young female rubber tapper who had never developed malaria over 15 years of work. She always wore a long sleeved shirt, long trousers and rubber boots when working and covered her head and face when rubber tapping. At home she slept under a bed net and burnt a coil when cooking to avoid mosquito bites. She also had a blood test when she fell sick. Community volunteers were recruited and trained on sharing this behaviour within the community at organised meetings and household visits. A household survey is then planned to identify if there had been a reduction in malaria cases and to assess the success of community mobilisation. A key aim of the pilot is to build the capacity of the Government's National Programmes in the use of the positive deviance approach to scale up to larger population groups.

Community Dialogue Approach
Martin, S. Community Dialogues for healthy children, Malaria Consortium, Learning Paper Series, 2012.
http://www.malariaconsortium.org/resources/pubdev/180/community-dialogues-for-healthy-

children-encouraging-communities-to-talk).

http://www.malariaconsortium.org/resources/publications/294/implementing-integrated-community-case-management-stakeholder-experiences-and-lessons-learned-in-three-african-countries

The Community Dialogue approach is to conduct a series of community dialogue sessions hosted by community leaders and community health volunteers to encourage community members to actively participate in the planning and implementation of interventions to address health issues that affect them. These sessions empower the community and create a sense of ownership of interventions among community members. Simple, flexible and easy-to-use tools such as facilitators' guidebook and pictorial flash cards, adapted to low-literacy audiences are often used. Community dialogue is an integral part of the community health strategy in Kenya.

The Malaria Consortium used this approach in its integrated community case management (iCCM) of childhood diarrhoea, pneumonia and malaria in Zambia, Mozambique and Uganda. Findings from the process evaluation conducted a year after implementation suggested that community dialogue was an effective tool for identifying and filling information gaps of communities, raised the level of awareness about the services of community health workers and allowed exchange of ideas and experiences leading to the identification of common solutions resulting in behavior change.

Community conversations
https://www.concern.net/sites/default/files/media/resource/ccs_for_citizen_participation.pdf

This is a similar approach to community dialogue, which has been developed as a socially transformative approach, which galvanizes communities to address the underlying causes of underdevelopment and vulnerability. This approach originated as a tool for behavior change for HIV and AIDS programmes, which has been adopted by the National AIDS Control Council in competency guidelines for communities.

There are 6 components, which occur as part of a facilitated process

1. Relationship building
2. Data gathering and situation analysis
3. Community dialogue
4. Decision making
5. Action
6. Reflection and review.

Experience with community conversations by Concern Worldwide in Kenya demonstrates their potential for citizen participation and may allow for meaningful and inclusive participation in devolved governance structures and processes.

Partnership defined quality (PDQ)
http://www.coregroup.org/storage/documents/Diffusion_of_Innovation/PDQ-Manual-Updated-Nigeria.pdf

Further information including text below available via CORE group website
http://www.coregroup.org/our-technical-work/initiatives/diffusion-of-innovations/83

This methodology was originally developed by Save the Children and aims to improve quality and accessibility of services with community involvement in defining, implementing and monitoring the quality improvement process by linking quality assessment and improvement

with community mobilisation.

PDQ enhances quality improvement by looking for answers outside the health system, it focuses on health issues that are of greatest importance to the client, it engages clients and non-clients, it empowers the community, gains commitment for community resources and enhances equitable use of services.

There are four main phases to PDQ

- Phase 1 – building support by presenting the process and gaining commitment for participation from stakeholders including community leaders and local and district level decision makers and health centre staff
- Phase 2 exploring quality as defined by the stakeholders
- Phase 3 – bridging the gap – to initiate partnership for quality improvement between the stakeholders through identification of ideas for QI
- Phase 4 – working in partnership to bring about change.

The strengths of this tool for community engagement are that the assessments are from the community and service providers, which generate essential information and results in greater participation and ownership. This method has been used in a range of settings, including Afghanistan, Armenia, Bangladesh, Bolivia, Georgia, Nepal, Pakistan, Peru, Philippines, Rwanda and Uganda.

Scorecards
http://resourcecentre.savethechildren.se/sites/default/files/documents/6800.pdf

Another method for community empowerment involves the incorporation of community monitoring with scorecards or citizen report cards by quality improvement teams for social accountability. CARE originally developed this approach, but there are a range of variations and adaptations, which have since occurred. The aim is to create social accountability by engaging with community members to express demand for public services and accountability from service providers to improve service quality, which the communities themselves could manage and sustain.

Community scorecards bring together community members and service providers and local government to identify service provision challenges and generate solutions together, working in partnership to implement and track the effectiveness of those solutions. Quality improvement teams are established which include health staff and community representation. A number of indicators are identified and tracked over time to form a discussion point for problem identification and then to monitor changes in quality over time.

Implementation Research in Health. A Practical Guide. Chapter 2 Box 3
http://who.int/alliance-hpsr/alliancehpsr_irpguide.pdf

This document highlights the good example in Afghanistan where scorecards were used after the fall of the Taliban regime in 2002 for M&E on health system performance and to establish annual priorities for improvement. A number of constraints were identified which resulted in the assessment and development of new implementation strategies to finance and deliver health services.

Power to the People: Evidence from a Randomized Field Experiment on Community-Based Monitoring in Uganda.
Björkman, M. & Svensson, J., 2009. *The Quarterly Journal of Economics*, 124(2), pp.735–769.
http://qje.oxfordjournals.org/content/124/2/735.abstract

Introduction of citizen report cards in an RCT in Uganda was shown to reduce under five mortality rates by 33%.

Care Groups
http://www.coregroup.org/storage/documents/Resources/Tools/Care_Group_Manual_Final__Oct_2010.pdf

The model was first developed by World Relief staff in Mozambique in 1995 and has since been adopted in over 14 different countries.

A care group is a group of between 10 and 15 volunteer community based health educators, usually mothers from their community (to enable peer to peer health promotion) who meet regularly (usually twice per month) with project staff for training, supervision and support. The volunteer should be chosen by the group of mothers she will serve or by village leadership. Each volunteer is responsible for regularly visiting 10-15 of her neighbours (once to twice per month), sharing health lessons with them and encouraging families to access clinical services when needed.

Care groups can integrate with local health providers, advocating for and strengthening services. Care groups create a multiplying effect, so that each household is equitably reached with interpersonal behaviour change communication, ensuring complete and consistent coverage of the project area. Each project staff member trains and supports up to 8 care groups, each containing 10-15 volunteer mothers and each care group volunteer visits 10-15 households from her community. The traditional care group model is shown below.

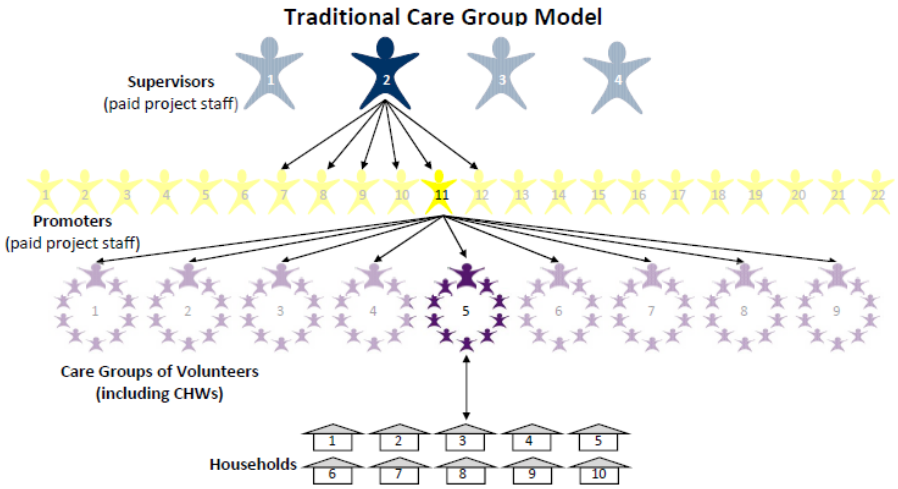


Figure 1: Source - Concern Worldwide, Mabayi District Child Survival Program Burundi, October 2008 – September 2013, Operations Research Study Description.

The care group model has been included in UNICEF's State of the World's Children Report 2008. World Relief's work with Care Groups in Mozambique demonstrated improvements in care-seeking behaviours and utilisation of health services, for example children with fast breathing treated at a health facility increased from 2% to 99%. Data collected through volunteers from the community based data registration, showed 66% infant mortality reduction and 62% under-five mortality reduction. When independently checked using pregnancy history questionnaires reductions of 49% infant and 42% under-five mortality were detected. (Edward et al. 2007)

Edward, A. et al., 2007. Examining the evidence of under-five mortality reduction in a community-based programme in Gaza, Mozambique. *Transactions of the Royal Society*

of Tropical Medicine and Hygiene, 101(8), pp.814–22. Available at: http://www.ncbi.nlm.nih.gov/pubmed/17482222 [Accessed March 23, 2014].

Designing for Behaviour Change
http://www.fsnnetwork.org/sites/default/files/combineddbc_curriculum_final.pdf

Another approach for community behavior change includes the designing for behavior change methodology. This is a method created in collaboration between the CORE group Social and Behavior Change Working Group, which seeks to explore selected behaviours, through a 'barrier analysis' which involves comparison of up to 12 determinants between 'doers' and non-doers' for selected behavior.

Following identification of the behavior, identification of the priority group, the influencing groups for the selected behavior, a barrier analysis can then be conducted with the 'priority group' to identify the determinants which reveal significant differences between doers and non-doers (the determinants are: perceived self-efficacy/skills, perceived social norms, perceived positive consequences, perceived negative consequences, access, cues for action/reminders, perceived susceptibility, perceived severity, perceived divine will, policy, culture). Following this bridges to activities and activities can then be developed in collaboration with key stakeholders.

This approach has been adopted in multiple settings to identify activities, which are appropriately targeted to tackle the underlying reasons as to why a behavior is not carried out at community level.

Stepping stones

http://www.steppingstonesfeedback.org/index.php/page/Home/gb

This is a gender, HIV, communication and relationship skills package developed to address a range of issues. It encourages participants to think about their experiences in relation to the issues and to identify solutions that are relevant to their own concerns through a participatory approach of non-formal learning, sharing discussions and participating in creative activities.

Participants discuss, act out and explore experiences, considering alternative outcomes and developing strategies to achieve these within a safe and supportive group. This enables participants to develop powers of 'critical literacy' to understand why we behave as we do and to assess consequences and rehearse ways to change in the future.

Stepping stones has been adapted to a range of contexts and used in over 100 countries.

4. Country Community Health Systems

Interactive Reference Tool on Country Community Health Systems
http://www.advancingpartners.org/resources/chsc?utm_source=email&utm_content=chsc&utm_campaign=HIFA

The Advancing Partners & Communities (APC), a five-year project funded and managed by USAID's Office of Population and Reproductive Health and implemented by JSI Research & Training Institute, Inc., in partnership with FHI 360 recently released the Community Health Systems Catalog. The catalog covers USAID priority countries for population and reproductive health and countries with a demonstrated interest in community-based family

planning. The resource is intended for ministries of health, program managers, researchers, and others seeking to learn more about the current state of community health systems in a nation.

Some country examples of what evidence base or evaluations have been undertaken to document the approach and impact of efforts to empower communities for health improvement.

Afghanistan

Improving Access to Mental Health Care and Psychosocial Support within a Fragile Context: A Case Study from Afghanistan
Ventevogel P, van de Put W & Faiz H. PLoS Med; 2012: 9(5)
http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001225#pmed-1001225-g001

In 2001 Afghanistan had a population of over 25 million people but only two psychiatrists, and no formally qualified psychiatric nurses or clinical psychologists. After the fall of the Taliban, the Afghan health care system had to be rebuilt. This provided opportunities to integrate mental health into basic health services. This case study reports the experiences of an international nongovernmental organisation (NGO), HealthNet TPO, in Nangarhar province. The authors argue that the treatment of mental disorders within the health care system needs to be accompanied by a community-based approach that focuses on psychosocial problems. Community actors can play a critical role in achieving better outcomes in the field of mental health care and psychosocial wellbeing. Since the programme started in 2002, 931 Community Health Workers (as well as other health care staff) have received basic mental health training in Nangarhar. People with a limited background in mental health care can deliver integrated services, once their tasks are integrated within a system of care that includes focused, competency-based trainings, regular supervision, and refresher training. The experience shows that, even within a fragile and resource poor context, it is possible to develop integrated services for mental health and psychosocial support, to rapidly cover an area of more than a million people. Community Health Workers have been vital in addressing psychosocial problems through activities outside the formal health care sector, strengthening self-help and foster resilience.

Can community health workers increase coverage of reproductive health services?
Viswanathan K, Hansen P & Hafizur Rahman M et al. Journal of Epidemiology Community Health 2012; 66: 894-900
http://jech.bmj.com/content/66/10/894.short

This paper analyses the effectiveness of deploying community health workers (CHWs) to promote the use of reproductive health services within the community and at health facilities in Afghanistan. It presents data from a cross-sectional survey of 8320 households in 29 provinces of Afghanistan. It finds that the presence of a female CHW in the community is associated with higher use of modern contraception, antenatal care services and skilled birth attendants but presence of a male CHW is not. It concludes that from the evidence available, CHWs can contribute to increased use of reproductive health services and that context and CHW sex are important factors that need to be addressed in programme design.

Midwifery training in post-conflict Afghanistan: tensions between educational standards and rural community needs
Mansoor G, Hill P & Barss P. Health Policy and Planning; 2011: 27 (1)
http://heapol.oxfordjournals.org/content/27/1/60.short

This study assesses the performance of students in Afghanistan selected for midwifery education by three methods: community mobilisation, a regional examination by the Institute of Health Sciences (IHS), and the National University Entrance Examination (NUEE). The academic records of 178 midwives were analysed. It found that 96% of midwifery graduates selected by communities were employed, compared with 74% chosen by the IHS and 82% by the NUEE. A total of 63% of community-selected graduates were working in rural locations, compared with 43% recruited by IHS and 9% by the NUEE. While fewer midwifery graduates selected by communities had completed high school and their academic performance was slightly lower during training, there was no difference in their pass rates and acquisition of practical skills. These results indicate that community mobilisation for local selection of trainees can achieve significantly higher employment levels of trained midwives in high-risk rural communities than usual selection methods, without compromising quality of skills.

Bangladesh

Cost-effectiveness of the community-based management of severe acute malnutrition by community health workers in southern Bangladesh
Puett C, Sadler K & Alderman H et al. Health Policy and Planning; 2012: 28 (4)
http://heapol.oxfordjournals.org/content/28/4/386.short

This study assessed the cost-effectiveness of adding the community-based management of severe acute malnutrition (CMAM) to a community-based health and nutrition programme delivered by community health workers (CHWs) in southern Bangladesh. The cost-effectiveness of this model of treatment for severe acute malnutrition (SAM) was compared with the cost-effectiveness of the 'standard of care' for SAM (i.e. inpatient treatment), augmented with community surveillance by CHWs to detect cases, in a neighbouring area. The results suggest that this model of treatment for SAM is highly cost-effective and that CHWs, given adequate supervision and training, can be employed effectively to expand access to treatment for SAM in Bangladesh.

Factors affecting recruitment and retention of community health workers in a newborn care intervention in Bangladesh
Moshfiqur Rahman S, Ashraf Ali N & Jennings L et al. Human Resources for Health; 2010: 8 (12)
http://www.human-resources-health.com/content/8/1/12

Well-trained and highly motivated community health workers (CHWs) are critical for delivery of many community-based newborn care interventions. High rates of CHW attrition undermine programme effectiveness and potential for implementation at scale. This paper investigates reasons for high rates of CHW attrition in Sylhet District in north-eastern Bangladesh through semi structured questionnaires. Process documentation was also carried out to identify project strengths and weaknesses, which included in-depth interviews, focus group discussions, review of project records (i.e. recruitment and resignation), and informal discussion with key project personnel. Motivation for becoming a CHW appeared to stem primarily from the desire for self-development, to improve community health, and for utilization of free time. The most common factors cited for continuing as a CHW were financial incentive, feeling needed by the community, and the value of the CHW position in securing future career advancement. Factors contributing to attrition included heavy workload, night visits, working outside of one's home area, familial opposition and dissatisfaction with pay. The framework presented illustrates the decision making process women go through when deciding to become, or continue as, a CHW. Factors such as job satisfaction, community valuation of CHW work, and fulfilment of pre-hire expectations all need to be addressed systematically by programs to reduce rates of CHW attrition.

Burma

Impact of Community-Based Maternal Health Workers on Coverage of Essential Maternal Health Interventions among Internally Displaced Communities in Eastern Burma: The MOM Project
Mullany L, Lee T & Yone L. PLoS Med; 2010: 7 (8)
http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000317#pmed-1000317-g001

This paper examines effectiveness of the Mobile Obstetric Medics (MOM) project between2005 – 08. The project provided local health workers from eastern Burma training in antenatal care, obstetrics, postnatal care, and family planning in Thailand. After training the workers were returned to Burma where they trained local health workers and traditional birth attendants to provide maternal health care to their communities. The results indicate that coverage of maternal health interventions and higher-level care at birth was substantially higher during the project period. The authors state that the MOM model of task-shifting, capacity building, and empowerment at the community level might serve as a model approach for similarly constrained settings.

Improving malaria knowledge and practices in rural Myanmar through a village health worker intervention: a cross-sectional study
Lwin M**,** Sudhinaraset M & Kyaw San A. Malaria Journal; 2014: 13 (5)
http://link.springer.com/article/10.1186/1475-2875-13-5
This paper analyses the impact of the Sun Primary Health (SPH) franchise programme on malaria knowledge and health practices in Burma. The SPH programme trains community health workers to provide high quality malaria information and treatment. Data from a cross-sectional household survey of 1,040 individuals was used to compare knowledge in areas with SPH intervention to areas without SPH intervention. The results suggest that the presence of a SPH provider in the community is associated with increased malaria knowledge and higher likelihood of going to trained providers for fevers, and that the longer the duration of the programme in a community, the greater the community knowledge level. The training of community health workers has a significant impact on malaria-related mortality and morbidity in rural Myanmar.

Piloting community-based medical care for survivors of sexual assault in conflict-affected Karen State of eastern Burma
Tanabe M, Robinson K & C Lee et al. Conflict & Health; 2013: 7 (12)
http://link.springer.com/article/10.1186/1752-1505-7-12

The Women's Refugee Commission and partners have been pursuing a community-based approach to providing medical care to survivors of sexual assault in Burma. This model translates the 2004 World Health Organization's Clinical Management of Rape Survivors facility-based protocol to the community level through empowering community health workers to provide post-rape care. This paper examines the safety and feasibility of community-based medical care for survivors of sexual assault. The evaluation took place in July-October 2011 and recorded qualitative feedback from trained community health workers, traditional birth attendants, and community members. Focus group discussions were conducted. Pilot site community health workers showed interest in providing community-based care for survivors of sexual assault. Traditional birth attendants attested to the importance of making this care available. Community health workers were deeply aware of the need to maintain confidentiality and offer compassionate care. They did not raise safety as an excess concern in the provision of treatment. The findings suggest that community-based post-rape care is feasible. Further research is needed to assess the safety perspective.

Democratic Republic of Congo (DRC)

Community volunteers can improve breastfeeding among children under six months of age in the Democratic Republic of Congo crisis

Balaluka G, Nabugobe P & Mitangala P et al. International Breastfeeding Journal; 2012: 7 (2)
http://www.biomedcentral.com/content/pdf/1746-4358-7-2.pdf

This study evaluates the effectiveness of community volunteers in promoting exclusive breastfeeding from birth in an area of endemic malnutrition in DRC. The evaluation was from 2004 – 06. A nutritional village committee was established in each community made up of five members. They were responsible for continuously working to raise awareness of the importance of exclusive breastfeeding from birth among pregnant women and community leaders in their respective villages. Data for 208 children who were exposed to the programme were compared with data for 178 children, collected from another health sector, which had never developed a community-based nutrition program. Results indicate that the duration of exclusive breastfeeding from birth (median, range) was 6 months (2 to 7) in the intervention area compared with 4 months (1 to 6) in the comparison area. The proportion of infants receiving exclusive breastfeeding at six months of age was higher in the intervention area than in the comparison area. The study concludes that the promotion of breastfeeding by community volunteers was effective as it increased the duration of exclusive breastfeeding from birth.

Use and limitations of malaria rapid diagnostic testing by community health workers in war-torn Democratic Republic of Congo
Hawkes M, Katsuva JP & Masumbuko C. Malaria Journal; 2009: 8 (308)
http://www.malariajournal.com/content/8/1/308

This paper assesses the effectiveness of training community health workers (CHWs) to deliver rapid diagnostic tests for malaria in remote rural areas of the DRC. It analyses the ability of twelve CHWs who were trained to safely and accurately perform and interpret RDTs on 357 febrile children. CHWs were uniformly positive in evaluating RDTs for their utility and ease of use. However, high malaria prevalence in this cohort (93% by RDTs, 88% by light microscopy) limited the cost-effectiveness of RDTs compared to presumptive treatment of all febrile children, as evidenced by findings from a simplified decision analysis. The findings of this study suggest that CHWs can safely and effectively use RDTs in their management of febrile children; although cost-effectiveness of RDTs is limited in zones of high malaria prevalence.

Ethiopia

Making pragmatic choices: women's experiences of delivery care in Northern Ethiopia
Gebrehiwot T, Goicolea I, Edin K & San Sebastian M. BMC Pregnancy and Childbirth; 2012: 12 (113)
http://www.biomedcentral.com/1471-2393/12/113

This study explores women's experiences and perceptions regarding delivery care in Ethiopia. Data came from six focus group discussions with 51 women to explore perceptions and experiences regarding delivery care. One core category emerged, 'making pragmatic choices', which connected the categories 'aiming for safer deliveries', 'embedded in tradition', and 'medical knowledge under constrained circumstances'. In this setting, women – aiming for safer deliveries – made choices pragmatically between the two available models of childbirth. On the one hand, choice of home delivery, represented by the category 'embedded in tradition', was related to their faith, the ascendancy of elderly women, the advantages of staying at home and the custom of traditional birth attendants (TBAs). On the other, institutional delivery, represented by the category 'medical knowledge under constrained circumstances', and linked to how women appreciated medical resources and the support of health extension workers (HEWs) but were uncertain about the quality of care, emphasized the barriers to transportation. Women made choices pragmatically and seemed to not feel any conflict between the two available models, being supported by traditional birth attendants, HEWs and husbands in their decision-making. Representatives of the two models

were not as open to collaboration as the women themselves, however. Although women did not see any conflict between traditional and institutional maternal care, the gap between the models remained and revealed a need to reconcile differing views among the caregivers. To improve outcomes an approach that incorporates all the actors involved in maternal care, at institutional, community and family levels alike is suggested. The authors conclude that reconsideration is required of the role of TBAs, and a well-designed, community-inclusive, coordinated and feasible referral system should be maintained.

Human resource development for a community-based health extension program: a case study from Ethiopia.
Teklehaimanot H & Teklehaimanot A. Human Resources for Health; 2013: 11 (39)
http://www.biomedcentral.com/content/pdf/1478-4491-11-39.pdf

Ethiopia has a high disease burden, aggravated by a shortage and imbalance of human resources, geographical distance, and socioeconomic factors. In 2004, the government introduced the Health Extension Program (HEP), a primary care delivery strategy, to address the challenges. This paper describes the strategies, human resource developments, service delivery modalities, progress in service coverage, and the challenges in the implementation of the HEP. Human resources were developed through the training of female health workers recruited from their prospective villages, designed to limit the high staff turnover and address gender, social and cultural factors in order to provide services acceptable to each community. The service delivery modalities included household, community and health facility care. A total of 40 training institutions were established, and over 30,000 Health Extension Workers have been trained and deployed to approximately 15,000 villages. The potential health service coverage reached 92.1% in 2011, up from 64% in 2004. While most health indicators have improved, performance in skilled delivery and postnatal care has not been satisfactory. Quality of service, utilization rate, access and referral linkage to emergency obstetric care, management, and evaluation of the program are the key challenges that need immediate attention. The experiences of Ethiopia in revitalising primary care through innovative, locally appropriate and acceptable strategies provides important lessons to other poorly resourced countries.

Building District-Level Capacity for Continuous Improvement in Maternal and Newborn Health
Ethier Stover K, Tesfaye S & Hailemichael Frew A. Journal of Midwifery & Women's Health; 2014: 59 (1)
http://onlinelibrary.wiley.com/doi/10.1111/jmwh.12164/full

This study examines the extent of the capacity built by The Maternal and Newborn Health in Ethiopia Partnership (MaNHEP) to support continuous improvement in community maternal and neonatal health (CMNH) care. Surveys and in-depth interviews assessed capacity improvement. Interviews focused on respondents' understanding and perceived value of the MaNHEP improvement approach. Bivariate analyses and multivariate linear regression models were used to analyze the survey data. Respondents reported significant positive changes in many areas of local culture and leadership. The themes of community empowerment and focused improvement emerged strongly from the interviews. MaNHEP was found to be able to build capacity. The multifaceted approach to building capacity was critical for the success.

Newborn care practices at home and in health facilities in 4 regions of Ethiopia
Callaghan-Koru1 J, Seifu A & Tholandi M. BMC Pediatrics; 2013: 13 (198)
http://www.biomedcentral.com/1471-2431/13/198/

This article describes newborn care practices reported by recently-delivered women (RDWs) in four regions of Ethiopia. A household survey with two-stage cluster sampling was used to assess newborn care practices among women who delivered a live baby in the period 1 to 7

months prior to data collection. The majority of women made one antenatal care (ANC) visit to a health facility, although less than half made four or more visits and women were most likely to deliver their babies at home. About one-fifth of RDWs in this survey had contact with Health Extension Workers (HEWS) during ANC, but nurse/midwives were the most common providers, and few women had postnatal contact with any health provider. Common beneficial newborn care practices included exclusive breastfeeding (87.6%), wrapping the baby before delivery of the placenta (82.3%), and dry cord care (65.2%). Practices contrary to WHO recommendations that were reported in this population of recent mothers include bathing during the first 24 hours of life (74.7%), application of butter and other substances to the cord (19.9%), and discarding of colostrum milk (44.5%). The results suggest that there are not large differences for most essential newborn care indicators between facility and home deliveries, with the exception of delayed bathing and skin-to-skin care. Improving newborn care and newborn health outcomes in Ethiopia will likely require a multifaceted approach. Given low facility delivery rates, community-based promotion of preventive newborn care practices, which has been effective in other settings, is an important strategy. For this strategy to be successful, the coverage of counselling delivered by HEWs and other community volunteers should be increased.

Ghana

Assessment of the adherence of community health workers to dosing and referral guidelines for the management of fever in children under 5 years: a study in Dangme West District, Ghana
Chinbuaha M, Abbeya M & Kager P. International Health; 2013: 5 (2)
http://inthealth.oxfordjournals.org/content/5/2/148.short

Community health workers (CHW) manage simple childhood illnesses in many developing countries. Information on CHWs' referral practices is limited. As part of a large cluster-randomised trial, this study assessed CHWs' adherence to dosing and referral guidelines. Records of consultations of children aged 2–59 months with fever managed by CHWs were analysed. Appropriate use of drugs was defined as provision of the correct drug pack(s) for the child's age group. Symptoms requiring referral were categorised into danger signs, respiratory distress and symptoms indicating other illnesses. Multivariate logistic regression examined symptoms most likely to be noted as requiring referral and those associated with provision of a written referral. Most children (11 659/12 330; 94.6%) received the appropriate drug. Only 161 of 1758 (9.2%) children who, according to the guidelines required referral were provided with a written referral. Not drinking/breastfeeding, persistent vomiting, unconsciousness/lethargy, difficulty breathing, fast breathing, bloody stool, sunken eyes and pallor were symptoms significantly associated with being identified by CHWs as needing referral or receiving a written referral. To conclude, CHWs' adherence to dosing guidelines was high. Adherence to referral guidelines was inadequate. More effort needs to be put into strengthening referral practices of CHWs within comparable community programmes.

Kenya

A Community Health Worker Home Visitation Project to Prevent Neonatal Deaths in Kenya
Livingston A, Tomedi A & Campbell A. J Trop Pediatr; 2013: 59 (1)
http://www.ncbi.nlm.nih.gov/pubmed/22907999

Community health worker (CHW) programmes require more resources than may be available in some resource-poor settings. The partners who authored this paper implemented a brief and inexpensive programme to train rural Kenyan CHWs to evaluate newborn infants for signs of severe illness during the first week of life and refer the ill infants to a health facility. During the first 12 months, 20 CHWs visited 702 infants, and all three visits were completed for 93% of the infants. There were five neonatal deaths, none after the first week of life. A

brief low-cost training programme for CHW home visitation of newborns is feasible for rural Kenya and the larger African setting.

Liberia

Healthcare utilisation and empowerment among women in Liberia
Sipsma H, Callands T & Bradley E et al. Journal of Epidemiology and Community Health; 2013: 67
http://jech.bmj.com/content/67/11/953.short

This cross-sectional study uses data from the 2007 Liberia Demographic and Health Survey. It included all non-pregnant women who were currently married or living with a partner. Multivariate logistic regression was used to assess the associations between constructs derived from the Theory of Gender and Power (TGP) and healthcare utilisation. Two-thirds of women (65.6%) had been to a healthcare facility for herself or her children in the past 12 months. Women with no education, compared with women with some education, were less likely to have been to a healthcare facility as were women who had experienced sexual abuse and women who were married. Women in higher wealth quintiles, compared with women in the next lower wealth quintile, and women with more decision-making power had greater odds of having been to a healthcare facility. Strong associations were shown to exist between healthcare utilisation and empowerment among women in Liberia, and gender imbalances are prevalent. This fundamental issue likely needs to be addressed before large-scale improvement in health service utilisation can be expected.

Malawi

Striving to promote male involvement in maternal health care in rural and urban settings in Malawi - a qualitative study
Kululanga L, Sundby J, Malata A & Chirwa E. Reproductive Health; 2011: 8 (36)
http://www.reproductive-health-journal.com/content/8/1/36/abstract

This paper considers the strategies that were used by different health care facilities in Malawi to involve husbands in maternal health care delivery. The data was collected through semi structured interviews from sixteen of the twenty health care providers from five different health facilities. The four main strategies used to invite men to participate in maternal health care were; health care provider initiative, partner notification, couple initiative and community mobilization. The health care provider initiative and partner notification were at health facility level, while the couple initiative was at family level and community mobilization was at village (community) level. The community mobilization had three sub-themes namely; male peer initiative, use of incentives and community sensitization. The couple strategy was found to be most appropriate but was mostly used by those who lived in urban areas and were well educated. The male peer strategy was found to be effective and sustainable at community level. A need for creation of awareness in men to ensure and sustain their participation in maternal health care activities of their female partners was identified.

Mozambique

HIV knowledge and health-seeking behavior in Zambézia Province, Mozambique
Audet C, Sidat M & Blevins M et al. SAHARA-J; 2012: 9 (1)
http://www.tandfonline.com/doi/abs/10.1080/17290376.2012.665257#.Uz1elVeGdaE

A number of educational campaigns in Mozambique have been aimed at improving HIV transmission and prevention knowledge among community members in an effort to reduce infection rates. These campaigns have also encouraged people to seek health care at clinical sites, instead of employing traditional healers to cure serious illness. A total of 349 people were interviewed in 2009 using free response and multiple choice questionnaires. Increased

educational level and having learned about HIV from a community health worker were associated with higher HIV prevention and transmission knowledge. Traditional healers and community health-care workers were both conduits of health information to our study participants. HIV education and use of clinical services may be facilitated by partnering more closely with these groups.

Becoming and remaining community health workers: Perspectives from Ethiopia and Mozambique
Maesa K & Kalofonos I. Social Science & Medicine; 2013: 87
http://www.sciencedirect.com/science/article/pii/S0277953613001883

Many global health practitioners are currently reaffirming the importance of recruiting and retaining effective community health workers (CHWs) in order to achieve major public health goals. This raises policy-relevant questions about why people become and remain CHWs. This paper addresses these questions, drawing on ethnographic work in Ethiopia and Mozambique between 2003 and 2010. Participant observation and in-depth interviews were used to understand the life histories that lead people to become CHWs, their relationships with intended beneficiaries after becoming CHWs, and their social and economic aspirations. People in Ethiopia and Mozambique have faced similar political and economic challenges in the last few decades, involving war, structural adjustment, and food price inflation. Results suggest that these challenges, as well as the socio-moral values that people come to uphold through the example of parents and religious communities, influence why and how men and women become CHWs. Relationships with intended beneficiaries strongly influence why people remain CHWs, and why some may come to experience frustration and distress. There are complex reasons why CHWs come to seek greater compensation, including desires to escape poverty and to materially support families and other community members, a sense of deservingness given the emotional and social work involved in maintaining relationships with beneficiaries, and inequity vis-à-vis higher-salaried elites. Ethnographic work is needed to engage CHWs in the policy process, help shape new standards for CHW programs based on rooting out social and economic inequities, and develop appropriate solutions to complex CHW policy problems.

Nepal

Community Health Workers Can Identify and Manage Possible Infections in Neonates and Young Infants: MINI—A Model from Nepal
Khanal S, Sharma J & Singh V et al. Journal of Health, Population and Nutrition; 2011: 29 (3)
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3131126/

The Morang Innovative Neonatal Intervention (MINI) is a community based pilot programme implemented in Nepal aiming to bring the management of sick neonates into the community. In the MINI model community health workers (CHWs) classified sick young infants with possible severe bacterial infection (PSBI). Female Community Health Volunteers (FCHVS) were trained to visit homes soon after delivery, record the birth, counsel mothers on essential newborn care, and assess the newborns for danger-signs. Infants classified as having PSBI, during this or subsequent contacts, were treated with co-trimoxazole and referred to facility-based CHWs for seven-day treatment with injection gentamicin. Of 11,457 livebirths recorded during May 2005–April 2007, 1,526 (13.3%) episodes of PSBI were identified in young infants. Assessment of signs by the FCHVs matched that of more highly-trained facility-based CHWs in over 90% of episodes. Treatment was initiated in 90% of the PSBI episodes; 93% completed a full course of gentamicin. Case fatality in those who received treatment with gentamicin was 1.5% [95% confidence interval (CI) 1.0-2.3] compared to 5.3% (95% CI 2.6-9.7) in episodes that did not receive any treatment. The assessment concludes that within the existing system, the CHWs can assess and identify possible infections in neonates and young infants and deliver appropriate treatment with antibiotics. This will result in

improvement in the likelihood of survival and address one of the main causes of neonatal mortality.

Early pregnancy detection by female community health volunteers in Nepal facilitated referral for appropriate reproductive health services
Andersen K, Singh A & Kumari Shrestha M. Global Health: Science and Practice; 2013: (3)
http://www.ghspjournal.com/content/1/3/372.abstract

This paper evaluates a pilot program that trained female community health volunteers (FCHVs) in early pregnancy detection using urine pregnancy tests (UPTs), counseling, and referral to appropriate antenatal, safe abortion, or family planning services. The training of 1,683 FCHVs took place between July 2008 and June 2009. A total of 1,492 FCHVs (89%) provided follow-up data on the number of clients served and the type of services provided. Interviews with FCHVs and other reproductive health service providers were also undertaken. The study concludes that providing FCHVs with the skills and supplies required for early pregnancy detection allowed them to make referrals for appropriate reproductive health services. Results suggest that FCHVs and other community health workers are a promising channel for early pregnancy detection and referral. It is suggested that as the intervention is scaled up, the focus should be on ensuring service availability and awareness of available services, UPT supply, and creating viable options for record keeping.

The female community health volunteer programme in Nepal: Decision makers' perceptions of volunteerism, payment and other incentives
Glentona C, Scheela I & Pradhan S. Social Science & Medicine; 2010: 70 (12)
http://www.sciencedirect.com/science/article/pii/S027795361000198X

This paper explores the views of stakeholders involved in the design and implementation of the Female Community Health Volunteer (FCHV) programme in Nepal, which has existed since the late 1980s and includes almost 50,000 volunteers. It focuses on volunteer motivation and appropriate incentives, and to compare these views with the views and expectations of volunteers. The degree to which decision makers understand community health worker motivations and match these with appropriate incentives is likely to influence programme sustainability. Semi-structured interviews were carried out in 2009 with non-volunteer stakeholders, including policy makers and programme managers. Results were compared with data from previous studies of FCHVs and from interviews with four volunteers and two Volunteer activists. The results show that stakeholders believed volunteers to be motivated primarily by social respect, religious and moral duty. The freedom to deliver services at their leisure was seen as central to the volunteer concept. They thought that the need for extrinsic incentives was regarded not only as financially unfeasible, but as a potential threat to the volunteers' social respect, and thereby to their motivation. These views were reflected in interviews with FCHVs. Strong traditions of volunteering as moral behaviour, a lack of respect for paid government workers, and the Programme's community embeddedness were recorded. The authors suggest that it may not be useful to promote a generic range of incentives, such as wages, to improve FCHV programme sustainability. Instead, programmes should ensure that the context-specific expectations of FCHVs, programme managers, and policy makers are in alignment if low attrition and high performance are to be achieved.

Nigeria

Utilizing community health workers as skilled birth attendants in rural communities in Nigeria
Silas O, Ugo O & Mohammed A et al. Tropical Journal of Obstetrics and Gynaecology; 2012: 29 (2)
http://www.ajol.info/index.php/tjog/article/view/85590

The Nigerian Midwives Service Scheme (MSS) was designed to address the scarcity of skilled birth attendants at primary health care levels. Although, Nigeria has a rich population of trained Midwives, their deployment and retention at communities in critical need for their skills remains a huge challenge. Community Health Workers (CHWs) are readily available and could bridge the gap of connecting the family, community and the referral facilities. This paper presents the findings of a cross-sectional survey of 329 CHWs to assess their knowledge and skills on various aspects of maternal and newborn health care using structured questionnaire and focused group discussions. The general knowledge of the CHWs of Antenatal care (ANC) and basic midwifery was good, although majority had problems assessing gestational age using anatomical landmarks, identifying abnormal labour and diagnosing fetal distress in labor. The authors conclude that CHWs can effectively fill in the gaps in poor access to skilled birth attendance in Nigeria if given the requisite training.

Pakistan

Lady health workers programme in Pakistan: challenges, achievements and the way forward
Hafeez A, Khalif Mohamud B & Riaz Shiekh M et al. Journal of the Pakistan Medical Association; 2011: 61 (210)
http://jpma.org.pk/full_article_text.php?article_id=2633

This paper reviews the Lady Health Workers programme and critically explore various aspects of the process to extract tangible implications for other similar situations. A descriptive study (2007-08) was undertaken including detailed desk review of project documents, interaction with relevant stakeholders, performance validation and extensive feedback from the community were collected. The data so obtained was analysed and evaluated against predetermined benchmarks. Each LHW serves a population of 1,000 people in the community and extends her services in the catchment population through monthly home visits. The scope of work includes over 20 tasks covering all aspects of maternal, newborn and child care. Total cost incurred on each worker is averaged at PKR 44,000 (US $ 570) per anum. Almost 60% of the total population of Pakistan, mostly rural, is covered by the programme with more than 90,000 LHWs all over the country. The health indicators are significantly better than the national average, in the areas served by the LHWs. The LHW programme has led to a development of a very well placed cadre that links first level care facilities to the community thus improving the delivery of primary health care services. However, despite its success and the trust it has earned from the community, there are certain areas which need special attention which include poor support from sub-optimal functional health facilities, financial constraints and political interference leading to management issues.

Improvement of perinatal and newborn care in rural Pakistan through community-based strategies: a cluster-randomised effectiveness trial
Bhutta Z, Soofi S & Cousens S et al. The Lancet; 2011: 377 (9763)
http://www.sciencedirect.com/science/article/pii/S014067361062274X

This paper evaluates the effectiveness of a community-based intervention package, principally delivered through Lady Health Workers (LHWs) working with traditional birth attendants and community health committees, for reduction of perinatal and neonatal mortality in a rural district of Pakistan. A cluster randomised trial was undertaken between February, 2006, and March, 2008. The results support the scale-up of preventive and promotive maternal and newborn interventions through community health workers and emphasise the need for attention to issues of programme management and coverage for such initiatives to achieve maximum potential.

Rwanda

Excellent Clinical Outcomes and High Retention in Care Among Adults in a Community-Based HIV Treatment Program in Rural Rwanda
Michael R, Miller A & Niyigena P et al. Journal of Acquired Immune Deficiency Syndromes; 2012: 59 (3)
http://journals.lww.com/jaids/Abstract/2012/03010/Excellent_Clinical_Outcomes_and_High_Retention_in.17.aspx

This paper reports clinical and programmatic outcomes at 24 months for a cohort of patients enrolled in a community-based ART program in Rwanda under collaboration between Partners In Health and the Rwandan Ministry of Health. The outcomes of the intensive community-based treatment support for ART in rural Rwanda are described as excellent with regards to 24-month retention in care.

Sierra Leone

Healthcare seeking for diarrhoea, malaria and pneumonia among children in four poor rural districts in Sierra Leone in the context of free health care: results of a cross-sectional survey
Diaz T, George A & Rao S. BMC Public Health; 2013: 13 (157)
http://www.biomedcentral.com/1471-2458/13/157/

This paper assesses health care seeking for children with diarrhoea, malaria and pneumonia in 4 poor rural districts in Sierra Leone with a view to planning for a community case management (CCM) programme after the implementation of the Free Health Care Initiative (FHCI). A cross-sectional household cluster survey and qualitative research were undertaken in July 2010. Caregivers were interviewed about healthcare seeking. The authors evaluated the association of various factors with not seeking health care by obtaining adjusted odds ratios and 95% confidence limits using a multivariable logistic regression model. Focus groups and in-depth interviews of young mothers, fathers and older caregivers in 12 villages explored household recognition and response to child morbidity. The results indicated high healthcare seeking rates soon after the FHCI; however, many children do not receive recommended treatment, and some are given traditional treatment instead of seeking outside care. The authors conclude that facility care needs to be improved and the CCM program should target those few children still not accessing care.

Somalia

External Actors and the Provision of Public Health Services in Somalia
Schäferhoff M. Governance: An International Journal of Policy, Administration, and Institutions; 2014
http://onlinelibrary.wiley.com/doi/10.1111/gove.12071/abstract

This paper argues that the provision of collective goods through external actors depends on the level of state capacity and the complexity of the service that external actors intend to provide. It shows that external actors can contribute most effectively to collective good provision when the service is simple, and that simple services can even be provided under conditions of failed statehood. Effectively delivering complex services requires greater levels of state capacity. The article also indicates that legitimacy is a key factor to explain variance in health service delivery. The malaria and TB projects of the Global Fund in Somalia are examples of an effective provision of collective goods in areas of limited statehood. Although there are many challenges, both projects demonstrate that simple health services can be successfully provided even if there is no state that exercises effective domestic sovereignty. Through the training of community health workers and the modest demand on the health infrastructure, TB services were effectively provided by the project, even in the Southern region. Equally important, the TB case also points to the role of local legitimacy for effective service delivery. The case indicates that once local actors perceive the targeted services as

legitimate, programs can be effective, even under such unstable conditions as in Central Somalia. Local acceptance can create a protective environment for external actors and as such the basis for their operations.

South Africa

Hypertension education and adherence in South Africa: a cost-effectiveness analysis of community health workers
Gaziano T, Bertram M, Tollman S & Hofman K. BMC Public Health 2014, 14 (240)
http://www.biomedcentral.com/1471-2458/14/240

The objective of this was to determine whether training community health workers (CHWs) about hypertension in order to improve adherence to medications is a cost-effective intervention among community members in South Africa. A Markov model with age-varying probabilities of cardiovascular disease (CVD) events was employed to assess the benefits and costs of using CHW home visits to increase hypertension adherence for individuals with hypertension and aged 25–74. Subjects considered for CHW intervention were those with a previous diagnosis of hypertension and on medications but who had not achieved control of their blood pressure. Results suggest that additional training for CHWs on hypertension management could be a cost-effective strategy for CVD in South Africa and a very good purchase according to World Health Organization (WHO) standards. The intervention could also lead to reduced visits at the health centres freeing up more time for new patients or reducing the burden of an overworked staff at many facilities.

South Sudan

Evaluation of a novel training package among frontline maternal, newborn, and child health workers in South Sudan
Nelsona B, Ahna R & Fehling M et al. International Journal of Gynecology & Obstetrics; 2012: 119 (2)
http://www.sciencedirect.com/science/article/pii/S0020729212003281

This study develops, implements, and evaluates an evidence-based Maternal, Newborn, and Child Survival (MNCS) package for frontline health workers (FHWs) in South Sudan. It involves a multimodal needs assessment to develop a best-evidence package comprised of targeted training, pictorial checklists, and reusable equipment and commodities. A training-of-trainers model was implemented. Program effectiveness was assessed through knowledge assessments, objective structured clinical examinations (OSCEs), focus groups, and questionnaires. A total of 72 trainers and 708 FHWs were trained in 7 South Sudan states. Trainer knowledge assessments improved significantly: from 62.7% to 92.0% ($P < 0.001$). The MNCS package has led to improved FHW knowledge, skills, and referral. A novel package of training, checklists, and equipment can be successfully implemented in resource-limited settings and enhance links between community-based providers and healthcare facilities.

Tanzania

Malaria Rapid Testing by Community Health Workers Is Effective and Safe for Targeting Malaria Treatment: Randomised Cross-Over Trial in Tanzania
Mubi M, Janson A & Warsame M. PLoS ONE; 2011: 6 (7)
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0019753#pone-0019753-g001

This study assessed the impact of rapid malaria diagnostic tests (RDTs) by community health workers (CHWs) on provision of artemisinin-based combination therapy (ACT) and health outcome in fever patients. Twenty-two CHWs from five villages were trained to manage

uncomplicated malaria using RDT aided diagnosis or clinical diagnosis (CD) only. Each CHW was randomly assigned to use either RDT or CD the first week and thereafter alternating weekly. Primary outcome was provision of ACT and main secondary outcomes were referral rates and health status by days 3 and 7. The CHWs enrolled 2930 fever patients during five months of whom 1988 (67.8%) presented within 24 hours of fever onset. ACT was provided to 775 of 1457 (53.2%) patients during RDT weeks and to 1422 of 1473 (96.5%) patients during CD weeks (Odds Ratio (OR) 0.039, 95% CI 0.029–0.053). The CHWs adhered to the RDT results in 1411 of 1457 (96.8%, 95% CI 95.8–97.6) patients. More patients were referred on inclusion day during RDT weeks (10.0%) compared to CD weeks (1.6%). Referral during days 1–7 and perceived non-recovery on days 3 and 7 were also more common after RDT aided diagnosis. However, no fatal or severe malaria occurred among 682 patients in the RDT group who were not treated with ACT, supporting the safety of withholding ACT to RDT negative patients. To conclude, CHWs can safely deliver RDTs and may safely improve early and well-targeted ACT treatment in malaria patients at community level in Africa.

Uganda

Performance of community health workers under integrated community case management of childhood illnesses in eastern Uganda
Kalyango J, Rutebemberwa E & Alfven T. Malaria Journal; 2012: 11 (282)
http://www.biomedcentral.com/content/pdf/1475-2875-11-282.pdf

This study compared the performance of community health workers (CHWs) managing malaria and pneumonia with performance of CHWs managing malaria alone in eastern Uganda and the factors influencing performance. A mixed methods study was conducted among 125 CHWs providing either dual malaria and pneumonia management or malaria management alone for children aged four to 59 months. Performance was assessed using knowledge tests, case scenarios of sick children, review of CHWs' registers, and observation of CHWs in the dual management arm assessing respiratory symptoms. Four focus group discussions with CHWs were also conducted. The study concludes that CHWs providing dual-illness management handled malaria cases as well as CHWs providing single-illness management, and also performed reasonably well in the management of pneumonia. With appropriate training that emphasizes pneumonia assessment, adequate supervision, and provision of drugs and necessary supplies, CHWs can provide integrated treatment for malaria and pneumonia.

Poor retention does not have to be the rule: retention of volunteer community health workers in Uganda
Ludwick T, Brenner J & Kyomuhangi T. et al. Health Policy Planning. 2013: 29 (2)
http://heapol.oxfordjournals.org/content/early/2013/05/06/heapol.czt025.short

Community health workers (CHWs) are increasingly being promoted to extend primary health care to underserved populations. Since 2004, Healthy Child Uganda (HCU) has trained volunteer community health workers in child health promotion in rural southwest Uganda. This study analyses the retention and motivation of volunteer community health workers trained by HCU. It presents retention rates over a 5-year period and provides insight into volunteer motivation. The findings are based on a 2010 retrospective review of the community health worker registry and the results of a survey on selection and motivation. The survey was comprised of qualitative and quantitative questions and verbally administered to a convenience sample of project participants. Between February 2004 and July 2009, HCU trained 404 community health workers (69% female) in 175 villages. Pair-wise ranking was used to assess the importance of seven 'motivational factors' among respondents. Those highest ranked were 'improved child health', 'education/training' and 'being asked for advice/assistance by peers', while the modest 'transport allowance' ranked lowest. The results suggest that in our rural, African setting, volunteer community health workers can be retained over the medium term. Community health worker programmes should invest in

community involvement in selection, quality training, supportive supervision and incentives, which may promote improved retention.

Yemen

Empowerment of Women and Its Association with the Health of the Community
Varkey P, Kureshi S & Lesnick T. Journal of Women's Health; 2010: 19 (1)
http://online.liebertpub.com/doi/abs/10.1089/jwh.2009.1444

This study assesses the relationship of women's empowerment with health in 75 countries, including Yemen. It uses a gender empowerment measure (GEM), which is a composite index measuring gender inequality in economic participation and decision making, political participation and decision making, and power over economic resources. Association between the GEM values and seven health indicators was evaluated using descriptive statistics, scatter plots, and simple and multiple linear regression models. The authors controlled for gross domestic product (GDP) as a possible confounding factor and included this variable in the multiple regression models. Yemen had the lowest GEM out of the 75 countries (0.128). Yemen had the highest fertility rate and the highest low birth rate. When GDP was not considered, GEM had a statistically significant association with all health indicator variables except for proportion of 1-year-olds immunized against measles (correlation coefficient 0.063, $p = 0.597$). After adjusting for GDP, GEM was significantly associated with low birth weight, fertility rate, infant mortality, and age ≤5 mortality; the strongest correlation was found to be between GEM and infant mortality ($R2 = 0.601$).The findings of this study suggest that the empowerment of women is associated with several key health indicators at a national level. Further research is necessary to determine the cause-effect relationship of these factors, confounding factors that may influence the relationship, and specific aspects of empowerment of women that effectively influence the health of the larger community.

Zambia

Community Health Workers in Zambia: Incentive Design and Management
Ashraf N & Kindred N. Harvard Business School NOM Unit; 2011: Case No. 910-030
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2006628

This paper explores how to best recruit and compensate individuals that are hired for a task with a pro-social component. Various incentive schemes and their potential effects on selection and motivation are examined. *(Unavailable for download through IDS).*

Protocol-driven primary care and community linkages to improve population health in rural Zambia: the Better Health Outcomes through Mentoring and Assessment (BHOMA) project
Stringer J, Chisembele-Taylor A & Chibwesha C. et al. BMC Health Services Research; 2013: 13 (Suppl 2)
http://www.biomedcentral.com/qc/1472-6963/13/S2/S7

Zambia's under-resourced public health system will not be able to deliver on its health-related Millennium Development Goals without a substantial acceleration in mortality reduction. Reducing mortality will depend not only upon increasing access to health care but also upon improving the quality of care that is delivered. The authors of this paper propose to improve the quality of clinical care and to improve utilization of that care, through a targeted quality improvement (QI) intervention delivered at the facility and community level. The patient-provider interaction is an important interface where the community and the health system meet. The project detailed in this paper aims to reduce population mortality by substantially improving this interaction. Success depends upon the ability of mentoring and continuous QI to improve clinical service delivery. It will also be critical that once the quality of services

improves, increasing proportions of the population will recognize their value and begin to utilize them.

5. Emerging lessons and recommendations for increasing self-reliance

A Neglected Resource: Transforming Healthcare Through Human Capital
Report of the Innovative Delivery Models Working Group 2012
Dr Victor J. Dzau with Natalie Grazin, Richard Bartlett, Dr Krishna Udayakumar, Thomas Kibasi, Dr Nicolaus Henke and Matthew Pettigrew
http://www.ipihd.org/ipihdghpf

Health systems are finding themselves under increasing pressure to improve the care they provide by extending access and raising quality, while maintaining financial sustainability. Health policy experts commonly refer to this as the “iron triangle” of cost, quality and access in healthcare. The International Partnership for Innovative Healthcare Delivery (IPIHD) has identified innovations that improve all three corners of the iron triangle but which challenge traditional healthcare delivery. This report explores innovation in human capital.

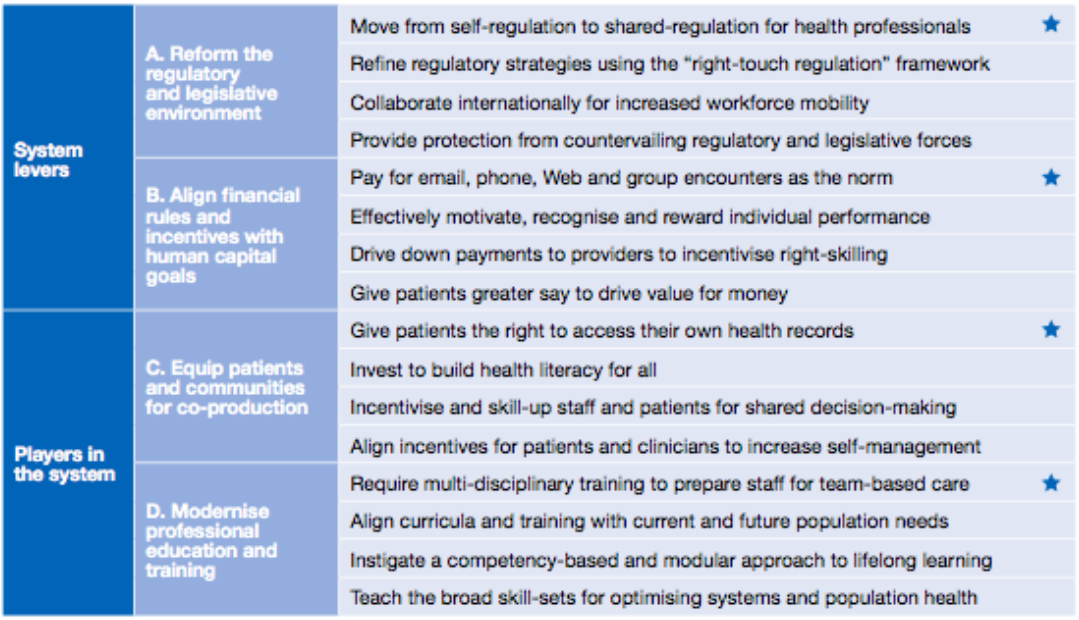
The workforce needed to match the burden of disease in LMIC does simply not exist. Copying models used in high-income countries of providing more and more highly trained healthcare workers is not feasible and does not necessarily result in better health services. Instead innovative utilization of human capital is required. People beyond the health workforce are a resource that can be used to promote and provide healthcare.

Research into and utilization of innovative use of human capital by healthcare providers has already begun. This report identifies five main principles of innovation to utilise human capital more efficiently and effectively:

- Reduce variation for a standardised operating model
- Right-skill the workforce
- Treat patients and communities as assets
- Optimise talent through technology
- Motivate everyone to play their part

Although implementation of all these principles isn’t required for a successful outcome, simultaneous use of some of these principles maximises the results they achieve.

Governments, policymakers and regulators can enable innovation. Four key enabling actions from a policy and/or regulatory perspective to facilitate innovation organized into two categories with four suggested goals for each enabler (star depicting the first goal) are proposed:



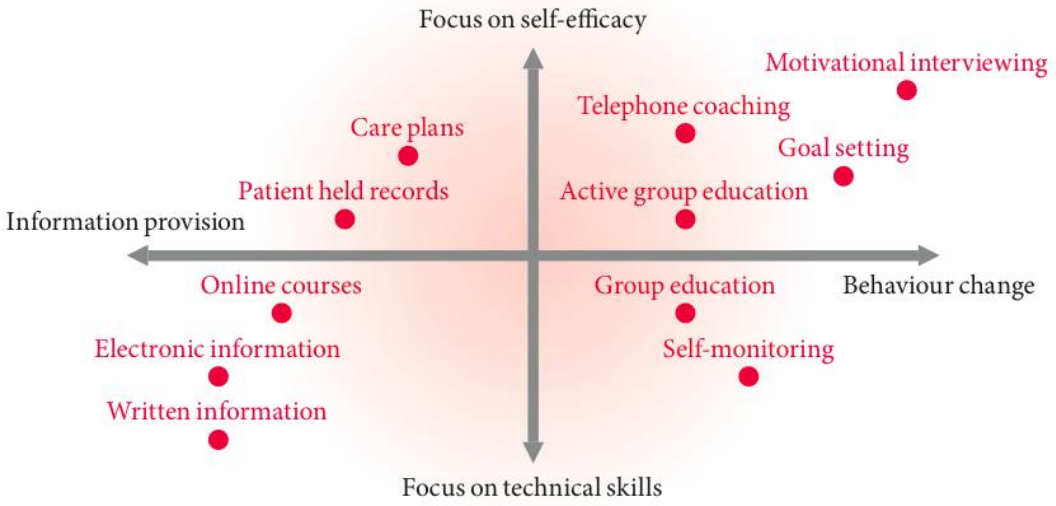
Source: Figure 7. A Neglected Resource: Transforming Healthcare Through Human Capital

Countries must demonstrate to the population that change is possible and the government is committed to change and that enabling innovative use of human capital is critical to provide a more effective and efficient health system.

Helping People Help Themselves
The Health Foundation, London 2011
http://www.health.org.uk/publications/evidence-helping-people-help-themselves/

Increasing numbers of people are living with chronic health conditions, which they manage most of the time by themselves and with their families. This includes eating well, exercising, taking medicines, keeping good morale, watching for changes, coping if symptoms worsen and knowing when to seek professional health. However, patients need support to be competent in all of these areas. This involves educating people about their condition and associated care and motivating them to better care for themselves to have a better quality of life and to feel more in control of their health. This review of more than 550 pieces of high quality research concludes that overall the evidence suggests that it is worthwhile to support self-management, especially focusing on behaviour change and supporting self-efficacy. Some studies suggest that evidence for self-management is moderate but this is because a wide range of interventions are described as 'self-management support' and some interventions may be more effective than others. However, it must be noted that self-management support alone cannot make a significant impact on the overall health of the population or on alleviating pressures on health services but it likely to work best when implemented within a series of wider initiatives to improve healthcare provision.

Healthcare providers can support self-management in a number of ways (figure). These initiatives can be categorized along a continuum from passive information provision about the health condition and technical skills through to initiatives that more actively seek to support behavior change and increase self-efficacy at the other end of the scale. Although different approaches may be required to support self-management of different clinical conditions, in all cases merely passively providing information is insufficient to motivate and sustain behavior change to improve clinical outcome.



Source: Figure 1. Continuum strategies to support self-management. Helping People Help themselves, 2011.

Although the following principles that support self-management have been identified, this report calls for more research and evaluation on how best to implement these principles and overcome associated barriers:

- involving people in decision making;
- emphasising problem solving;
- developing care plans as a partnership between service users and professionals;
- setting goals and following up on the extent to which these are achieved over time;
- promoting healthy lifestyles and educating people about their conditions and how to self-manage;
- motivating people to self-manage using targeted approaches and structured information and support;
- helping people to monitor their symptoms and know when to take appropriate action;
- helping people to manage the social, emotional and physical impacts of their conditions;
- proactive follow up;
- providing opportunities to share and learn from other service users.

Promoting self-management should not only focus on the patient. More research is required to understand the education and support necessary to optimize healthcare workers skills in supporting self-management and changing their attitudes, and behaviours towards self-management and the shift in care to a partnership approach.

Community Health Workers and other Front Line Health Workers: Moving from Fragmentation to Synergy to achieve Universal Health Coverage
Side session at the Third Global Forum on Human Resources for Health
http://www.who.int/workforcealliance/knowledge/resources/chw_outcomedocument/en/

Global Health Workforce Alliance commissioned the following 3 Working Papers to provide a platform for discussion on synergizing and harmonising support and identifying knowledge gaps in planning, developing and delivering on CHW programmes to achieve UHC.

Collectively, these papers informed the Third Global Forum on Human Resources for Health, Recife, Brazil side-session on “CHWs and other Front Line Health Workers (FLHW): Moving from Fragmentation to Synergy to Achieve Universal Health Coverage (UHC)".

The output from this side session was the development of a “CHW Framework for Partner Action” which recognised the following principles:

- CHWs and other FLHWs play a unique role and can be essential to accelerating MDGs and achieving UHC
- Programmes for strengthening CHWs and other FLHWs must be integrated within national health systems

A commitment was given from the partners, participants, initiatives and key stakeholders that approved the above principles to the following:

- They will work together to adapt, apply and implement the CHW Framework for Partner Action
- They will advocate, endorse and apply the principles and processes delineated in the CHW Framework for Partner Action
- They will jointly promote the culture of self and mutual monitoring and accountability (M&A) of commitments and plans
- They will reciprocally respond to knowledge gaps and promote a co-ordinated response to needs-based research on CHWs

Working Papers:

A framework for partners’ harmonized support
Sigrun Mogedal, Shona Wynd and Muhammad Mahmood Afzal
http://www.who.int/workforcealliance/knowledge/resources/frame_partner_support/en/

Monitoring and accountability platform - for national governments and global partners In developing, implementing, and managing CHW programs
Allison Annette Foster, Kate Tulenko, Edward Broughton
http://www.who.int/workforcealliance/knowledge/resources/monitoring_account_platform/en/

Knowledge gaps and a need based Global Research agenda by 2015
Diana Frymus, Maryse Kok, Korrie de Koning, and Estelle Quain
http://www.who.int/workforcealliance/knowledge/resources/knowledge_gaps/en/

2012 USAID Evidence Summit on CHW Performance
http://www.usaid.gov/what-we-do/global-health/chw-summit

Many countries are increasing their investments and implementing large-scale CHW programs to extend the reach of inadequate health systems to hard-to-reach and underserved populations, and to expand coverage of key interventions. However, more evidence is needed to understand how best to support CHWs to ensure scale up and sustained, optimal performance.

A year-long evidence review process led to a 2-day Evidence Summit of approximately 150 participants from LMIC governments and non-governmental organizations, the U.S. Government and non-governmental agencies, bilateral and multilateral agencies, and domestic and international academic institutions. The following recommendations for policy, practice and future research emerged:

- Develop a strategic research agenda that provides greater clarity on how to enhance CHW performance. The agenda should examine the combined inputs from both community and formal health systems.
- Consider innovative research designs and methodologies to answer complex

questions about performance, scale-up and increased capacity building to ensure research is driven by local investigators.

- Invest in research that examines the intended and unintended impact of scaling up CHW programs.
- Develop a robust logic model targeting country policymakers and donors that captures the summit's key learnings and best practices and lays out ways to improve CHW performance.
- Identify a more coordinated approach to sound stewardship of CHWs at the country and global levels.

Heterogeneity of Communities

All communities will have their own unique cultural, social, gendered, political, economic, legal and communication contexts. Each of these contexts will have an influence over community health worker service provision and community empowerment for greater health self-reliance. Some of the methods described in section 3 seek to better understand these contexts in order to identify actions to move forward in a more empowering way. For example stepping stones was originally designed in response to the vulnerability of women, men and young people in sexual behaviour decision making, through men's gendered patriarchal domination of women and older people's generally repressive attitudes to youth. In response stepping stones works simultaneously and separately with older men, younger men, older women and younger women in order to give space within peer groups to explore and analyse situations without threat of domination from others.

http://www.steppingstonesfeedback.org/index.php/About/How_does_it_work/gb

6. Additional and forthcoming resources and ongoing projects

REACHOUT
http://www.reachoutconsortium.org

REACHOUT is a five-year European Union funded international research consortium aiming to generate knowledge to strengthen the role of CHW and other close-to-community providers in promotional, preventive and curative primary health services in LMICs in rural and urban areas in Africa and Asia.

Health Systems Global Thematic Working Group on Community Health Workers
http://www.healthsystemsglobal.org/ThematicWorkingGroups/ApprovedThematicWorkingGroups.aspx

Supporting and Strengthening the Role of Community Health Workers in Health Systems is one of eight thematic working groups of Health Systems Global, which aims to bring together researchers, policy makers and practitioners addressing the issue of how to support the generation of evidence, the roll-out and functioning of CHW programmes and enabling learning across geographical and political contexts.

Third Global Symposium on Health Systems Research
http://hsr2014.healthsystemsresearch.org

The third Global Symposium on Health Systems Research will be held in Cape Town on 30 September to 3 October 2014.

Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster-randomised controlled trial
Prasanta Tripathy, Nirmala Nair, Sarah Barnett, Rajendra Mahapatra, Josephine Borghi, Shibanand Rath, Suchitra Rath, Rajkumar Gope, Dipnath Mahto, Rajesh Sinha, Rashmi Lakshminarayana, Vikram Patel, Christina Pagel, Audrey Prost, Anthony CostelloThe Lancet, Volume 375, Issue 9721, 3–9 April 2010, Pages 1182-1192
http://ac.els-cdn.com/S0140673609620420/1-s2.0-S0140673609620420-main.pdf?_tid=f75f6026-bfc8-11e3-a918-00000aab0f6c&acdnat=1397035741_3daadd0638b5a98c64a5b3448ac09a09

Effect of scaling up women's groups on birth outcomes in three rural districts in Bangladesh: a cluster-randomised controlled trial
Kishwar Azad, Sarah Barnett, Biplob Banerjee, Sanjit Shaha, Kasmin Khan, Arati Roselyn Rego, Shampa Barua, Dorothy Flatman, Christina Pagel, Audrey Prost, Matthew Ellis, Anthony Costello. The Lancet, Volume 375, Issue 9721, 3–9 April 2010, Pages 1193-1202
http://ac.els-cdn.com/S0140673610601420/1-s2.0-S0140673610601420-main.pdf?_tid=c80d125a-bfc8-11e3-b224-00000aab0f01&acdnat=1397035662_b74a2081310bd3dc3fac68a8f92e3502

Community Health Workers in Low-, Middle-, and High-Income Countries: An Overview of Their History, Recent Evolution, and Current Effectiveness.
Perry et al. Annual Review of Public Health. 2014.
http://www.annualreviews.org/doi/abs/10.1146/annurev-publhealth-032013-182354

Outcomes and costs of community health worker interventions: a systematic review
Viswanathan M, Kraschnewski JL, Nishikawa B, Morgan LC, Honeycutt AA, Thieda P, Lohr KN, Jonas DE. Med Care. 2010 Sep; 48(9):792-808.
http://www.ncbi.nlm.nih.gov/pubmed/20706166

Developing and Strengthening Community Health Worker Programs at Scale A Reference Guide for Program Managers and Policy Makers.
Maternal and Child Health Integrated Program (MCHIP). Dec 2013.
http://www.mchip.net/node/2140

SYNTHESIS PAPER
Developed out of the outcomes of four consultations on Community Health Workers and other Frontline Health Workers held in May/June 2012
http://www.who.int/workforcealliance/knowledge/resources/synthesis_paper/en/

Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems
Global Health Workforce Alliance, World Health Organization
http://www.who.int/workforcealliance/knowledge/resources/chwreport/en/

Community Health Workers - Key messages
Advocacy document
Global Health Workforce Alliance
http://www.who.int/workforcealliance/knowledge/resources/chwkeymessages/en/

Scaling-up the Community-Based Health Workforce for Emergencies
Joint Statement by the Global Health Workforce Alliance, WHO, IFRC, UNICEF, UNHCR
http://www.who.int/workforcealliance/knowledge/resources/chwstatement/en/

Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases.
Lewin S, et al. Cochrane Database of Systematic Reviews (currently being updated).

Which intervention design factors influence performance of Community Health Workers in low and middle income countries? A systematic review
Maryse C Kok et al. REACHOUT (to be published)

A systematic review of 140 quantitative and qualitative studies to identify intervention design related factors influencing performance of CHWs.

Close to community health providers post 2015: Realising their role in responsive health systems and addressing the social determinants of health
Liverpool School of Tropical Medicine, Centre for Applied Health Research and Delivery (CAHRD), Health systems work stream (discussion paper)

The challenges and opportunities of building pro-poor gender equitable health systems in fragile and conflict affected contexts: human resources for health
Liverpool School of Tropical Medicine, Centre for Applied Health Research and Delivery (CAHRD), Health systems work stream (discussion paper)

Community Health Worker Central
http://www.chwcentral.org

A web-based resource which promotes and engages CHWs by offering resources to improve CHW programmes and performance and provides a forum for discussion amongst CHWs, public health professionals and programme managers.

EQUINET
http://www.equinetafrica.org

A Southern Africa Regional network of professionals, civil society members, policy makers, state officials and others who build knowledge, shape effective strategies and strengthen their voice on health equity.

One million Community Health Workers Campaign
http://1millionhealthworkers.org

This campaign aims to train, equip and deploy one million CHWs in Africa; 1 for every 650 rural inhabitants.

7. Additional information

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