Women's and Children's Health Knowledge Hub



WORK PLAN 2012-13



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Introduction

Compass: Women's and Children's Health (WCH) Knowledge Hub aims to translate global health evidence into concrete action and measurable results for women and children in developing countries. Compass works closely with partners in Asia and the Pacific towards achieving Millennium Development Goals 1, 4 and 5, which aim to equitably improve the health of women and children. WCH Hub was established through the Australian Agency for International Development (AusAID) Knowledge Hubs for Health Initiative to contribute to the effectiveness of AusAID's investment towards improving the health of the world's poor. In 2012-13, Compass will complete the final program of work within the current framework of the AusAID "Strategic Partnerships for Health Knowledge Hub Initiative."

The final phase will consolidate previous work by focusing on targeted engagement and communicating work-to-date with key stakeholders and potential users of WCH Hub products, in particular with AusAID, partner governments, and research and development partners (listed in Key Partners).

This phase will also see increasing collaboration between Health Knowledge Hubs, including a coordinated approach to engagement with the Timor Leste and Papua New Guinea (PNG) Ministries of Health (MoHs), a mapping exercise of Hub activities by theme and country to better synthesise activities and increase the potential in-country impact of the initiative, and a coordinated dissemination tool – the electronic 'Health Hubs Flash'. A cross-Hub case study will also be commissioned.

During the next 18 months, Health Knowledge Hubs will revise the monitoring and evaluation framework and will ensure that results of dissemination, engagement and uptake are measured and described.

Our **key achievements** to date can be summarised as follows. They have been organised against the overarching Hub objectives, although there is often overlap between the objectives.

Analysis of key issues

- Helped the PNG Department of Health and the Lao PDR Ministry of Health introduce better oxygen systems into 30 hospitals. Now children who are very sick from pneumonia can receive life-saving oxygen therapy. This program has reduced death rates from pneumonia by up to 35% in PNG and an evaluation is ongoing in Laos.
- Improved health information in PNG so that we now know the causes of death among children in order to efficiently target resources to the places of greatest need. Before this initiative there was no accurate way of knowing the causes of child deaths. In 2011 we produced a report of the causes of over 10,000 admissions to 11 hospitals and over 600 deaths. This information is directly influencing policy and practice improvements.
- Tested better ways of detecting and treating tuberculosis (TB) within communities in Indonesia.
 Many cases of TB are spread in communities by people who do not know they are infected. By
 following up the relatives of TB cases, it is possible to find other cases and treat them before they
 become very ill or spread TB. A model program has introduced this in over 300 close contacts of
 adults with TB in Yogykarta province.
- Tested a way to follow-up low birth weight newborns in Fiji. Before this initiative there was no knowledge of the outcomes for high-risk newborns, but it was thought that a high proportion died after hospital discharge. Now we will know what the outcomes are for these babies and what basic services are needed to improve their lives. This program has followed up over 200 high-risk newborns to test the effectiveness of a simple follow-up model.
- Analysed DHS and MICS reports for nine countries in Asia and the Pacific and identified that
 information reported for adolescents is limited by the omission of important cohorts, omission of
 important sexual and reproductive health indicators, and failure to report disaggregated data.
- Demonstrated that adolescent childbearing is common in East Asia and the Pacific and occurs in the context of low contraceptive prevalence, high unmet need and poorer access to family planning information and services than adults - highlighting that adolescents require additional targeted SRH policies and interventions.
- Identified effective approaches to improve adolescents' access to sexual and reproductive health information and services, including identifying strategies to scale-up the provision of information and the features of youth-friendly health services in Vanuatu.
- In collaboration with the Human Resources for Health Knowledge Hub, identified the systems requirements to support human resources for maternal, newborn and reproductive health working at the community level and documented current practice and policy in ten countries in Asia and the Pacific.
- Combined global evidence on community-based maternal and child health care with a detailed review of current practice in PNG, working with World Vision and the NDOH to revitalise this level of care.
- Consolidated research on measurement of maternal health outcomes, taking this beyond the current focus on mortality to explore how to improve quality of care in small island states in the Pacific.

- Identified policy and practice barriers to achieving greater involvement of expectant fathers in maternal and child health.
- The "Melbourne Statement" developed as a result of a birth-dose consultation last December, is
 mentioned in the WHO Weekly Epidemiological Review of 6th May, which contains an update of
 hepatitis B control across the region. The review highlights Laos and PNG as two high priorities for
 special attention for hepatitis control, including the fact that high proportions of home births restrict
 access to birth dose vaccine.
- Compass collaboration on AusAIDs Health Thematic Strategy document.

Engagement

- Improved the care for sick children at more than 30 district hospitals throughout Laos, PNG, Solomon Islands and other Pacific countries through training programs and implementing evidence-based standards and quality improvement, including the distribution of more than 3000 copies of the WHO *Pocket Book of Hospital Care for Children*.
- Helped design and implement the Child Health Policy and Plan in PNG, which is part of the overall National Health Plan for this decade.
- Contributed to the development of the Melbourne International Adolescent Health Group.
- After hearing about the Vanuatu ASRH study the World Bank contacted Compass with a proposal
 to conduct a similar study in the Solomon Islands. Following our recommendations, the World Bank
 has decided not to go ahead with the ASRH study in Solomon Islands.
- Supported efforts to improve birth-dose vaccination against hepatitis B, emphasising the potential integration with other life-saving perinatal care, providing input to a global WHO program of work.
- Developed and pre-tested two versions of a guide to developing evidence-based nutrition programs for women and children (Nutrition critical appraisal tool) with nutrition experts and stakeholders from Australia, Asia and the Pacific. Modified the framework based on pre-testing feedback.
- Joined a global systematic review on task-shifting for maternal and child health care, contributing research on the use of innovative injection technology by trained lay health workers.
- Convened and contributed to new networks and forums for reproductive health, including family planning, such as the Maternal Health Reference Group, the Sexual and Reproductive Health Network and the AusAID Family Planning Roundtable.
- Invited member of the reference group for the formation of the Pacific Sexual & Reproductive Health Research Centre, Fiji.

Dissemination

- Raised awareness of significance of maternal mental health in low-income settings through publication of a systematic review in the WHO Bulletin.
- Reaching emergency obstetric care: overcoming the 'second delay' was referenced several times in a technical report from the Initiative for Maternal Mortality Programme Assessment, University of Aberdeen.
- WHO has committed to publish Essential Competencies in Adolescent Health for Health Workers Working at Primary Care Level in 2012.
- Trevor Duke was invited to the main session of the PSHON meeting to discuss challenges to Child Survival in the Pacific. November 2011.
- Dr Andrew Steer CICH co-presented with Dr Joseph Kado MOH Fiji, on 'Improving hospital care for sick children in Fiji and the Pacific' at the Pacifika Medical Association Conference.
- Zulfi Bhutta Seminar, "Issues and challenges in Maternal and Child Health and Nutrition: a global perspective". Compass presented on "The challenge of community care for maternal and newborn health, PNG and elsewhere" and on "Current challenges in women's and children's nutrition" with good attendance of around 70 from NGOs, academic institutions and AusAID.
- WHO Honiara office disseminated Hub Policy Briefs at the Pacific Health Ministers Conference, 28 June 2011, Honiara.
- Compass representation at a Parliamentarian's' Breakfast around the launch of the Family and Community Care paper.
- "Universities-ACFID Linkages meeting: Exploring models for research partnerships" on 24 February, disseminated 30 CDs with Hub outputs.
- Family Planning Pacific Forum, Sydney, 15-16 November, presentation on Hub's adolescent SRH and also some of the family planning work in Vanuatu and Solomon Islands.
- Dissmination of Hub outputs at the ARHA Roundtable on Gender Based Violence.

Capacity Building

- Helped train over 20 paediatricians in Laos, who are now leading child health in rural provinces and districts, and leading the push for improved quality of care.
- Worked with countries in the Pacific to design a course for nurses to be skilled in child health, to

- address the high rates of newborn and child deaths and illness.
- Improved the supply of essential medicines in the Solomon Islands through training of pharmacists and improving systems of drug procurement and distribution.
- Participatory, practical and interactive courses in the use of the WHO Pocket Book of Hospital Care for Children have successfully been completed in Solomon Islands, Lao, Fiji and now specifically adapted to PNG. A training course was held in 2011 in West New Britain, involving 17 nurses, 2 community health workers and 3 doctors. During 2012-2013 ten provincial hospitals will receive training in improving the quality of hospital care. By 2013 all hospitals in PNG would have received this training.
- Developed adolescent health competencies for primary level health workers and identified the tools and resources required to support the introduction of these into health worker training curricula.
- In collaboration with Marie Stopes International Timor-Leste, developed a *Youth Friendly Sexual* and Reproductive Health Counselling Manual that has been presented to the Ministry of Health and trained 39 counsellors in two districts.
- Strengthened the capacity of local organisations in Vanuatu to conduct their own research and program evaluation by training local research officers and peer educators in research methods and data analysis and ensuring their active participation in a large qualitative study.
- Developed and successfully piloted the core module of the Nutrition and Food Security –
 Approaches to improving the health of women and children short course with five nutritionists from
 Timor Leste and seven health and nutrition workers from remote Indigenous communities in the
 Northern Territory.
- Developed and successfully piloted the *Nutrition for infants and young children* module of the *Nutrition and food security: Approaches to improving the health of women and children* short course with five nutritionists from Timor Leste and six health and nutrition workers from remote Indigenous communities in the Northern Territory.

These achievements are framed within four key themes, through which Compass maintains an emphasis on equitable access to and use of women's and children's health services, improving the quality of care for women, their partners and children, and providing support to scale up effective interventions to improve health outcomes.

Theme 1: Improving child survival and quality of care in the Pacific and Asia

Theme 2: Scaling-up approaches to achieve universal access to reproductive health

Theme 3: Dissemination and uptake of solutions for maternal and newborn health and survival

Theme 4: Nutrition critical appraisal tool and associated resources to support governments to prioritise and manage the scaling-up of effective nutrition interventions to address undernutrition

Background

The Knowledge Hubs for Health initiative aims to build knowledge, evidence and expertise and inform health policy dialogue relevant to Asia and the Pacific. In 2008, AusAID established four Knowledge Hubs for Health, each addressing different dimensions of the health system: Health Policy and Finance; Health Information Systems; Human Resources for Health; and Women's and Children's Health (WCH). Compass is a partnership between the Menzies School of Health Research; the Centre for International Health, Burnet Institute; and the Centre for International Child Health, the University of Melbourne.

The Knowledge Hubs for Health overarching aim is to contribute to the quality and effectiveness of Australia's engagement in the health sector in Asia and the Pacific though expanded expertise and an expanded knowledge base that is of practical value and used by stakeholders in development. The guiding objectives for the initiative are:

- To increase the critical, conceptual and strategic analysis of key health issues relevant to the Asia Pacific region that can be used to inform policy thinking and practical application at the national, regional and international levels.
- 2. To expand convening powers and engagement between Knowledge Hubs, Australian institutions and Asia Pacific national, regional, and international researchers, development partners and educational institutes.
- 3. To effectively disseminate relevant and useful knowledge resources which aim to influence policy thinking and practical application at national, regional and international level.
- 4. To expand the capacity of Australian institutions and professionals and through them to Asia Pacific institutions and professionals to participate effectively in evidence informed decision making.

Strategic Direction

Consistent with previous work plans, in 2012-13 the overall aim of Compass is to improve the effectiveness of aid for WCH, with an emphasis on contributing to equitable progress towards:

MDG 1-Eradicate extreme poverty and hunger

MDG 4-Reduce child mortality

MDG 5a-Improve maternal health and MDG 5b-Universal access to reproductive health

This is in line with one of the key development objectives outlined in the Australian Government response to the Independent Review of Aid Effectiveness: "Saving the lives of poor women and children through greater access to quality maternal and child health services (for example, skilled birth attendants and midwives), and supporting large scale disease prevention, vaccination and treatment."

Compass: Women's and Children's Health Knowledge Hub aims to translate global health evidence into concrete action and measurable results for women and children in developing countries. Compass will continue to work within identified priority areas for making gains in WCH: the introduction and scaling up of known effective interventions; achieving equity in intervention coverage; and the integration of services with a continuum of care (Annex 2: Strategic Framework).

Our vision is to establish Compass as a central knowledge point for WCH stakeholders in the region, advocating for greater investment, facilitating partnerships, influencing policy and practice, and responding to changing contexts.

The 2012-13 strategic direction includes a focus on dissemination of relevant and useful findings and recommendations developed through work to date. Compass will seek to ensure that the findings are translated and embedded into policy and practice beyond 2012-13 by sharing the knowledge gained with AusAID, the scientific community, in-country stakeholders, and other development partners.

Maintaining a focus on capacity building, Compass will continue to strengthen national, regional and global partnerships by convening knowledge sharing forums (such as conference presentations, round table discussions, and multi-stakeholder dialogue), expanding and consolidating current Compass networks.

Priorities in this work plan are informed by consultations with regional, national, provincial, and district level health officials, and international experts and partners. Choices have been influenced by the potential of solutions to make a difference; issues that have been neglected; emerging evidence, and our own strengths and capacity.

¹ "An Effective Aid Program for Australia: Making a real difference – Delivering real results" Government response to the Independent Review of Aid Effectiveness, Commonwealth of Australia, 2011, p.25.

Compass has identified the four themes as critical areas requiring a stronger evidence base to improve policy and practice. In many countries the MDG targets will not be reached by 2015 and there is a need for intellectual leadership in women and children's health in the Asia Pacific in the post-MDG period. Compass is committed to translating the knowledge, research and evidence gained during the Hub initiative to contribute to future research, policy, and practice agendas.

Aims and Key Themes

In 2011, Compass focused on compiling the evidence to improve child survival; maternal, newborn and reproductive health; and nutrition. The 2009, 2010 and 2011 programs of work have been valuable in: defining the achievements and limitations of current global and regional programs working towards MDGs 4 and 5; clarifying the priorities for WCH in Asia and the Pacific; and identifying knowledge gaps and opportunities for the application of evidence informed interventions in the region. Building on this foundation, work in 2012-13 will focus on translating the evidence assembled into relevant, tailored, practical resources in order to assist government and stakeholders in the region to scale up effective interventions and strengthen service delivery to improve the quality of care for women and children. In 2012-13, the themes are:

Theme 1: Improving child survival and quality of care in the Pacific and Asia

There is much scope for improving the quality of care for seriously ill children in developing countries throughout our region. In recent years we have demonstrated that simple, practical interventions can have a substantial impact on health outcomes. In 2012-13 these will include: evidence-based guidelines and implementation strategies for the care of sick children in Lao PDR, PNG, Solomon Islands, and other Pacific countries; integrating and simplifying systems for health facility reporting; oxygen therapy for reducing child, newborn and maternal deaths; community-based screening of TB; community case management of pneumonia; supporting child health nurses in the Pacific; and documenting the necessary knowledge to optimise survival of high-risk neonates.

Theme 2: Scaling-up approaches to achieve universal access to reproductive health Compass' work has highlighted that the equitable achievement of MDG 5b, 'ensuring universal access to reproductive health', largely depends on countries' ability to scale-up access to reproductive health information and services at the community and primary care level. Reducing the unmet need for reproductive health, particularly family planning, is a cost-effective approach to improve maternal and newborn health and has significant benefits in terms of women's empowerment, poverty reduction and prevention of HIV.^{2,3,4} In 2012/2013, Compass will continue to contribute to efforts to achieve equitable progress towards MDG 5b by building on, and facilitating uptake of, work to increase investment in family planning and to improve adolescents' access to quality health information and services.

Theme 3: Dissemination and uptake of solutions for maternal and newborn health and survival

These streams of work address the challenges of improving maternal and newborn health and survival, especially in settings where homebirths are common and mortality rates are high. In such settings, Compass supports the essential role of improved health facilities, but also seeks evidence for additional community-based initiatives that could provide immediate life-saving care, while the necessary health system strengthening is underway. This is also linked to other Compass work on improving referral and other steps to overcome the 'second delay'.

Theme 4: Nutrition critical appraisal tool and associated resources to support governments to prioritise and manage the scaling-up of effective nutrition interventions to address undernutrition

Undernutrition is the underlying cause of 3.5 million child deaths and 11% of the total global burden of disease. While the causes of this condition are mostly predictable and preventable, countries with a high burden of undernutrition often lack the knowledge, capacity and resources to deliver effective nutrition interventions. Compass is developing a series of resources including the 'Nutrition critical appraisal tool' (NCAT), a simple, evidence-based tool to enable nutrition stakeholders to appraise, plan and implement effective nutrition interventions using evidence based comprehensive approaches, and a 4-module short course entitled: 'Nutrition and Food Security: Approaches to improving the health of women and children'.

² Smith R, Ashford A, Gribble J, Clifton D. *Family Planning Saves Lives 4th edition*. 2009; Washington DC: Population Reference Bureau.

³ Stover J, Ross J. How contraceptive use affects maternal mortality. 2008; Washington DC: USAID.

⁴ Health Policy Initiative: Task Order 1. Family Planning and the MDGs: Saving lives, saving resources. 2009; Washington DC: USAID

Key Partners

Multilateral organisations and development agencies

UNFPA

AusAID

WHO HQ

UNICEF

Australian Youth Ambassadors for Development

FAO

Regional organisations

WHO (WPRO & SEARO)

EAPRO (UNICEF regional office)

SPC - Statistics and Demography Programme

East and Southeast Asia and Oceania Region, IPPF

National health agencies, organisations & NGO's

PNG Medical Association

PNG National Department of Health

Paediatric and nursing associations

Wan Smolbag Theatre, Vanuatu

Family Planning International

Oxfam, Vanuatu

Reproductive Health Coordinator, Vanuatu Ministry of Health

Reproductive Health Coordinator, Solomon Islands Ministry of Health

Papua New Guinea Obstetrics and Gynaecology Society

Susu Mamas NGO, PNG

Lao Women's Union

Aboriginal Medical Services Alliance Northern Territory

QLD Health

NT Department of Health and Families

International NGO's & Associations

Oxfam Australia

World Vision Australia

Save the Children

International Health Services, Albion Street Centre

REACH Ending Child Hunger and Undernutrition Partnership

Australian Red Cross

Family Planning International

The Fred Hollows Foundation

Universities, research institutions and knowledge platforms

Norwegian Knowledge Centre for the Health Sciences

London School of Hygiene and Tropical Medicine

PNG Institute of Medical Research

University of PNG

Wellcome Trust funded researchers studying maternal sepsis in Africa, Nepal and Vietnam

Centre for Women's Health, Gender and Society, University of Melbourne

International Forum for Rural Transport and Development

IMMPACT, Aberdeen University

Engenderhealth

Mahidol University, Bangkok, Thailand

Jean Hailes Research Unit, Monash University

Research and Training Centre for Community Development in Hanoi, Vietnam

South Asian Infant Feeding Research Network/ University of Sydney

Batchelor Institute of Indigenous Tertiary Education

Centre for Population Health, Burnet Institute

University of Technology, Sydney

Focus for 2012 - Knowledge Dissemination

There is now much literature on understanding how knowledge is translated and diffused.⁵ Of key importance in the dissemination process is the articulation of the purpose of knowledge, which in turn influences dissemination pathways and the target audience. Compass will focus on dissemination in order to achieve sustainable outcomes for knowledge translation, through targeted engagement and communication strategies with key partners to ensure maximum uptake by policy makers. Products will be disseminated using multiple strategies and modes depending on the target audience. To assist this process, Compass has appointed a dedicated Communications Officer to support dissemination of information, engagement with targeted audiences, encourage interaction, and monitor outcomes.

As the momentum builds towards the deadline for the MDGs in 2015, there are many opportunities for effective dissemination, and increased interest in evidence-based reviews, syntheses and policy recommendations. Compass work will be underpinned by principles identified in the Getting Research into Policy and Practice (GRIPP) Initiative⁶ and by the Population Reference Bureau.⁷ In 2012 we have planned a seminar 'Coming to GRIPP' to stimulate discussion, drawing on relevant literature about efficient and effective strategies for dissemination, engagement and uptake. The following modalities will be used to disseminate findings: publications in peer reviewed journals; policy briefs; case studies outlining key findings and recommendations for programming and resource allocation; conferences, workshops and training courses; and policy dialogue. Media releases and other media products will also be used as a dissemination tool for a wider Australian audience, where appropriate. The Compass website will be reviewed to enhance the effectiveness of this communication and advocacy tool.

However, simply disseminating information is insufficient: relevance and credibility is needed to influence policy and practice. Compass intends to ensure the sustainability of findings by integrating the knowledge gained within AusAID, in-country stakeholders and other development agencies. To achieve this, Compass will disseminate knowledge via existing systems: key stakeholder intranet and external websites; AusAID's lunchtime seminar series, regular Hub briefings, round table discussions, and engaging at AusAID regional meetings. Compass will continue to work with AusAID by providing relevant technical reviews to the Health Resourcing Facility, and by contributing to AusAID's new health policy and research agenda in women and children's health. In country, Compass will ensure relevant AusAID staff are aware of current activities through the 'Health Hubs Flash'.

Close collaborations (with WHO and other UN agencies, Australian institutions, researchers from Asia and the Pacific, development partners and educational institutions, and members of the Maternal Technical Advisory Group) developed through the lifetime of the Hub Initiative, will be a platform for dissemination of knowledge resources. Compass will also use the Universities-ACFID Linkage network, co-chaired by Latrobe University that aims to widen debate on international development and to facilitate sharing of information on development related research, to reach a broader range of academics. We will also partner with other health and development agencies active in advocacy and development education in Australia and the region. In 2010, Compass participated successfully in the Women Deliver Conference in Washington and it is envisaged that we will disseminate final research outputs at the May 2013 Conference in Malaysia.

The last three years has allowed the Hubs to build valuable networks and partnerships in the Asia Pacific region. Compass will maximise the use of existing networks for dissemination, including: Compass' membership of the Child Health and Nutrition Knowledge Network of the Child Health and Nutrition Network Research Initiative, the annual Pacific Senior Health Officials Network (PSHON) meetings, the Asia Pacific Alliance for Sexual and Reproductive Health and Rights, the Partnership for Maternal, Newborn and Child Health, Population and Health Infoshare and the global research initiative for the evaluation of safe motherhood intervention strategies (IMMPACT). Compass will also seek to extend its networks through the broader dissemination of the Investment Cases, linking urban poor findings with stakeholders working on social determinants and equity issues.

While much of our work has had regional relevance, Compass is mindful of the need for context-specific policy and program advice to individual countries. We have engaged in policy dialogue with in-country government partners, for example, in Vanuatu in relation to adolescent sexual and reproductive health, in Papua New Guinea (PNG) in relation to the community level delivery of maternal, newborn and child health services, and in the Philippines in relation to access to MCH services for the urban poor. We will build on this work and in particular, will bring together the policy implications of various streams of work aimed to improve maternal and newborn health care in PNG, through our strong connections with the National Department of Health, other relevant government officials, clinical specialists and academics. This will include our findings on community level delivery of antenatal and post-partum care, overcoming

⁵ "Spreading the Word: Disseminating Research Findings" n.d. The Water, Engineering and Development Centre, Synthesis Note. Available at: http://www.impactalliance.org/ev_en.php?ID=37431_201&ID2=DO_TOPIC

⁶ http://www.globalhealth.org/view_top.php3?id=186

Population Reference Bureau. Information Dissemination: Using the Internet as a Tool to Disseminate Information. www.prb.org/presentations/Information.ppt

the second delay in reaching emergency obstetric care, greater involvement of expectant fathers in maternal and newborn health, and improving the attitudes and communication and counselling skills of maternal health care workers. Compass will also work with the University of Technology, Sydney, and WHO PNG to ensure that their two-year program to improve midwifery education in PNG is informed by our findings. We will also investigate collaboration with other Hubs in relation to their work relevant to PNG.

Compass will build on lessons learned during from work so far to influence policy and practice through engagement with key stakeholders and communication through established channels to ensure sustainable outcomes beyond 2013.

Cross-Hub activities

In 2012-13, Compass will collaborate with the other Hubs in a number of activities. These include a more coordinated approach to thematic areas and dissemination. Specifically:

- Compass will work with the other Hubs to coordinate women and children's health activities to ensure a complementary approach to in-country dissemination.
- A coordination mechanism for cross-Hub work to support the MoH in Timor Leste has already been established. Coordinated by UNSW, this mechanism will ensure that Hub communication is streamlined and that relevant information will reach targeted stakeholders.
- The 'Health Hubs Flash' is a dissemination tool administered by a working group comprising each Hub's communications officers. Styled along the lines of other e-health newsletters (eg. Eldis), the Health Hubs Flash will be a snapshot of quarterly activities, with links to further information. It will be distributed to recipients on individual Hubs' lists, as well as to AusAID country posts.
- With the support of AusAID and other Hubs, Compass will offer a multi-disciplinary workshop on 'strategies for improving women and children's health', with the key audience being AusAID stakeholders in the region.
- Compass will contribute to proposed cross hub case studies on collective lessons learnt and analysis of the impact of the hub initiative at the policy/practice level, in discussion with AusAID, the other hubs and aligned to the Cross Hub M&E Framework (revised December 2011).

Capacity Building

Each of the Compass products includes capacity building, education and information sharing with partners, enabling Compass to ensure sustainability beyond 2012-13. Through continued and enhanced engagement with Australian institutions, regional researchers, development partners and educational institutions, Compass will continue to support the development of capacity in women's and children's health among health professionals and researchers in Australia and Asia and the Pacific in the following ways:

- Providing fellowships and in-country PhD or Masters-level research in international women's and children's health, as well as opportunities for early career professionals to contribute to Compass activities, gain peer review and build capacity.
- Supporting research on access to essential medicines, and cross-Hub facilitation of PhD and Masters' students from the region to broaden the academic scope of this work, consequently increasing its impact.
- Incorporating knowledge generated into undergraduate and postgraduate teaching, including
 the international health stream of the Master of Public Health program at Monash University and
 the University of Melbourne. Findings will be incorporated into courses for external stakeholders,
 such as the Adolescent Health and Wellbeing courses for UNICEF/UNFPA.
- In partnership with the Fred Hollows Foundation and regional nutrition stakeholders, offer the final two modules of the 4 module, flexible delivery short course entitled 'Nutrition and Food Security-Approaches to improving the health of women and children'.
- The Australian Leaderships Awards Fellowships (ALAF) will continue to support professional
 development activities in Australia for six nutritionists from Timor Leste, including practical inservice training in hospitals in the Northern Territory and participation in piloting of 4 modules of
 the nutrition and food security short course.

Compass will also work closely with AusAID in the coming year to strengthen staff knowledge of women and children's health issues, both at AusAID post and at the strategic level. In particular, on request from AusAID, Compass will explore options to deliver a WCH training package to AusAID staff in 2012.

Theme 1: Improving child survival and quality of care in the Pacific and Asia Background

"Hospitals and health systems are not just mechanical structures to deliver technical interventions the way the post-office delivers a letter. Hospitals and health systems are core social institutions; the way people are treated has the potential to worsen, or to mitigate, the effect of poverty and social disadvantage on health and development."

Lynn Freedman, 2005

There is much scope for improving the quality of care for seriously ill children in developing countries throughout our region. In recent years we have demonstrated that simple, practical interventions can have a substantial impact on health outcomes. These include standardised guidelines, training and support for remote health staff, improving oxygen supplies, and standardised reporting of health facility activity and outcomes. We have demonstrated that these interventions can all be done at very low cost. Improving quality of care in district and provincial hospitals has an effect on care-seeking by communities and families, and as the above quote suggests, can help achieve some of the loftier Goals of the Millennium Declaration, as well as being crucial to achieving sustainable reductions in child deaths.

Our 2012-13 activities build on our previous work. They are detailed below, in alignment with our overarching Hub objectives:

Analysis of key issues

Evidence-based guidelines for the care of sick children: effective implementation strategies in challenging environments of Lao PDR, PNG, Solomon Islands and other Pacific countries

• In 2012-13 we will pursue this further, with analysis of the effectiveness of these interventions at a province and district level in PNG and Lao PDR. In those countries there are emerging programs for training, standards and quality improvement in hospitals, including the implementation of the Pocket Book of Hospital Care for Children.

Integrating and simplifying systems for health facility reporting

• We have developed a tool for recording and standardising hospital outcome data, which has been introduced into PNG's National Health Information System. This has helped to guide other interventions that will result in improved service quality. It is clear that there are well and poor performing hospitals. The reasons for high mortality relate greatly to human resources, lack of support and training, work ethic issues, low morale, and system dynamics. This information is providing the Child Health Advisory Committee,(the statutory committee of the National Department of Health), with evidence on which to build policy and improve equity of child health outcomes. In 2012 we will assist the National Department of Health in linking this routine hospital outcome data with Syndromic Disease Surveillance data. This tool would be of great value to other countries in the region and we will employ strategies that to ensure it is available and taken up by countries who seek to trial it.

Optimising quality of survival in high-risk neonates: knowledge needed for follow up and early intervention in the Pacific

Declines in neonatal mortality in Fiji have slowed. We are undertaking a situational analysis in Fiji of the health outcomes and long-term needs of newborns who survive serious illness (including newborns with low birth weight, birth asphyxia and infections). This will inform ongoing efforts to improve quality of newborn care, continue mortality reductions and, improve quality of care beyond survival by developing systems of follow-up care for these children. This project involves the Fiji Clinical Services Network, the peak body within the MoH for consideration of child health service issues.

Improving lung health in Asia and the Pacific

• The majority of the high burden TB countries are in the Asia and Pacific regions. However, data provided by national TB programs in many countries in the region consistently show that child TB represents an unexpectedly small proportion (usually less than 2%) of the total TB caseload. This is unexpected because transmission of TB is common in these communities and young children (<5 years) are known to be particularly vulnerable to TB disease if infected. Epidemiological studies from elsewhere would suggest that child TB should represent 10-20% of the total caseload in these communities. It is therefore likely that TB in children is grossly under-recognised and under-treated. Over the last few years we have provided collaborative support to national TB programs in the</p>

- region, including Bangladesh, Cambodia, PNG, Indonesia, Philippines and Vietnam. We have developed training tools for the diagnosis of child TB and a desk-guide for child TB management for health workers at the district level. This will inform health policy, leading to greater case finding for TB and appropriate models for the region based on the best available evidence.
- While the 2010 Cambodia DHS shows marked improvements in child survival since 2000, the most deprived areas, such as Ratanak Kiri still have child mortality rates close to 100/1000 live births. The only existing study of the causes of child mortality in Cambodia (S. Jack, unpublished) indicates that over 50% of child deaths are due to pneumonia. Community based case management (CBCM) of pneumonia has been piloted in two settings in Cambodia in recent years. WHO undertook to perform a detailed analysis of community case management of pneumonia to make a case to the government to support community case management. However, this was not completed due to staffing issues. We will build the case at country level for the acceptance of community case management of pneumonia in selected areas.

Engagement

This work involves engagement across countries in the region, learning from each other. It involves key institutions in the focus countries, including the ministries of health, national paediatric associations, educational institutions (such as University of Papua New Guinea, the University of Health Sciences, Lao PDR), national TB programs in Indonesia, Bangladesh and Cambodia, WHO offices nationally and regionally, AusAID.

Improving lung health in Asia and the Pacific

- Following the Hub's recent work on urban poverty, we will also pursue opportunities to expand our
 engagement and work with the TB program in the Philippines through partnership with a city
 government in a high-TB burden region that is exploring innovative approaches to addressing
 poverty in TB control. The experiences of this city can provide valuable lessons for implementation
 of other urban TB control programs, and indeed other disease control programs that require
 ongoing patient contact and management, as is needed for many non-communicable diseases.
- We have shown that sustainable oxygen therapy is transformational in rural and provincial hospitals. It enables effective treatment of pneumonia, serious newborn infections and other common causes of childhood death. We have shown that this is best implemented via a systems approach, taking into consideration engineering, training, and management needs and integrating oxygen systems with interventions to improve quality of care, as outlined above, to achieve optimal impact. The evaluation of innovative oxygen systems in PNG and Lao PDR has enabled these MoH to consider how to effectively and affordably provide much needed basic technology in remote environments. These are complex lessons that are applicable to other interventions also.

Dissemination

 Careful evaluation of strategies for improving the quality of care for children in Lao PDR, for example, is providing the Lao MoH, and other partners (WHO, JICA, Lao Luxembourg, AusAID) with data that enables investment in strategies that are effective in the Lao context. We will describe the key steps involved in improving hospital care, and disseminate this information widely, with web-site tools, presentations at meetings, targeted briefing documents.

Capacity Building

- In terms of Australian institutional development, the WCH Hub has built capacity in numerous young researchers to engage in this work. These include 2 Australian PhD students, working in Lao PDR and Fiji, and many other health professionals and development specialists engaged in this work. We support a Fellow in International Child Health who gains a detailed understanding and skills in several areas of work, and uses this as a platform for a longer-term contribution to global health.
- In the Asia-Pacific region this work in child heath is supporting two PhD students in Indonesia, one
 in Bangladesh, one Diploma of Public Health student in PNG, and a Master of Epidemiology
 student from Solomon Islands.

Child Health Nurses in the Solomon Islands and Fiji

• The Ministries of Health (MoH) of Fiji and The Solomon Islands see increasing the number of child health nurses as a high policy priority in child health. Currently only PNG trains child health nurses. There are 12 such nurses working in the Solomon Islands, all trained in PNG, and working in provinces or other positions of high responsibility; running children's services, supervising public health and MCH services. Courses in these two countries would provide strong and cost effective bases for child health services, as it is unlikely that trained paediatric doctors will be available or likely to work in provincial locations in the short to medium-term. Appropriate post-graduate child health nursing curricula will be developed with working groups from both countries.

Theme 2: Scaling-up approaches to achieve universal access to reproductive health Background

Universal access to reproductive health (MDG 5b), particularly family planning, is a cost-effective approach to improve maternal and newborn health and has significant benefits for women's empowerment and poverty reduction. 8,9,10 The activities under this theme make the case for increasing investment in family planning in the Pacific through the analysis of country specific projections in Vanuatu and Solomon Islands and by strengthening the evidence base for effective health promotion strategies to increase adolescents' knowledge, attitudes and access to family planning information and services.

Achieving universal access to reproductive health will require a substantial increase in investment from both governments and donors in reproductive health information and services at the community and primary care level. To build a case for increased investment, Compass and Family Planning International (FPI) have commenced a cost-benefit analysis to examine the costs and health, economic and social benefits of different family planning usage scenarios using country-specific data from Vanuatu and the Solomon Islands.

Reproductive health information and services need to reach adolescents if universal access to reproductive health is to be realised. Adolescents suffer a disproportionate burden of sexual and reproductive ill-health: two-thirds of all sexually transmitted infections and more than 40% of new HIV infections occur in young people aged 15-24.¹¹ Adolescent girls aged 15-19 account for 11% of all deliveries but almost a quarter of the ill-health related to pregnancy and childbirth, with maternal conditions the leading cause of death in this age group.^{12,13} Unsafe sex and lack of contraception are among the leading risk factors for poor health for young people aged 10-24.14 Compass' work to date has highlighted that adolescents have unique reproductive health information and service delivery needs, face particular barriers to accessing information and services and require additional targeted responses. To address these challenges, Compass' activities in 2009-2011 identified effective approaches to improve adolescents' access to sexual and reproductive health, including strategies to scale-up the provision of information and services in the Pacific.

Activity 1: Increasing investment in family planning in the Pacific

Work to date

Compass' work and engagement in 2009 and 2010 highlighted that improving access to family planning is essential to achieving MDG 5b in the Pacific; however, available data reveal continuing low contraceptive prevalence and high unmet need for family planning in this region, particularly among adolescents. 16 Increasing equitable access to family planning will require a significant increase in expenditure by both Pacific Island governments and donors.

To address this issue, Compass, in partnership with Family Planning International (FPI), commenced a cost-benefit analysis of increasing investment in family planning in the Pacific in 2011. This activity uses country-specific data from Vanuatu and the Solomon Islands to examine the costs and health, economic, and social benefits of different family planning usage scenarios. Work in 2011 has included:

- Formation of a reference group comprising key regional stakeholders;
- Finalisation of data analysis methods and underlying assumptions;

⁸ Smith R, Ashford A, Gribble J, Clifton D. Family Planning Saves Lives 4th edition. 2009; Washington DC: Population Reference

⁹ Stover J. Ross J. *How contraceptive use affects maternal mortality*. 2008; Washington DC: USAID.

¹⁰ Health Policy Initiative: Task Order 1. Family Planning and the MDGs: Saving lives, saving resources. 2009; Washington DC:

Joint United Nations Programme on HIV/AIDS (UNAIDS). Report on the global AIDS epidemic. 2010

¹² Patton GC, Coffey C, Sawyer SM, Viner RM, Haller DM, Bose K, et al. Global patterns of mortality in young people: a

systematic analysis of population health data. Lancet. 2009; 374(9693):881-92.

13 WHO: Why is giving special attention to adolescents important for achieving Millennium Development Goal 5? World Health Organisation, Geneva: 2008.

¹⁴ Gore FM, Bloem PJ, Patton GC, Ferguson J, et al. *Global burden of disease in young people aged 10-24 years: a systematic* analysis. Lancet. 2011; 377(9783):2093-102

Gray N, Azzopardi P, Kennedy E, Creati M and Willersdorf E. Achieving MDG 5 for adolescents in Asia and the Pacific: lessons for the delivery of reproductive health services. 2010; Melbourne: Burnet Institute, on behalf of Compass, the Women's and Children's Health Knowledge Hub. Available at: http://www.wchknowledgehub.com.au/our_resources

16 Kennedy E, Gray N, Azzopardi P, Creati M. Adolescent fertility and family planning in East Asia and the Pacific: a review of

DHS reports. Reprod Health, 2011; 8:11

- Collection of country-specific data for Solomon Islands and Vanuatu; and
- Preliminary population projections and analysis using Spectrum modelling software.

Our activities for 2012-13 are:

Analysis of key issues

- Compass will make the case for increasing investment in family planning in the Pacific through the
 analysis of population projections for different family planning scenarios in Vanuatu and Solomon
 Islands. Profiles will include an overview of current family planning use and need, current
 government and donor expenditure on family planning, and the costs and benefits of scaling-up
 family planning to meet targets for reduced unmet need and contraceptive prevalence rate.
- Profiles will also include systems requirements for increasing investment in reproductive health.

Engagement

- Our analysis will be carried out in consultation with the Centre for Population Health, Burnet Institute.
- Compass will continue to engage with the reference group comprising key regional stakeholders, including WHO, UNFPA, SPC, IPPF, Oxfam and government.

Dissemination

- Country reports will be developed for Vanuatu and the Solomon Islands highlighting key findings to assist governments, NGOs and other stakeholders in the region to advocate for increased investment in, and policy support to, family planning.
- Country reports and recommendations will be presented to each Ministry of Health and other stakeholders through in-country meetings and discussions.
- Policy briefs highlighting key findings and policy recommendations will be disseminated to AusAID, reference group organisations and in-country governments and will draw on regional networks such as PSHON, PSRH, SRH Network and the Asia Pacific Alliance for Sexual and Reproductive Health and Rights.
- We will prepare papers for peer reviewed publication identifying the costs and benefits of increasing investment in family planning in the Pacific.
- Compass will also draw on the extensive networks of the reference group to ensure targeted dissemination of work and identify further opportunities to facilitate uptake of findings. This includes a regional meeting with the reference group in February 2012.

Capacity building

• Incorporate key findings in postgraduate courses in international health through Monash University to engage with junior public health practitioners.

Activity 2: Achieving MDG 5 for adolescents

Work to date

In 2009-2011, Compass undertook a program of work on ensuring equitable progress towards MDG 5 for adolescents. This comprised three main activities:

- A review of the extent to which national-level data sources in Asia and the Pacific capture data on reproductive health outcomes for adolescents, neonatal outcomes for the babies of adolescent mothers, and adolescents' access to reproductive health services;
- 2. A review of the barriers to adolescents accessing reproductive health services and the programs that have been implemented in Asia and the Pacific to address these barriers; and
- 3. A qualitative case study of the reproductive health information and service delivery preferences of adolescents in Vanuatu.

The key findings of this work include:

- Available data about adolescent SRH are limited by the omission of important sub-populations (such as unmarried adolescents), omission of important indicators and failure to report agedisaggregated data;
- Available data confirm that adolescent fertility is high in many countries in this region and occurs in the context of low contraceptive prevalence and high unmet need for family planning;
- Adolescents, particularly girls, have poorer knowledge and less access to family planning information and services compared with adults; and
- · Adolescents face particular barriers to accessing reproductive health information and services and

require additional targeted approaches.

Much of this work has already been widely disseminated through a variety of channels, including peerreviewed publications, presentations at international conferences and key regional meetings, policy briefs and briefing papers disseminated to AusAID and other stakeholders, and direct feedback to incountry stakeholders including the MoH in Vanuatu. Our activities for 2012-13 are:

Analysis of key issues

- Strengthen the evidence base for effective approaches targeting adolescents, particularly effective health promotion strategies to increase adolescents' knowledge, attitudes and access to family planning information and services.
- Compass case study of the reproductive health information and service delivery preferences of
 adolescents in Vanuatu indicated the need to improve the provision of family planning information
 to adolescents and strengthen comprehensive sexuality education through schools in Vanuatu. The
 Burnet Institute, in partnership with Wan Smolbag Theatre, Oxfam Vanuatu and Oxfam Australia,
 will develop and evaluate a family planning health promotion activity targeting adolescent girls and
 boys in Vanuatu.

Engagement

- Continue engagement with the Vanuatu MoH to facilitate the uptake of study findings in the National Guidelines for Youth Friendly Health Services and the next iteration of the Reproductive Health Strategy.
- Explore opportunities to engage with the Pacific Adolescent Health and Development Coordinators.
- Through regional partnerships and participation in regional meetings and forums, Compass will continue to strengthen Pacific networks for sexual and reproductive health and adolescent health.

Dissemination

- Publish policy briefs on key findings that will be available on the Compass website and disseminated to AusAID and through key regional networks including PSHON, PSRH, SRH Network, UNFPA, UNICEF and IPPF.
- Write papers for peer review publication on scaling-up adolescents' access to sexual and reproductive health information, strengthening youth friendly health services for adolescents, and effective approaches to family planning health promotion targeting adolescents.
- Present at appropriate regional conferences and meetings, including an AusAID seminar.

Capacity building

- The capacity-building research model will continue to be disseminated and promoted as an approach that can be applied to other Pacific countries, following interest from UNFPA, IPPF and World Bank.
- Work in 2012-2013 will continue to build Australian and regional capacity by engaging with junior public health practitioners and in-country partners.
- The findings will continue to be incorporated in postgraduate level international health units through Monash University.

Theme 3: Dissemination and uptake of solutions for maternal and newborn health and survival Background

These linked streams of work address the challenges of improving maternal and newborn health and survival, especially in settings where homebirths are common and mortality rates are high. In such settings, Compass supports the essential role of improved health facilities, but also seeks evidence for additional community-based initiatives that could provide immediate life-saving care, while the necessary health system strengthening is underway.

To date, Compass has focussed on two broad areas within this theme: health care at the time of childbirth, including reviewing literature to overcome the 'second delay', and improving community engagement with maternal and child health services. These two themes continue to guide the specific activities in 2012-13, as detailed below. The specific activities have been presented within the framework of the overarching objectives of the Hub initiative.

Activity 1 Health care at the time of childbirth, tailored to low-resource/high-mortality settings

Work to date

During 2011, Compass completed an analytic review of maternal post-partum sepsis (a knowledge gap identified in 2010) and proposed steps for community-based treatment to address this problem. The planned connections with Wellcome Trust laboratories took time to mature and the practical application of new approaches to post-partum infection will be completed in 2012. A review of country practices in Asia and the Pacific for measurement of adverse maternal outcomes (fatal or non-fatal) demonstrated some good practice examples in Asia. Also in 2011 an unplanned opportunity was taken up: collaborating with World Vision Australia to produce an evidence-based contribution to advocacy for strengthening the role of family and community care in reducing maternal, newborn and child deaths in PNG. We joined a global systematic review on task-shifting for maternal and child health, contributing our research on training lay health workers.

The 2010 paper on community-based care at childbirth was updated with new evidence, confirming that community-based care does have a role where access to services is poor. The importance of postnatal care, including home visits, is confirmed, as was the potential to leverage off new momentum in immunisation. WHO have shown interest in Compass work on testing the degree to which improved early postnatal care could be supported by better integration with birth-dose vaccination for hepatitis B. Experiences in high-mortality settings in the Western Pacific region are very relevant to similar settings in South Asia and Africa – given that many countries in these regions there will be confronted with the need to introduce birth-dose vaccination into overburdened maternal and newborn care programs.

Our activities for 2012-13 are:

Analysis of key issues

- Describe the optimum balance between community care and local health system strengthening with a follow-up document on good practice examples relevant to our region.
- Develop and test of tools to rapidly assess important microbial targets in maternal sepsis in collaboration with Wellcome Trust laboratories in the region.

Engagement

- We will strengthen connections with WHO at regional and global levels, through email contact and invited participation in key meetings (only part funding from Compass for this) to incorporate our findings in forums discussing postnatal care, immunization and task-shifting for maternal and child health.
- Participate in maternal and newborn care discussions with development partners and governments, with practice-oriented consultations, especially in Papua New Guinea, Laos and Burma, but possibly also in Indonesia, Solomon Islands, Timor Leste.

Dissemination

- Prepare papers on maternal sepsis, lessons on measurement of maternal outcomes, and an update of the 2010 community-based care working paper with submission to peer-review journal as appropriate.
- Publish policy briefs with dissemination through national and regional forums.

Capacity Building

· Develop practical tools for national or district program managers contemplating provision of

community-based care at childbirth, or integrating vaccination with postnatal care, with some incountry consultations to support this.

- Engage a Compass fellow to continue work in 2012.
- Partner with local health researchers in Papua New Guinea, Laos, and Burma.

Activity 2: Engaging men in sexual, reproductive, maternal and child health

Work to date

In 2011 Compass undertook an activity to review progress and identify good examples of different models of engaging men, especially expectant fathers, in sexual, reproductive, maternal and newborn health (SRMNH). It was noted that while there has been increasing recognition of the impact of men's knowledge and behaviour on the health of their partners and children and the importance of greater engagement of men in SRMNH^{17,18}, there has been little increase in their participation in most developing countries.

A Masters of Public Health (international health stream) post-graduate student was recruited to undertake reviews and consultations as an MPH Research Project in 2011. Under supervision the student has:

- identified examples of good practice in relation to greater engagement of men in SRMNH, through review of the peer-reviewed and grey literature and consultations with obstetric specialists, relevant academics, UN and other development agencies, and MCH officials from PNG and Pacific Island Countries.
- reviewed existing maternal and reproductive health guidelines for the extent to which they encourage male involvement, and reviewed and collated the availability of supportive tools.

While there is widespread acknowledgement among senior clinicians and MCH officials that greater engagement of men and expectant fathers is important, preliminary findings show that there remains a general pessimism towards the challenges in implementing this. There are systems barriers, particularly lack of time, lack of resources, lack of health care provider skills; and attitudinal barriers. Despite this, Compass has identified some examples of projects that have made progress in changing attitudes and encouraging greater involvement by men. A variety of models appear to be effective, including reaching expectant fathers through workplaces, through MCH services, and within communities. Community communication strategies are important to change broad community attitudes, not just those of men, as well as working on the systems barriers. Gathering local information to inform culturally appropriate strategies, materials and tools is essential. Our activities for 2012-13 are:

Analysis of key issues

 A report and policy brief will bring together lessons learned from Compass work to date on the systems and attitudinal barriers to greater engagement of expectant fathers, as well as findings from the current Burnet Institute study in East New Britain which includes this theme, the data gathered for the NCAO/UNICEF Haus Man-Sambai Long OI Mama Project in early 2012, and existing programs such as the Men's Clinic at the Mingende Hospital in Kerowagi District, Simbu Province.

Engagement

- Compass will organize a workshop on greater involvement of men at the Asia and Oceania Federation of Obstetrics and Gynaecology (AOFOG) Council Meeting in Fiji in mid 2012. The workshop discussions and outcomes will be documented in 'Proceedings' and published on the Compass website and Health Hubs Flash.
- In November 2012 Compass will convene a workshop in Port Moresby, PNG, in consultation with the National Department of Health, WHO, UNICEF, the PNG National Catholic AIDS Office (NCAO), and Susu Mamas to present findings and experiences and to discuss policy and practice implications.

Dissemination

- Report and policy brief will be shared with the Maternal Health Adviser for the Asia Pacific region for UNFPA, as well as UNICEF and WHO regional reproductive health officials.
- A policy analysis paper will also be completed and submitted for publication.
- We will aim to present findings from this work at the Second Global Symposium on Health Systems Research. Beijing, China 31 October-3 November 2012.

¹⁷ UNFPA. It Takes Two: Men as Partners in Maternal Health. 11 July 2007 http://www.unfpa.org/public/global/pid/84

¹⁸ WHO. Programming for male involvement in reproductive health. Report of the meeting of WHO Regional Advisers in Reproductive Health WHO/PAHO, Washington DC, USA 5-7 September 2001.

 We will aim to present at the 10th Biennial Pacific Sexual and Reproductive Health Conference, Samoa, 2013. All Pacific Island Country obstetricians, senior midwives and relevant UN agency staff usually attend this meeting.

Capacity Building

Compass will consult with the University of Technology, Sydney, to ensure that the expert
midwives and obstetricians that support the training and ongoing mentoring and support of
midwives in PNG are aware of the findings of the benefits and barriers to greater engagement of
expectant fathers, and with the staff of the bilateral Health and HIV program.

Activity 3: Reaching emergency obstetric care: synthesising experience and exploring new options to overcome the 'second delay'

Work to date

In 2009 Compass undertook a broad based review of the literature and gathered information about new communication, transport and financing options. A report and policy brief were prepared and widely disseminated in hardcopy, through the Compass web-site, and in CD format. The work has been presented at a wide variety of fora and incorporated into the Monash University MPH WCH Unit. In 2010, at the Women Deliver conference, Compass was able to share its report with Julia Hussein and the team at IMMPACT, the global research initiative for the evaluation of safe motherhood intervention strategies based in Aberdeen, who were about to undertake a similar systematic review as part of the DFID Systematic Review Program. They have now completed their report 19, in which they refer to our work several times: "Barriers and solutions to address Phase II delays were described most recently by Holmes and Kennedy (2010) in a wide and comprehensive review."

To reduce preventable maternal deaths there is a need to address all 'three delays' in the provision of EmOC: the delay in seeking care, the delay in reaching care, and the delay in receiving care. Populations in many AusAID priority countries live in remote or isolated areas with difficult geographic terrain. Due to the urgency of obstetric emergencies, benefits from improvements in the first and third of the three delays are limited if delay in reaching care remains; yet this has received relatively little attention. Our activities for 2012-13 are:

Analysis of key issues

It is envisaged that advice about overcoming the second delay in reaching emergency obstetric
care will be included in the working paper on models of care for maternal health in high mortality
settings.

Engagement

 Work on the second delay will also be included in the in-country consultation on community care at childbirth in Papua New Guinea (see Activity 2 for more details).

Dissemination

Compass is currently working on a paper for publication on maternity waiting homes and the way
that they have been conceptualised, and the checklist for district level planners is also being
finalised. In 2012, this checklist will be tested in two districts in PNG, with support given to the
district planners to implement the checklist; appraisal from the referral 'community of practice' will
also be sought.

Activity 4: Improving women's satisfaction with maternity services by increasing the counselling and communication skills of care providers

Work to date

Since 2010, Compass has been collaborating with the Professor Jane Fisher, Head of Women's Mental Health, Jean Hailes, in work that aims to build the case for the significance of mental and emotional health during and after pregnancy, and satisfaction with maternal health care services, in contributing to the health and survival of women and their babies. This has been a much neglected area that is now starting to attract some attention from WHO.

Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Social Science & Medicine. 1994 Apr;38(8):1091-110.

Compass has taken a multi-disciplinary approach and looked at the issue from several angles. A systematic review of the prevalence of pregnancy-related and post-partum depression and distress and the associated factors (paper accepted by WHO Bulletin) was undertaken. This found that prevalence of maternal depression and distress is higher in low income settings than in rich countries, that poor women are at greatest risk, and that care-giving capacity is compromised with adverse effects for early childhood development and survival when a mother is emotionally unwell. A report compiling evidence and experiences in relation to the attitudes of maternal health care workers and influences on these attitudes, based on our review of the literature, has been prepared. Consultations have been undertaken to learn about the extent of training for maternal health care workers in interpersonal communication skills, and in particular explored what is needed to increase uptake and adaptation of the WHO 2009 manual on communication and counselling skills of maternal health care workers. In 2010 a policy brief was prepared and has been widely disseminated through the Compass web-site, CD, and at national, regional and international meetings. Our activities for 2012-13 are:

Analysis of key issues

• To develop an intervention seeking to improve women's satisfaction with maternal health care services, to reduce the incidence of pregnancy related mental health problems, and to increase detection and early management of these problems, through provision of training to maternal health care providers in interpersonal skills and recognition of mental health problems, forming women's community support groups, and providing greater emotional support during childbirth. The intervention will be piloted in Lao PDR, where Compass will work with Burnet-Laos and Save the Children Fund in Sayabouli province. After piloting and refining the intervention Compass will prepare a detailed design for an intervention trial and submit a research proposal to an appropriate funding agency.

Engagement

- Compass work is relevant to a systematic review that WHO, with Oxford Brookes University, Norwegian Knowledge Centre and Southampton University, is currently undertaking of interventions to address cultural factors that affect the uptake of maternity care services. Compass will work with them to raise awareness of these issues and facilitate uptake of such interventions in the WPRO priority countries in our region.
- Compass will collaborate with the Maternal Health Adviser for the Asia Pacific region for UNFPA, the WHO, WPRO Reproductive Health Adviser and the WHO SEARO Reproductive Health Adviser, and with UNICEF Safe Motherhood program officials in raising awareness through relevant regional UN meetings.

Dissemination

- Professor Jane Fisher, a key collaborator on this work, will attend the Global Consultation on Early Childhood Development in Florence.
- We will aim to participate in the Second Global Symposium on Health Systems Research. Beijing, China 31 October-3 November 2012.
- We will aim to collaborate with the Age journalist, Jo Chandler, to prepare a media article about this topic.

Capacity Building

• Compass will incorporate our findings into postgraduate teaching in international health, working with INGOs and with academic centres.

Theme 4: Nutrition critical appraisal tool and associated resources to support governments to prioritise and manage the scaling-up of effective nutrition interventions to address undernutrition Background

Undernutrition, the underlying cause of 3.5 million child deaths and 11% of the total global burden of disease²¹, is one of the most critical issues affecting women and children in Asia and the Pacific. The causes of maternal and childhood undernutrition are predictable and preventable²², and there is now global recognition that the "1,000 Days" – the period between conception and two years of age – is the critical window of opportunity in which good nutrition can have a profound impact on health and productivity²³. However, many countries with a high burden of maternal and child undernutrition lack the capacity, knowledge and the resources required to prioritise, plan, implement, evaluate and scale-up effective and sustainable approaches to improve the nutritional well being of women and children²⁴.

In order to strengthen the capacity of country stakeholders to address the nutrition issues they face, Compass is developing the Nutrition critical appraisal tool (NCAT), a practical, interactive and context specific guide to assist prioritising and planning evidence-based, multi-stakeholder, integrated and comprehensive programs to improve the nutrition of women and children.

During the development of the NCAT, extensive consultation with nutrition experts in Asia, the Pacific and Australia revealed that stakeholders working in nutrition and food security often have limited prior nutrition training and few opportunities to learn from past experiences, to reflect on best practice or to recognise key intervention points for nutrition-specific and nutrition-sensitive interventions. In order to address this gap, Compass, in partnership with the Fred Hollows Foundation, has developed the Nutrition and Food Security—Approaches to improving the health of women and children short course: a practical, evidence based short course designed to enable nutrition stakeholders with limited prior nutrition training to identify, implement and advocate for effective evidence based approaches to improving nutrition and food security.

The course comprises four modules: a core module on Nutrition planning and programming, and three elective modules on Nutrition for infants and young children, Nutrition for women of reproductive age and pregnancy and Food security and livelihoods. Each module utilises the knowledge assembled in the process of developing the NCAT, draws on best practice case studies from the field of international and indigenous public health nutrition and is tailored to meet the specific needs of participants, allowing them to examine and critique country data, activities and programs from their own context.

The short course and the NCAT are complementary: the NCAT is used as a training tool throughout the modules of the short course, and a modified version of the short course will be used to train stakeholders in the use of the NCAT.

Work to date

• Pre-tested two versions of the NCAT, and revised the NCAT framework based on feedback from nutrition experts and other stakeholders in Asia, the Pacific and Australia.

• In consultation with a technical advisory group and a reference group, developed and delivered the pilot of the core module of the *Nutrition and food security: Approaches to improving the health of women and children* short course. The pilot of this module was delivered in 2011 to five nutritionists from Timor Leste and seven health and nutrition workers from remote Indigenous communities in the Northern Territory. Monitoring and evaluation results indicated that participants gained knowledge and confidence to undertake their roles; and are applying the learnings of the module, particularly the project planning cycle and the concept of the underlying determinants of health, in their work roles.

In consultation with a technical advisory group and a reference group, developed and delivered the pilot of the Nutrition for infants and young children module of the Nutrition and food security: Approaches to improving the health of women and children short course. The pilot of this modules was delivered in 2011 to five nutritionists from Timor Leste and six health and nutrition workers from remote Indigenous communities in the Northern Territory ²⁵. Monitoring and evaluation results indicated that participants'

²³ 1,000 Days http://www.thousanddays.org/about/

²¹The Lancet's Series on Maternal and Child Undernutrition, Executive Summary, http://www-tc.iaea.org/tcweb/abouttc/tcseminar/Sem6-ExeSum.pdf

REACH Ending Child Hunger and Undernutrition Partnership, http://www.reach-partnership.org/

²⁴ Black, M., et al., *Maternal and child undernutrition: effective action at national level.* The Lancet, 2008. **371**(9611): p. 454-455; http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61694-8/fulltext

²⁵ Eight participants (four from Timor Leste and four Indigenous Australian participants) participated in both modules delivered in 2012. Three Indigenous Australian participants and one participant from Timor Leste who participated in the core module were unable to participate in the *Nutrition for infants and young children* module due to work or training commitments, while one participant from Timor Leste and two Indigenous Australian participants who had been unable to attend the core module attended the *Nutrition for infants and young children* module. In total, 15 participants attended one or both modules.

knowledge improved, and that the subject areas covered were relevant to their work roles. The short course team is currently supporting participants to implement "action plans" developed during the module.

• Commenced the development of the *Nutrition for women of reproductive age and pregnancy* and *Food security and livelihoods* modules of the Nutrition and food security: Approaches to improving the health of women and children short course; to be piloted in 2012.

The activities planned for 2012-13 in Theme 4 are grounded in the priority areas articulated in the Compass Strategic Framework (introduction of known effective interventions and; scaling up implementation of interventions) and are based on the need for further knowledge in the priority topic of Nutrition. Compass has also carefully considered the broader Hub initiative objectives in the formulation of these activities. The Theme 4 activities contribute to progress in these objectives as detailed in the following:

Analysis of key issues

- Improve mechanisms for national nutrition programs to assess the effectiveness of current and proposed nutrition activities against an evidence base and deliver actions and policies in a coordinated and responsive manner.
- Improve access of regional nutrition stakeholders to the evidence for effective nutrition interventions to influence health and nutrition policy thinking and practical application at the local, national, regional and international level.
- Continue to pretest the NCAT with a variety of nutrition experts and other stakeholders in the region.
- Field test the NCAT with Ministry of Health nutrition stakeholders in at least two countries in the region.
- Modify the NCAT and training package based on the results of the field testing.

Engagement

- Expand linkages between policy makers, research organisations and practitioners in national and regional organisations including MoH's in Timor Leste, Nepal, UNICEF, WHO, and WFP.
- In partnership with regional and global stakeholders, including UNICEF, WFP, FAO and WHO, finalise the NCAT and the NCAT training package in readiness for field testing.

Dissemination

- Improve ability of nutrition stakeholders to identify barriers and key success factor of approaches to improving the nutrition and food security of women and children through the collection and dissemination of best-practice case studies from the region.
- Document and disseminate the outcomes of the short course to stakeholders in the region and in Australia including presentations at relevant conferences, meetings, workshops and forums.
- Work with key stakeholders including UNICEF, WFP, FAO WHO and Mahidol University to ensure that the NCAT and the short course are accessible to all countries in the region.

Capacity Building

- Improve capacity of regional nutrition stakeholders to prioritise, select and scale up appropriate nutrition interventions using best-practice, evidence-based, comprehensive, multi-stakeholder, integrated approaches.
- In consultation with the module technical advisory groups and the course reference group members, develop the curriculum and content of the *Nutrition for women of reproductive age and pregnancy* and *Food security and livelihoods* modules of the *Nutrition and Food Security Approaches to improving the health of women and children* short course.
- Continue to support short course participants to apply the learnings of the short course in their work roles, and to implement the individual action plans developed in each module.
- Pilot the Nutrition for women of reproductive age and pregnancy and Food security and livelihoods modules of the Nutrition and Food Security - Approaches to improving the health of women and children short course with fifteen nutrition and health workers from Timor Leste and remote Indigenous communities in the Northern Territory.

Monitoring and Evaluation

In the final stage of this phase of the HUB initiative it is important to measure how effective the knowledge generation has been in influencing policy and practice and building capacity of WCH stakeholders in the region. With a focus on dissemination and uptake in 2012-13, Compass' approach to M&E will draw upon feedback documented by Adrianne Chattoe-Brown, (AusAID Health Resource Facility Consultant) in the Finalising the Monitoring and Evaluation Frameworks and Planning for the Mid-Term Review, and recommendations from the AusAID's Mid-term Review of the Knowledge Hub Initiative. A schematic depicting Compass' program logic has been developed (Annex 1). This schematic clearly outlines Compass' outcomes at three levels: individual product outcomes, thematic-wide outcomes and Knowledge Hub objective level outcomes. Methods of assessment at all three levels are also identified.

The guiding objectives and indicators of Compass' current Monitoring and Evaluation Framework are directly aligned to those in the Cross-Hub Monitoring and Evaluation Framework (MEF) finalised in February 2010. In 2012 there are plans to build on the current M&E framework. Facilitated by AusAID, this framework will be better able to monitor and measure Hub results, objectives and dissemination strategies. Compass has already committed to working with AusAID on this process. In particular, Compass will implement strategies to evaluate policy research identified at the M&E workshop held in Canberra in December 2011 with AusAID and ODI.

Consistent with previous work plans, Compass will continue to use the quarterly reports as an internal tool to monitor the progress and quality of activities under each product. In 2012-13, an M&E framework will be added to this template, to allow easy tracking of activities' progress and uptake at quarterly intervals. It is envisaged that this template will be a summary of the broader M&E framework developed at the Hub level, and will feed directly into the indicators and means of verification. For example, simple methods of measurement – such a website monitoring and uptake logs – will be implemented and managed by the communications officer. It is worth noting that many Compass activities already employ internal evaluation strategies. For example the nutrition short course (Theme 4) had an M&E framework developed and delivered by an external consultant, to measure the quality of content, efficacy of training, and sustainability of the knowledge transferred. The Hub initiative will also be evaluated through documentation of lessons learnt across all four Hubs, and a case study on the impact of the Hub initiative at the policy/practice level.

Compass continues to use the comparative advantage as three partner organisations to utilise the wider network of technical expertise in a peer review process. Final products will include working papers, policy option papers, peer reviewed journal publications, case studies, conference presentations, guidance briefs, and on-line resources.

	Indicators	Means of Verification	Assumptions
Aim: To contribute to the quality and effectiveness of Australia's engagement in the health sector in the Asia Pacific region through expanded expertise and an expanded knowledge base that is of practical value and used by stakeholders in development.	Uptake and use of Compass knowledge products in the development context, best practice guidelines and health system reform at international and national level. Increased use of evidence and analysis in the implementation and review of policy processes in national governments and development partners Improved collaboration and coordination amongst stakeholders including donors and multi-laterals Increased engagement of Australian expertise Increased engagement of Compass partner institutions, organisations in evidence informed policy making.	Key informant interviews Peer reviewed journal publications and regionally recognised technical papers Documentation of engagement with policies, guidelines, policy agendas for each product, where applicable, uptake log Case studies of policy engagement or of increased capacity for engagement of Australian expertise.	The Hubs will be in a position to contribute towards the overarching aim. External factors, that impact on the Hub's ability to contribute to the aim, may be out of Compass' control. Stakeholders will be able to identify Hub contributions at this level.
Objective 1: To increase the critical, conceptual and strategic analysis of key health issues relevant to Asia and the Pacific that can be used to inform policy thinking and practical application at the national, regional and international levels.	Evidence of appropriateness of policy issue selected in addressing evidence gaps and contributing to aid effectiveness Practicality of products to policy makers Quality and rigour of methodology and outputs	Key informant interviews and evaluations Peer review assessments of each paper against quality, and policy relevance. All proposed papers completed, on time, in an appropriate format, including recommendations to inform policy Case study of policy/practice engagement and impact	Peer reviewers willing to engage and sufficiently informed Analysis is relevant, appropriate, timely and useful to development stakeholders at country regional and global levels.
Objective 2: To expand convening powers and engagement (e.g. communication, networks and partnerships) between the Hubs, Australian institutions and Asia-Pacific national, regional and international researchers, development partners and educational institutes.	Number and range of stakeholders engaged in knowledge product design, implementation, review and dissemination Evidence of strengthened cross and intra-Hub collaboration Degree to which Compass' convening activities are new, strengthening existing involvement. Inclusion of Asia or Pacific settings in discussions or documents where this had been lacking	Self-assessment against the work plan on convening activities in product design, implementation, review and dissemination. Case study on collective cross Hub lessons learnt	
Objective 3: To effectively disseminate relevant and useful knowledge resources which aim to influence policy thinking at national, regional and international levels.	Documented dissemination process, target group and expected benefits of knowledge products. Targeted users are aware of, and perceive knowledge products to be relevant, accessible and useful Targeted users attend conferences and meetings Evidence of in-country stakeholder further disseminating knowledge products and requesting new work from Compass	Self-assessment and reports against individual product dissemination strategies Monitoring tools: quarterly reports, dissemination log, analysis of website use through google analytics Internal and external websites, publications, conference trip reports Key informant interviews with stakeholders	
Objective 4: To expand the capacity of Australian institutions and professionals and through them to Asia and the Pacific Region and professionals to participate effectively in evidence informed policy making.	 Increased capacity of Compass to support early career professionals to undertake high-level research, convene and engage on these issues. Evidence of knowledge products utilised to build capacity of in-country partners, and to undertake training in the region. 	Key informant interviews with WCH Compass supported fellows, students and AVI Documentation of courses delivered, participant attendance records and post-course evaluation feedback Compass Annual report on capacity building and outcomes.	

Annex 1: Compass Schematic

undertaken. The Mid-Term Review eport, managed by AusAID, will gement assessments of progress Compass: Women's and Children's Health Knowledge Hub Aim: To contribute to the quality and effectiveness of Australia's engagement in the health sector in Asia and the Pacific through expanded expertise and an expanded knowledge base that is of practical value and used by stakeholders in development Compass Partners: Centre for International Child Health [University of Melbourne]; Menzies School of Health Research; & Burnet Institute Centre for International Health **Guiding Objective 2: Engagement Guiding Objective 3: Guiding Objective 4: Capacity Guiding Objective 1: Policy** Hub level Dissemination development specific surveys/reviews undertal and the Completion Report, m. provide professional judgement. towards outcomes & Expand communications, Increase the critical, conceptual Objective-I Outcomes networks & partnerships between Effectively disseminate relevant Expand the capacity of and strategic analysis of key the Hubs, Australian institutions and useful knowledge resources Australian institutions and health issues relevant to Asia & and Asia-Pacific national, regional professionals to participate which aim to influence policy the Pacific that can be used to and international researchers. thinking at national, regional and effectively in evidence-informed inform policy thinking and development partners & international levels policy making practical application at the educational institutes national, regional and international level Thematic-Wide Outcomes Thematic Area 2: Thematic Area 3: Thematic Area 1 Thematic Area 4: Approaches to Universal Access Solutions to Maternal and Newborn Child Health and Survival in Asia **Hub Outcomes at Three Levels** Nutrition to Reproductive Health **Health in Difficult Settings** & the Pacific product; information sharing meetings; technical papers published & conference presentations. Assessments based on aggregation of data, opinion and professional judgement. The products outlined below may contribute to one or more of the four Thematic Areas. 2009: Product Outputs Reproductive & maternal health-adolescent girls Delay in reaching o Regional child survival strategy **Individual Product Outcomes** 2010: Product Outputs Nutrition critical appraisal tool Creating demand for community-level RH services Competencies in adolescent healthfor primary level health workers Improving QOC for seriously il children Increasing investment in family planning in the Pacific Follow-up of knowledge gaps in maternal sepsis 2011-2012 Product Outputs rvices for long-term low-up of high-risk oving lung h

Annex 2: Compass 2012-13 Strategic Framework

PURPOSE

To improve the effectiveness of aid for WCH, with a focus on contributing to equitable progress towards MDGs 4, 5a and 5b. The vision is to establish Compass as a central knowledge point for those who work to improve WCH, advocating for greater investment, facilitating partnerships, influencing policy and practice, and responding to changing contexts, in collaboration with the other Health Knowledge Hubs.

ROLE

- Advocate for greater investment in WCH on a regional scale
- Build and support WCH networks and partnerships in the region
- Be a central point for integrating research activities and results in the region and analysing their policy implications
- Advise AusAID, other donors, NGOs and governments about ways to overcome the barriers and make gains in WCH
- Build the capacity of Australian professionals to contribute to improving WCH in the region
- Forecast and respond to new and changing influences on WCH

STRATEGIES

- Consulting, engaging and developing networks with research partners, civil society partners, policy makers and other stakeholders
- Reviewing existing knowledge and identifying gaps; mapping and scoping, including case studies in selected priority countries
- Knowledge synthesis and sharing; training and mentoring; monitoring and evaluation; and the development of evidence based tools and guidelines
- Disseminating the evidence base on ways to overcome impediments to the universal delivery of and access to interventions

PRIORITY AREAS

- Introduction of known effective interventions
- Scaling-up implementation of interventions
- Achieving equity in intervention coverage
- Integration of services with a continuum of care

TOPICS

- Prevention, identification and management of the major causes of childhood mortality and morbidity
- Neonatal health and survival
- Safe motherhood and perinatal care
- Sexual and reproductive health
- Nutrition

PRODUCTS AND ACTIVITIES

Annex 3: Implementation Schedule
Theme 1: Improving child survival and quality of care in the Pacific and Asia

Output 2012-13	J	F	М	А	М	J	J	А	S	0	N	D	J	F	М	А	М	J
A paper in a peer reviewed publication describing the implementation of the WHO Pocketbook of Hospital Care for Children in low and middle income countries throughout the world, strategies taken and where opportunities and gaps exist						Х												
A paper in a peer reviewed publication exploring the uptake of the Pocketbook of Hospital Care for Children in Indonesia, and the steps that had the largest impact, and the scale that was achieved						Х												
A web-based guide to country adaptation, translation, implementation and evidence behind the WHO Pocketbook of Hospital Care for Children						Х												
Publication and dissemination of the Clinical Use of Oxygen: a manual for health workers, technicians and managers						Х												
Web-based availability of the computerised hospital reporting system for common childhood illnesses (the PHR). This program enables standardised case fatality rate reporting, and vaccine preventable and syndromic disease surveillance.													Х					
Presentations to the Pacific Senior Health Officials Meeting in Cairns on strategies for improving the quality of care for sick children and reducing newborn mortality	Х																	
Policy briefs to AusAID on strategies to improve the quality of care for children, improving care for high-risk newborns						Х								Х				
Publication of a peer-reviewed paper in the Australian Journal of Paediatrics and Child Health on how to reduce neonatal mortality in the Pacific and poor Asian countries									Х									
Curricula for post-graduate child health nursing, developed with the Ministries of Health of Solomon Islands and Fiji									Х									
Presentation on Child Health Nurses role in the Pacific at PSHON meeting, to MoH colleges of higher education and the Pacifika Paediatric meeting											Х							
A paper in a peer-reviewed publication on the public health significance of morbidity among children who survive complications in the perinatal period in developing countries											Х							
An evidence-based approach to closing the policy-practice gap in child TB contact management							Х											
Systematic review of child contact screening in SE Asia											Х							
Evaluation of symptom-based screening for community-based contact management in Indonesia – ongoing research with Gadjah Mada University. Presentation of data at Global Lung Health Conference, Malaysia, October 2012.										Х								
Training of community-based health workers in Cambodia on child TB diagnosis – collaboration with Cambodia NTP and WHO, Cambodia. Aim to present findings and publish 2013											Х	Х	Х					
Presenting a session at the International Paediatric Association's World Congress on the implementation of WHO guidelines for child health and improving quality and safety of paediatric care in developing countries																		Х
Implementation of community-based child contact management in Bangladesh – collaboration with Bangladesh national TB program. Aim to present findings and publish 2013														Х	Х	Х		
Detailed review of pneumonia case management in Cambodia to be presented to the government as the case for expanded community case management.								Х										

Theme 2: Scaling-up approaches to achieve universal access to reproductive health Activity 1: Increasing investment in family planning in the Pacific

Output 2012-13	J	F	М	А	М	J	J	А	S	0	N	D	J	F	М	А	М	J
Report drawing together data and making the case for increased family planning in the Pacific			Х	Х														
Country profiles for Vanuatu and Solomon Islands with country-specific advocacy			Х	Χ														
Policy Brief: The costs and benefits of increasing family planning in the Pacific				Χ	Х													
Papers for regional journal publication highlighting the costs and benefits of increasing investment in family planning in the Pacific			Х	Х	Х			Х	Х									
Presentation of country profiles to key in-country stakeholders			Х	Χ														
Regional meeting with reference group to present findings		Х																
Presentation of key findings and recommendations to AusAID lunchtime seminars			Х	Х														

Activity 2: Achieving MDG 5 for adolescents

Output 2012-13	J	F	М	Α	М	J	J	А	S	0	N	D	J	F	М	Α	M	J
Policy Brief: Providing sexual and reproductive health information to adolescents – the importance of focusing on family planning			Х	Х														
Policy Brief: Strategies for scaling-up adolescents' access to sexual and reproductive health information in the Pacific			Х	Х														
Policy Brief: Strategies for scaling-up the provision of youth friendly health services in the Pacific			Х	Х														
Policy Brief: Reaching adolescents with family planning information in the Pacific – effective health promotion approaches																Х	Х	
Two papers submitted from 2010 Vanuatu study - one on adolescents' access to SRH information, one on youth friendly health services			Х	Х			Х	Х	Х		Х	Х						
Targeted engagement with key MoH representatives to facilitate uptake of findings		Х	Χ															
Presentation of key findings and recommendations to AusAID through lunchtime seminars			Х	Χ														
Family planning health promotion intervention developed and documented					Х	Х	Х	Х	Х	Х								
Presentation of key findings and recommendations to Vanuatu MoH, AusAID and other stakeholders																Χ	Χ	Χ
One paper submitted from the evaluation of the 2012-2013 family planning health promotion activity targeting adolescents in Vanuatu															Х	Х	Х	

Theme 3: Dissemination and uptake of solutions for maternal and newborn health and survival Activity 1: Health care at the time of childbirth, tailored to low-resource/high-mortality settings

Output	J	F	М	Α	М	J	J	А	S	0	N	D	J	F	М	Α	M	J
Policy Brief: Expanding Community-based Care at Child-birth in Difficult Settings				Х	Х			,										
Policy Brief: Integrating Immunisation and MNH Programs at birth			Χ	Х														
Working paper and policy brief: Systems for Maternal Mortality Surveillance and Response					Χ													
Working paper: Community-based Care at Child-birth (updated to include with maternal sepsis, 'second delay')				Х														
Case studies: Good practice examples of integrated community care with health system strengthening							Х	Χ										
Documentation of models of care for maternal health in high mortality settings							Х											
Maternal sepsis paper submitted for publication				Х														
WHO Publication on the Integration of Birth-dose Vaccination with Post-natal Care		Х	Χ															
Guide to implementation research options for community-based care						Χ												
Tool for rapid assessment of the contribution of maternal sepsis				Х														
Program managers guide for integration of immunisation and postnatal care				Х	Х	Х												
Program managers guide for integrating of community care with health system strengthening								Х	Χ									

Activity 2: Engaging men in sexual, reproductive, maternal and child health

Output	J	F	М	А	М	J	J	А	S	0	N	D	J	F	М	Α	M	J
Reports (literature review, consultations report, best practices review) and summary policy brief						Χ	Х	Х										
Paper for Second Global Symposium on Health Systems Research										Χ								
Proceedings of workshop AOFOG Council Meeting								Χ										

Activity 3: Reaching emergency obstetric care: synthesising experience and exploring new options to overcome the 'second delay'

Output 2012-13	J	F	М	А	М	J	J	А	S	0	N	D	J	F	М	Α	М	J
Paper submitted for publication on maternity waiting homes					Χ													
Refined district level checklist					Χ	Χ												

Activity 4: Improving women's satisfaction with maternity services by increasing the counselling and communication skills of care providers

Output 2012-13	J	F	М	А	М	J	J	А	S	0	N	D	J	F	М	А	М	J
Comprehensive Report		Χ																
Paper for Second Global Symposium on Health Systems Research										Χ								
Intervention for Lao PDR developed and documented			Χ	Χ														
Intervention tested and refined					Χ	Χ	Х	Χ	Χ									
Proposal for intervention trial developed and submitted to funding agency										Χ	Х	Χ	Х	X				
Media article in potential collaboration with the Age						Χ												

Theme 4: Nutrition critical appraisal tool and associated resources to support governments to prioritise and manage the scaling-up of effective nutrition interventions to address undernutrition

Output 2012-13	J	F	М	Α	М	J	J	А	S	0	N	D	J	F	М	Α	М	J
Collated set of best-practice nutrition case studies from the region												Х						
Electronic version of the NCAT, with manual, for field testing				Χ														
Report of the NCAT field testing												Х						
Finalised NCAT and manual, based on the results of field testing																		Χ
Curriculum and content of the Nutrition for women of reproductive age and pregnancy module of the Nutrition and food security - approaches to improving the health of women and children short course				Х														
Delivery of the pilot of the Nutrition for women of reproductive age and pregnancy module of the Nutrition and food security – approaches to improving the health of women and children short course					Х													
Nutrition for women of reproductive age and pregnancy module of the Nutrition and food security – approaches to improving the health of women and children pilot short course report							Х											
Curriculum and content of the Food security and livelihoods module of the Nutrition and food security - approaches to improving the health of women and children short course									Х									
Delivery of the pilot of the Food security and livelihoods module of the Nutrition and food security – approaches to improving the health of women and children short course										Х								
Food security and livelihoods module of the Nutrition and food security – approaches to improving the health of women and children pilot short course report												Х						
Complete short course pilot report of the Nutrition and food security – approaches to improving the health of women and children short course															Х			