

WORK PLAN 2011

Compass: Women's and Children's Health Knowledge Hub



Developed for the
AusAID Strategic Partnerships for Health
Knowledge Hub Initiative
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Executive Summary

With global efforts gaining momentum towards the achievement of the Millennium Development Goals (MDGs), the AusAID Knowledge Hubs for Health Initiative is committed to working closely with partners in Asia and the Pacific to contribute to translating global health strategies into concrete action and measurable results for women and children. The purpose of Compass: The Women's and Children's Health Knowledge Hub is to improve the effectiveness of aid for women's and children's health, with an emphasis on contributing to equitable progress towards MDGs 1, 4, 5a and 5b and supporting the United Nations Global Strategy for Women's and Children's Health¹, launched 22 September 2010 through consolidating and extending current work, relationships and networks. In 2011, Compass will complete the final year's program of work within the current framework of the AusAID "Strategic Partnerships for Health Knowledge Hub Initiative".

Building on previous years work, in 2011, Compass products will maintain an emphasis on equitable access to and use of women's and children's health services, improving the quality of care for women and children, and providing support to scale up effective interventions to improve health outcomes. A focus for 2011 will be translating findings and recommendations into accessible policy briefs and tools for national stakeholders and development partners. In the process, country partners will be increasingly engaged to ensure that the products are grounded in, and can impact upon specific development contexts. New areas of work respond to regionally relevant knowledge gaps identified from, and expanding, the work in 2009 and 2010.

Product 1: Improving Child Health and Survival in Asia and the Pacific

Building on work from previous years, a detailed understanding of the issues faced by countries in implementing the Regional Child Survival Strategy will be developed and key recommendations made for overcoming specific obstacles to accelerate progress towards MDG 4 with a particular focus on the major causes of child death, and inequity in child survival.

Product 2: Scaling-up Approaches to Achieve Universal Access to Reproductive Health Care

Innovative approaches to increase access to evidence-based community level reproductive health services will be examined, with an emphasis on generating the evidence for increased investment and providing tools where they are lacking. A case study methodology will be used to identify which approaches work in which settings and why, in order to learn lessons for scaling-up and implementation in other high-need areas.

Product 3: Solutions for Maternal and Newborn Health in Difficult Settings

There are many settings in Asia and the Pacific where maternal and newborn mortality rates remain high, and many births still take place in the home. Compass will contribute to global knowledge on what is required to maximise community level services for maternal and newborn survival, and provide descriptions of maternal and newborn care packages and feasible plans to improve health services. Integration of perinatal care with birth-dose vaccination at community level will grow as a focus area, building on momentum established with WHO in 2010.

Product 4: Supporting Governments to Prioritise and Manage the Scaling-up of Effective Nutrition Interventions: the Nutrition Critical Appraisal Tool (NCAT) and Associated Resources.

This is a continuation of work undertaken in 2009 and 2010 that aims to support governments to prioritise and manage the scaling-up of effective nutrition interventions to address MDGs 1, 4 and 5. This activity will include finalising the development of the nutrition critical appraisal tool after extensive pre-testing and field testing and, in partnership with the Fred Hollows Foundation and national and regional nutrition stakeholders, developing and delivering a flexible delivery short course for nutrition stakeholders in the region on 'Nutrition and Food Security short course - Approaches to improving the health of women and children'.

In 2011, Compass will expand its convening capabilities, strengthen cross-Hub collaboration and enhance 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 the region.

¹ http://www.who.int/pmnch/activities/jointactionplan/201009_globalstrategy_backgrounddocs/en/index.html

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 Burnet Institute, and the Centre for International Child Health.

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 through 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:

- 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;
- Expand convening powers and engagement (e.g. communication, networks and partnerships) between the Hubs, Australian institutions and Asia and the Pacific national, regional and international researchers, development partners and educational institutes;
- Effectively disseminate relevant and useful knowledge resources which aim to influence policy thinking at national, regional and international levels and
- Expand the capacity of Australian institutions and professionals to participate effectively in evidence informed policy making.

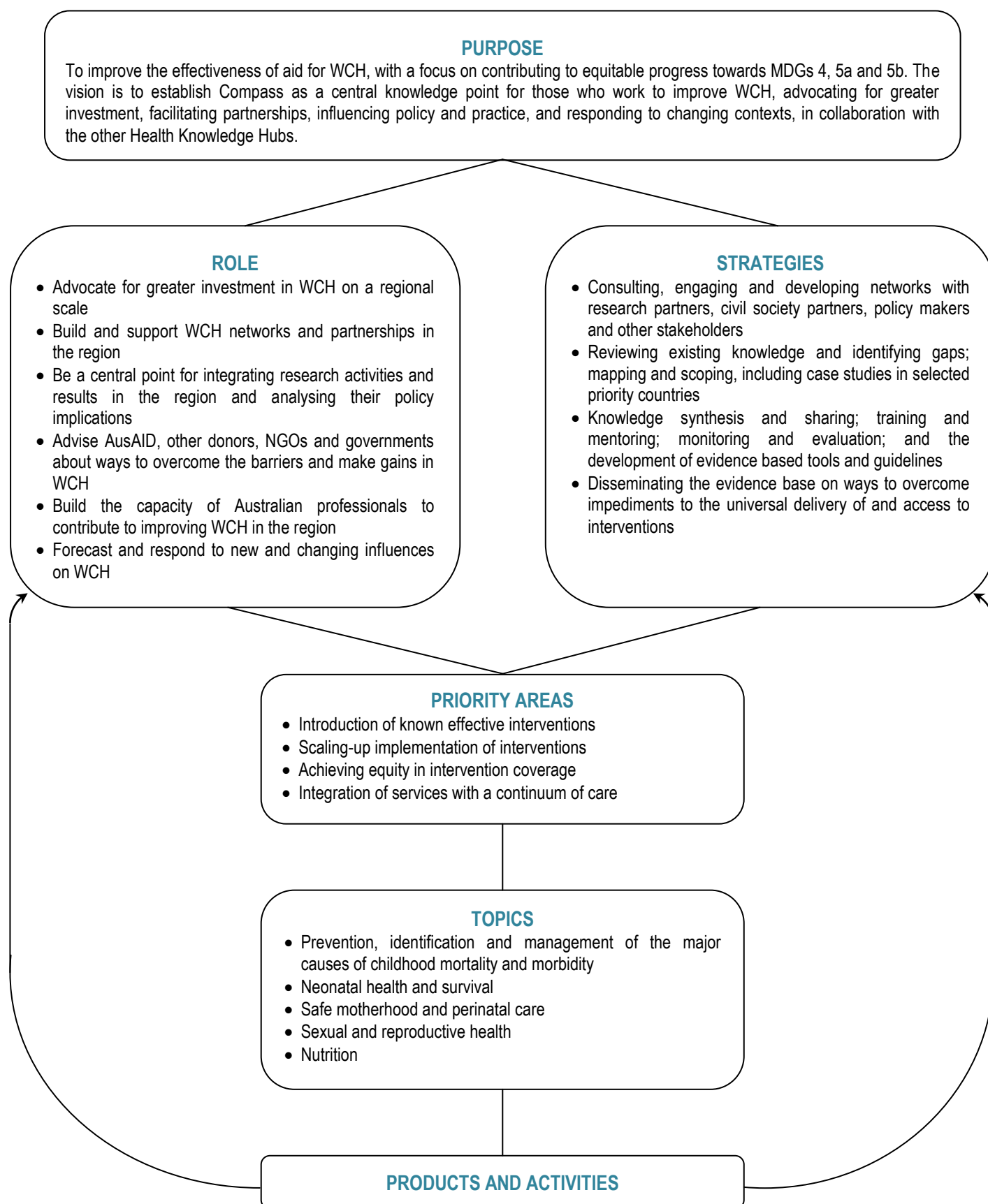
Strategic Direction

Consistent with previous work plans, in 2011 the overall purpose of Compass is to improve the effectiveness of aid for WCH, with an emphasis on contributing to equitable progress towards MDGs 1, 4, 5a and 5b through consolidating and extending current work, relationships, and networks. The 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. In 2011 Compass continues to work within the strategic framework developed in 2009 across 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 (Figure 1).

The 2011 strategic direction includes a focus on dissemination of relevant and useful findings and recommendations developed through work to date. Compass intends to ensure the sustainability of findings, and retention beyond 2011, by sharing the knowledge gained with AusAID, in-country stakeholders and other development partners. Maintaining a focus on capacity building, Compass will build on the participation of partners at the Australian, national, regional, and global level in the knowledge generation process through convening mechanisms (such as conference presentations, round table discussions, and multi-stakeholder dialogue), thus expanding and consolidating current Compass networks.

Priorities in this work plan have been informed by our contacts with regional, national, provincial, and district level health officials, as well as international experts and partners. Choices have been influenced by the potential of solutions to make a difference; issues that have been relatively neglected; the impact of future trends; and our own strengths and capacity.

Figure 1: Compass 2011 Strategic Framework



Aims and Key Themes

In 2010, Compass focused on the evidence to improve child survival; maternal, newborn and reproductive health; and nutrition. The 2009 and 2010 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. This has had additional benefit in forming and strengthening links between WCH stakeholders in Australia and the region, including the WHO, WFP, UNICEF and UNFPA regional offices.

Building on this foundation, in 2011 Compass will translate product knowledge into practical resources, tailored to settings in the region, with a focus on improving the quality of care for women and children, and providing support to scale up effective interventions to improve health outcomes. Product outputs have been designed to inform evidence-based policy development at national, regional and international levels to contribute towards achieving the MDGs 1, 4 and 5 targets. In 2011, the proposed Compass products are:

1. Improving child health and survival in the Asia and the Pacific
2. Scaling-up approaches to achieve universal access to reproductive health
3. Solutions for maternal and newborn care in difficult settings; and
4. Supporting governments to prioritise and manage the scale-up of effective interventions: the nutrition critical appraisal tool (NCAT) and associated resources.

Knowledge Dissemination

There is burgeoning literature on new understandings of how global health knowledge is translated and diffused.² Compass will focus on the dissemination of existing and ongoing products in order to achieve sustainable outcomes for knowledge translation and ensure maximum uptake by policy makers. The enormous increase in the amount of information and research findings available make it even more important to have a carefully thought through dissemination strategy if the results of Compass' work are to make a difference to health aid effectiveness. With this in mind, the Compass dissemination strategy is presented in terms of audience and strategies.

Audience

Key to the dissemination strategy is the definition of the target audience. Compass has identified the following audience for maximum impact and coverage:

Audience	Methods of communication
Ministry of Health officials in countries that Compass products have focussed on	Send hardcopy of 2 – 4 page policy brief with short cover letter to Director-General MoH. He / she will annotate and pass on to appropriate officials for action. The delegated officials may then contact us or go to the web-site for further information.
AusAID	Regular communication and meetings with the Health and HIV thematic group Send electronic copies of all documents to the Health and HIV thematic group to be incorporated into AusAID's own knowledge management systems (facilitating access by country post staff))
UN stakeholders (WHO, WB, UNICEF, UNFPA)	Send hard copies of policy briefs with cover letter to key senior contacts at headquarters and regional offices Visit regional / country offices to disseminate and discuss findings Collaborate in convening meetings Collaborate in developing, pre-testing and adapting normative guidance tools informed by Compass work Email to individual relevant contacts about particular resources Promote web-site
Civil society and academics in priority countries	Disseminate translated policy briefs via INGOs, and through national and local NGO networks and academic institutions
International NGOs	Universities-ACFID Linkage network Seminars Online discussion for a such as those hosted by WHO or Human Resources for Health Exchange Web-site resources
Consultants	Through the Health Resource Facility Online discussion fora Web-site resources
Academics	Universities-ACFID Linkage network Seminars Online discussion forum Web-site resources
International health students (Australian and international)	Incorporate Compass findings into relevant MPH courses and resources

² [Lapaige V.](#) "Integrated knowledge translation" for globally oriented public health practitioners and scientists: Framing together a sustainable transfrontier knowledge translation vision. J Multidiscip Healthc. 2010;3:33-47.

Strategies

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)* Initiative³ and by the Population Reference Bureau.⁴ The following modalities will be used to disseminate knowledge products: peer reviewed publications; policy briefs and case studies outlining key findings and recommendations for programming and resource allocation. Media briefs, in the form of information and results on HUB research initiatives, will also be used as a dissemination tool for a wider Australian audience. This strategy employs a principle of development effectiveness, namely, social accountability.⁵ Strategies to encourage greater use and uptake of the website will also be developed in 2011, to enhance the effectiveness of this communication and advocacy tool. Dissemination strategies will be tailored to different audiences in the region as appropriate.

Simply disseminating information is insufficient; credibility is needed to influence policy and practice. It is apparent that, with time, Compass is becoming better known and establishing a strong reputation as a knowledge nexus. Conference presentations, peer-reviewed publications, convening of collaborative meetings such as the WHO Hepatitis B consultation, and the web-site, all contribute to this. Compass intends to ensure the sustainability of findings, and retention beyond 2011, by firmly integrating the knowledge gained within AusAID, in-country stakeholders and other development agencies. Compass will engage key stakeholders responsible for decision making at a policy and program level to explore mechanisms to disseminate product knowledge via existing knowledge management systems. These may include displaying Compass documents on appropriate key stakeholder intranet and external websites, continuing to contribute to AusAID's lunchtime seminar series, developing a schedule for regular hub briefings, initiating round table discussions and potential engagement at AusAID regional meetings.

In addition to the specific collaborations and partnerships detailed for each individual product, Compass will strengthen cross-Hub collaboration through joint dissemination activities. Close collaborations (with WHO and other UN agencies, Australian institutions, researchers from the Asia and the Pacific, development partners and educational institutions, and members of the maternal Technical Advisory Groups) developed through the lifetime of the Hub Initiative, will be used as 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. As the convenor of the Annual Hub Forum in November 2011, Compass will engage a wider audience of stakeholders in an additional day dedicated to advances in women and children's health.

In 2011 Compass intends to maximise the use of existing networks as a modality 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 and through the resources sections of relevant web-sites including the Partnership for Maternal, Newborn and Child Health (<http://www.who.int/pmnch/topics/en/>) and the global research initiative for the evaluation of safe motherhood intervention strategies (IMMPACT).

Product leaders will track relevant meetings and conferences (such as the Global Health and Innovation Conference 2011 at Yale University, New Haven, Connecticut, 16–17 April; 6th Asia-Pacific Conference on Reproductive and Sexual Health and Rights (APCRSHR), Yogyakarta, Indonesia; and the Asian Forum of Parliamentarians on Population and Development) and through contacts, or attendance, ensure that the work is available to delegates. Mechanisms such as shared calendars (with partners such as UNICEF in the Pacific) will facilitate the identification and management of dissemination opportunities. Drawing on the strength of Compass' existing collaborative partnerships will galvanise support for the endorsement of global initiatives around women's and children's health and nutrition.

Compass views AusAID as a key audience for findings and recommendations and undertakes to provide AusAID with resources that can be incorporated into AusAID's own knowledge management systems. Compass hopes to reach the Health and HIV thematic group and country post staff with helpful resources in a timely way. This will include continuing to contribute to AusAID's lunchtime seminar series, developing a schedule for regular hub briefings, initiating round table discussions and potential engagement at AusAID regional meetings.

Compass will produce a series of 2 – 4 page policy briefs in simple English with graphics, illustrations and photographs. These will be available in hard copy, on-line and CD, translated into Mandarin, Vietnamese,

³ http://www.globalhealth.org/view_top.php?id=186

⁴ Population Reference Bureau. Information Dissemination: Using the Internet as a Tool to Disseminate Information. www.prb.org/presentations/Information.ppt

⁵ <http://www.acfid.asn.au/resources/promoting-voice-and-choice>

Indonesian, Lao, Burmese and Thai, as appropriate. Suitable translators will be identified through Compass' institutional country partners, and international public health students.

Strategies to encourage greater use of the website will also be developed in 2011, to enhance the effectiveness of this communication and advocacy tool to a wide array of audiences. Compass will also display documents on appropriate key stakeholders intranet and external websites, including the Partnership for Maternal, Newborn and Child Health (<http://www.who.int/pmnch/topics/en/>), Population and Health Infoshare, (<http://www.phishare.org/>), the global research initiative for the evaluation of safe motherhood intervention strategies (IMMPACT), and the Asia Pacific Alliance for Sexual and Reproductive Health and Rights (www.asiapacificalliance.org).

Capacity Building

Each of the Compass products includes capacity building, education and information sharing with partners, enabling Compass to support evidence informed policy environments and ensure sustainability beyond the current funding cycle. 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 some of the following ways:

- Providing fellowships and in-country PhD research in international women's and children's health and 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.
- Conducting an investment case in family planning in the Pacific collaboratively with a variety of regional organisations who will gain the capacity to undertake similar exercises in the future.
- 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, developing a flexible delivery short course entitled 'Nutrition and Food Security-Approaches to improving the health of women and children'. The course will target nutrition stakeholders from Australia, Asia and the Pacific with limited prior training in nutrition
- Hosting a public health nutritionist under the Australian Volunteers International (AVI) program. The nutritionist will coordinate in-country field testing and undertake relevant capacity building
- Through Compass' success in the Australian Leaderships Awards – Fellowships (ALAF) Compass will support professional development activities in Australia for six visiting nutritionists from Timor Leste, including practical in-service training at Royal Darwin Hospital.
- The process of field testing the nutrition critical appraisal tool in country will involve significant capacity building and training of national nutrition stakeholders'

Product 1: Improving Child Health and Survival in Asia and the Pacific

As an extension of work completed in 2009 and 2010, Compass will continue to work with collaborators in Papua New Guinea (PNG), Solomon Islands, Fiji, Vietnam, Cambodia, Indonesia and Lao PDR to address knowledge gaps, to strengthen child health and survival. In 2011, Compass will strengthen engagement with the Human Resources for Health (HRH) and Health Information Systems (HIS) Hubs. The knowledge and experience from one country can be applied, with critical insight and an understanding of context, culture and history, to other countries. The issues Compass will investigate and provide recommendations to address will include community based prevention and treatment of childhood pneumonia; appropriate models for neonatal care; contact screening and preventative therapy for childhood tuberculosis (TB) in Cambodia and Indonesia; evaluating efforts to standardise and improve quality of care for children; improving access to oxygen and essential medicines; and the need for child health nurses in Pacific countries.

Activity 1: Addressing neonatal mortality and appropriate models of neonatal care in Asia and the Pacific

Background and Approach

Throughout Asia and the Pacific, WHO estimates that over 50% of child deaths occur in the neonatal period. Key requirements for improving neonatal mortality and morbidity will include a better understanding of the epidemiology of neonatal deaths and true neonatal mortality rates, how countries can scale up health system approaches to neonatal care, and how to optimise services for high-risk newborns.

In high mortality settings, such as Cambodia there is evidence that the burden of neonatal mortality is still substantially underestimated. In Vietnam, and other countries in the region, the burden of neonatal mortality is recognized as a problem, but the approach to the problem is increasingly focused on improving tertiary neonatal intensive care. Compass will conduct a review of the epidemiology of neonatal mortality in the region and explore appropriate interventions.

Compass will review the evidence for different models of improving neonatal care in Pacific countries and poorer countries in Asia. Specifically this work will evaluate the need for health system improvements in neonatal care at district hospitals and health centres, different considerations in planning such service improvements and different models that could be appropriate. This involves considering of how to reach national-scale in improving neonatal care, and outlining minimal standards of equipment, human resources and training, developing guidelines for neonatal care at different levels, including referral guidelines, and strengthening systems for the recording and use of data on neonatal outcomes.

In transitional countries in the region where neonatal mortality rates are starting to decline, there is a need to better understand the quality of survival, methods and how to scale-up services for high risk newborns. A model of nurse-led community and hospital-based follow-up for high-risk newborns in developing countries will be developed, piloted and evaluated in Fiji in conjunction with the Ministry of Health (MoH). This will contribute to a better understanding of how to optimise health, nutrition and developmental outcomes, what services need to be in place, how to maintain follow-up and what outcomes can be expected.

Intended audience

- Health Departments in the region wanting to develop systematic approaches to neonatal care
- Regional and National Paediatric Associations
- Donor partners interested in investing in neonatal health
- Key multilateral agencies such as WHO and UNICEF
- Australian aid agencies who are interested in appropriate ways of contributing to neonatal health services development

Key partners

- Fiji Ministry of Health Clinical Services Network and Fiji Colonial War Memorial Hospital: Dr Joseph Kado
- Dr Titus Nasi: Solomon Islands MoH

- Vietnam: National Paediatric Hospital, Hanoi; Research Institute for Child Health, Hanoi; National Institute of Hygiene and Epidemiology
- UNICEF and WHO regional country offices

Outputs

- A paper on a neonatal model of care in the Pacific
- A paper reviewing neonatal mortality in Vietnam
- A paper on the public health implications of newborn complications in developing countries and services required for long-term follow-up of high-risk newborns

Dissemination

- This work feeds into WHO's Regional Strategy for Child Survival, with special emphasis on smaller poorer countries where health facility-based neonatal care services are rudimentary and under-developed.
- Papers listed above will be submitted for publication in peer reviewed journals.
- Presentations will be made at regional meetings such as Pacific Paediatricians and PNG Paediatric Society Meetings in 2011.
- This work will help inform AusAID, WHO, UNICEF and other development partners of the practical and context specific needs for improving newborn survival. For each peer reviewed publication a 1-2 page policy brief will be developed and disseminated to AusAID, WHO, UNICEF, and other country-specific development partners

Timeframe

Activity 1- neonatal mortality	J	F	M	A	M	J	J	A	S	O	N	D
A paper on a neonatal model of care in the Pacific												
A paper reviewing neonatal mortality in Vietnam												
A paper on the public health implications of newborn complications in developing countries and services required for long-term follow-up of high-risk newborns												

Activity 2: Improving lung health in Asia and the Pacific

Background and approach

Pneumonia is the most common cause of death in children (at least 18% of global child mortality, over 50% in some countries in the region),^{1 2} and tuberculosis (TB) carries a large unrecognised disease burden and contributes to child and maternal deaths.³ Most pneumonia deaths occur in the community due to lack of simple antibiotic therapy. Over 20 years ago a series of field studies demonstrated the great mortality savings that can be gained from community based case management of pneumonia, yet no countries have effectively taken this approach to scale. Currently Cambodia, Philippines and Indonesia have implemented community case management in a few districts, but they are struggling to evaluate the programs. In Cambodia, data are available documenting the most recent of these pilot exercises, but these have not been analysed for consideration by the government.

Hypoxaemia, or lack of oxygen in the blood, is the major complication causing death in pneumonia. Hypoxaemia also causes deaths from newborn infections, birth asphyxia, very low birth weight, obstetric emergencies, asthma, and other common infections in childhood and adults. Most health facilities do not have reliable oxygen supplies, because traditional systems have relied on expensive and logistically difficult equipment. This seriously impedes health care workers' ability to manage common emergencies, and causes low health service utilisation and low health worker morale. New methods are available to improve oxygen delivery that are feasible, sustainable and low cost. Their use can reduce death rates in childhood pneumonia by 35%, and improve health care worker performance and quality of care in very low resource settings. These programs are highly cost effective, with cost

per life saved comparing favourably with the cost of new vaccines against pneumonia, but with broader effect against other common causes of death and disability, and the strengthening of paediatric and maternal care. In 2011, work will focus on and assess what is required to scale up access to oxygen in remote health clinics.

Tuberculosis is a major cause of morbidity and mortality in Asia and the Pacific. Important risk factors for infection among children are closeness of contact to the source case and the degree of sputum smear-positivity in a source case with pulmonary TB (PTB). Natural history data show that young age is a major risk factor for TB disease development following infection. In the pre-BCG era, the risk of developing disease was very high (around 50%) for infants infected with TB, around 25% for children infected in the second year of life falling to less than 10% in the 2–5 year age group and around 2% for those 5–10 years of age. In view of this high risk of infection and disease WHO, the StopTB program, the International Union Against TB and Lung Disease (IUATLD) and other global agencies recommend active contact screening of children in close contact with sputum smear-positive PTB. The use of preventive therapy in resource-poor settings would reduce the large burden of TB among children and family screening and treatment would reduce the overall burden to communities. WHO currently recommends preventative therapy with daily isoniazid for six months.⁶ Despite these recommendations, contact screening and management rarely happen in resource-poor countries. This results in a large pool of untreated TB in children, mothers and families. Compass will examine the barriers to implementation of this policy in several Asian countries, and propose means to overcome these and scale up community based screening and prevention of TB.

Cambodia is a high child mortality country. Pneumonia is the most important cause of childhood death in Cambodia, causing over half of all deaths outside the neonatal age group. For a significant section of the population there are major barriers to access basic care for sick children. In many cases this is because they live in villages with no reasonable access to any health services. Community based case management (CBCM) has been piloted in two settings in Cambodia in recent years. The first was in Stueng Traeng Province in a pilot project supported by PSF (Pharmacists Sans Frontieres). The second was in Koh Kong area, undertaken by BASICS and CARE, using USAID funds. The project was completed in 2009, but activities continued until 2010 when the drug supplies ran out. We have reviewed this project and, in consultation with UNICEF, WHO and the Ministry of Health, devised a program of work to revitalise pneumonia control in the country. As part of the first stage in this work, during 2011, Compass will provide an epidemiologist to undertake analysis of careseeking and likely mortality impact associated with the CBCM projects. During this time we will also work with a geographer and staff from UNICEF to establish a credible definition of what constitutes effective access to acute care for Cambodian children. This information will be used to map the areas lacking access to facilitate the planning of future health services and the interim need for community based services. We will also initiate a comparative study of the household costs of pneumonia in comparable areas of Cambodia and Vietnam. Such costs are known to be a major problem in Cambodia.

Intended audience

- WHO country office Cambodia
- Lao MoH
- PNG Ministry of Health
- Cambodia Ministry of Health

Key Partners

- WHO country office Cambodia
- UNICEF country office Cambodia and EAPRO Regional Office
- Prof Philip Hill, University of Otago
- Lao Ministry of Health
- Lao WHO Office: Dr Christian Winter
- PNG Ministry of Health
- International Union against TB and Lung Disease
- Dr David Peel, Ashdown Consultants, UK
- PhD student Rina Triasih from University of Gajah Mada

⁶ Guidance for National Tuberculosis Programmes on the Management of Tuberculosis in children. Stop TB Partnership Childhood TB Subgroup, World Health Organization, Geneva, 2006

Outputs

- A review of community case management of pneumonia in the region and an approach to its evaluation
- A monograph on pneumonia management in Cambodia, which will form the basis of a regional meeting on the subject in 2012 or 2013.
- State-of-the-Art review of models of contact tracing, case finding and preventative therapy for TB at a community level
- Establish programme of operational research around implementation of community-based child contact management with expected outcomes to include case-finding, challenges for implementation, adherence to IPT, cost-benefit analysis
- Greater knowledge of how to scale up access to oxygen therapy in remote district hospitals in PNG and Lao PDR
- Publication of peer reviewed journal articles on how to scale up access to oxygen therapy
 - Appropriate models of oxygen therapy in health facilities in PNG: a cost effectiveness analysis
 - An advocacy article on the oxygen as a neglected essential medicine
 - Publication of the WHO book: Clinical Use of Oxygen: a manual for health workers, engineers and administrators

Dissemination

- Via peer reviewed publications, conference presentations and communications that will have wide impact in the region and globally. For each peer reviewed publication a 1-2 page policy brief will be developed and disseminated to AusAID, WHO, UNICEF, and other development partners.
- The dissemination of the WHO book: Clinical Use of Oxygen: a Manual for Health Workers, Engineers and Administrators.
- A session on these topics will be held at the IUATLD annual conference in France in 2011, which attracts delegates from developing countries throughout the world. Findings may also be presented at a regional Asia-Pacific conference, the World Society of Paediatric Infectious Disease conference in Melbourne and to the Indonesian Paediatric Society.
- The information collected and assembled on community case management of pneumonia in Cambodia will form the basis of a major advocacy effort, organized by UNICEF to raise the profile of pneumonia in the region. The data will also be prepared for peer reviewed publication and presented at national and international conferences.

Timeframe

Activity 2 – lung health	J	F	M	A	M	J	J	A	S	O	N	D
A review of community case management of pneumonia in the region and an approach to its evaluation												
A monograph on pneumonia management in Cambodia, which will form the basis of a regional meeting on the subject in 2012 or 2013												
State-of-the-Art review of models of contact tracing, case finding and preventative therapy for TB at a community level												
Establish programme of operational research around implementation of community-based child contact management with expected outcomes to include case-finding, challenges for implementation, adherence to IPT, cost-benefit analysis												
Greater knowledge of how to scale up access to oxygen therapy in remote district hospitals in PNG and Lao PDR												

Activity 2 – lung health	J	F	M	A	M	J	J	A	S	O	N	D
Publication of peer reviewed journal articles on how to scale up access to oxygen therapy:												
1) Appropriate models of oxygen therapy in health facilities in PNG: a cost effectiveness analysis												
2) An advocacy article on the oxygen as a neglected essential medicine												
3) Publication of the WHO book: Clinical Use of Oxygen: a manual for health workers, engineers and administrators												

Activity 3: Improving quality of hospital care for children

Background and Approach

Hospitals play an important role in health systems as institutions for training and capacity building, and for referral care of the most seriously ill patients. In high mortality settings, improving the quality of care hospitals deliver is necessary to reduce child mortality. *The WHO Pocketbook of Hospital Care for Children* provides clinical guidelines and standards which can begin to meet some of these needs at all levels of hospital care.⁵ As an example, Lao PDR has some of the highest child mortality rates in the region. Recent reviews of human resources for health in Laos PDR, including for child health, have demonstrated critically low capacity in medical education, clinical capacity and standards, and Lao language medical resources. In 2010 Compass has been able to assist with the development of the *WHO Pocketbook of Hospital Care for Children* in Lao language, an implementation plan, and conducting of baseline assessments of the quality of hospital care for children. In 2011, the *Pocketbook* will be implemented through initial training workshops. Follow-up hospital assessments will evaluate the effectiveness of this approach, including the impact on care provided.

Intended audience

- Child and Adolescent Health Division of The World Health Organisation, Geneva
- Other agencies in Western Pacific Region involved in improving quality and safety of health care
- Ministries of Health
- Child health workers and paediatric organisations in the Western Pacific Region

Key Partners

Partners for this work include WHO, Lao PDR MoH, Pacific Paediatric Society, PNG Paediatric Society, and other partners described at the International Child Health Review Collaboration (www.ichrc.org). Compass work carried over from 2009-2010 will continue to generate evidence of how to overcome other key obstacles to improved care, including improving child mortality reporting, auditing and surveillance for common illnesses of childhood in PNG and other countries in the region. This will be part of the ongoing work for this product, and communication of the lessons learned will be a major focus in 2011.

Outputs

- A paper in a peer reviewed publication describing the global uptake of the WHO Pocketbook of Hospital Care for Children, and where opportunities and gaps exist.
- A guide to country adaptation, translation and implementation of the WHO Pocketbook of Hospital Care for Children
- A paper on Improving quality of care for children in Lao PDR
- A paper on progress towards MDG-4 in PNG
- A systematic review on peri-natal, neonatal and child mortality auditing

Dissemination

- Publication of peer reviewed journal articles on the topics listed above. For each peer reviewed publication a 1-2 page policy brief will be developed disseminated to AusAID, WHO, UNICEF, and other development partners.
- Presentations at regional meetings, such as the Fiji National Health Conference, PNG Medical Symposium, the Pacific Paediatricians Meeting, and to AusAID through their internal lunchtime seminar series.
- Written material will be posted on the Compass website, and all will be on the www.ichrc.org web-site, which is accessed in over 90 developing countries, with an average of 8000 hits per month.
- A meeting at WHO HQ in Geneva is planned in 2011 for finalising the revision and working towards widespread implementation of the WHO guidelines, and Compass will play a leading role in this

Timeframe

Activity 3 – hospital care for children	J	F	M	A	M	J	J	A	S	O	N	D
A paper in a peer reviewed publication describing the global uptake of the <i>WHO Pocketbook of Hospital Care for Children</i> , and where opportunities and gaps exist.												
A guide to country adaptation, translation and implementation of the <i>WHO Pocketbook of Hospital Care for Children</i>												
A paper on Improving quality of care for children in Lao PDR												
A paper on progress towards MDG-4 in PNG												
A systematic review on peri-natal, neonatal and child mortality auditing												

Activity 4: Child Health Nurses in the Pacific: a neglected cadre of health workers.

Background and Approach

Among global agencies and donors there is now a welcome recognition of the role of midwives, and the need for more midwives deployed equitably in rural and urban areas. However there is inadequate recognition of the need for nurses with more specialist child health training. Child health in developing countries has become increasingly complex in the last two decades: twenty years ago there was no ART therapy, no PMTCT programs, no artemisinin-based therapy, no fixed-dose combination therapy for TB, no insecticide-treated bed nets, no IMCI, no zinc or vitamin A, no vaccines against pneumococcus, Hib, rotavirus or HPV, little use of third-generation cephalosporins or concerns over antibiotic resistance for common infections such as meningitis or dysentery. Twenty years ago there was little focus in developing countries on the care of the neonate, the needs of adolescents, child welfare or human rights. Now all these areas should be part of a comprehensive child health program, yet still, in many countries nurses provide front-line management of seriously ill children, run paediatric wards, and coordinate provincial and district MCH programs. Pre-service / under-graduate nursing courses cannot hope to equip nurses with all these skills to enable them to deal with the increasingly complex case management described above. There is a great need to recognise the importance of child health nurses, not just as paediatric nurses in central referral hospitals, but as nurses with the knowledge, technical skills and competence to be independent clinicians, trainers and coordinators of public child health programs in their districts or provinces.

The response of donor agencies to the increased complexity of child health has been largely a vertical one - to run in-service courses for their specific intervention for existing nurses and doctors. In several countries Western nurse academics have reviewed nursing courses and proposed a move towards more academic, theoretical, college or university-based styles of post graduate training, often requiring bachelor's degrees, or bridging courses. Because of opportunity-costs, this inevitably has meant a move away from clinically orientated, practical nursing where the

wards are the best classroom. Many graduate nurses, after several years in the workforce, cannot afford more than an additional year away from earning a living, and stretched health services cannot lose their best nurses to several years of post-graduate studies. There is hence a need for clinically orientated, practical post-graduate child health nursing courses. The integration and sustainability of all these new child health initiatives demands it.

In 2011 Compass will explore this issue further, using evidence from PNG, Solomon Islands, Fiji and other countries in the Pacific. The courses will be mapped for child health nursing in the Pacific, describing the annual output, distribution of graduates, their current roles, constraints to effectiveness, and distribution anomalies. We will write an article based on these data to be published in a peer reviewed international health journal to raise awareness of this need globally and in the Pacific region. With the changing nature of child health interventions globally in developing countries, these issues are just as relevant in Africa and Asia. We will explore curriculum needs that would incorporate a holistic approach to teaching child public health and clinical paediatrics, incorporating new vertical proven interventions and programs that have become such a feature of the child health landscape. We will provide recommendations on how this could be better supported in Solomon Islands, Fiji and elsewhere.

This will be done in partnership with the Human Resources for Health Hub (Professor Richard Taylor), and Ministries of Health in Pacific, particularly Solomon Islands and Fiji. The central aim of this activity is to understand how to best equip nurses to better address child health needs in their country, and help bridge the gap between the current limitations in adequate capacity-building and training and the increasing demands and responsibilities placed on nurses.

Intended audience

- Health Departments in the Pacific wanting to build a HR base for improving child health services development
- Donor partners who are interested in appropriate ways of contributing to human resources in child health, including AusAID

Key Partners

- Human Resources for Health Hub (Professor Richard Taylor)
- MoH in Pacific, particularly Solomon Islands, Fiji

Outputs

- A paper in a peer reviewed international health journal to critically evaluate this need globally and in the Pacific region, and how it can be addressed

Dissemination

- Discussions with ministries of health interested in this issue, and with AusAID through their internal lunchtime seminar series and other communications
- Publication of peer reviewed journal article and policy brief on this issue

Timeframe

Activity 4 – Child Health Nurses in the Pacific	J	F	M	A	M	J	J	A	S	O	N	D
A talk with PPT slides delivered to key ministries within the region.												
A paper in a peer reviewed international health journal to critically evaluate this need globally and in the Pacific region, and how it can be addressed												

Activity 5: Improving access to Essential Medicines for Children and Women in the Pacific

Background and Approach

In 2010, a review of interventions for improving the availability of essential medicines was undertaken, concluding that there is some evidence for interventions, including supervisory visits, community-directed initiatives and training for health workers in pharmacy ordering and management. However there is a paucity of evidence for most of the proposed interventions in the published literature.

In 2011, the interventions in one or more Pacific countries will be investigated, to determine their coverage and feasibility in different contexts in Asia and the Pacific. Compass will also review the utilisation of the WHO Model Essential Medicines List for Children (2009)⁷ in the region, and identify where essential medicines included in national and global guidelines are not available, and what is required to rectify this.

Intended audience

- Solomon Islands Ministry of Health & Medical Services
- Tonga Ministry of Health
- Other PIC Ministries of Health and/or procurement agencies
- Donor partners and commodities-based vertical programs
- Pharmacy staff in developing countries in the region

Key Partners

- Bev Snell; Essential Drugs & Community Health Specialist, Burnet Institute, Centre for International Health
- A-Prof Noel Cranswick; Director of Clinical Pharmacology RCH, member of WHO Essential Medicines Committee

Impact

- Improve stock management capabilities at the national and district level, to improve medicines availability at the primary care and hospital level.

Outputs

- A review of the implementation of the Essential Medicines List for Children and its integration and compatibility with national guidelines and essential drug availability and provide a tool for this process
- Provide strategies to improve the availability of Essential Medicines at primary care and district level hospitals, following on from a completed systematic review (2010).
- Computerised inventory reporting template for PIC national procurement bodies.
- Policy brief for AusAID and other donor agencies providing medicines and supplies into PICs.

Dissemination

- Publication of peer reviewed journal article and policy brief on this issue.
- Discussions with ministries of health interested in and participating in this issue, and with AusAID through their internal lunchtime seminar series and other communications

⁷ WHO Model Formulary for Children: World Health Organization 2010; Geneva

Timeframe

Activity 5 – Access to Essential Medicines	J	F	M	A	M	J	J	A	S	O	N	D
Regional inventory surveillance study												
Review of implementation / integration of EMLc in PICs												
Publication of findings												
Presentation to regional meetings / academia								Ongoing				

Product 2: Scaling-Up Approaches to Achieve Universal Access to Reproductive Health

Compass' work in reproductive health in 2009 and 2010 demonstrates that the achievement of the MDG 5b target of 'ensuring universal access to reproductive health' in the Pacific is largely dependent on the ability of countries to scale-up the provision of reproductive health services, including family planning at the community level. For countries able to do this, evidence suggests that the benefits will be wide ranging. It is well established that the equitable provision of family planning is a cost effective method for reducing maternal mortality, thereby contributing to the achievement of MDG 5a.^{8,9} In addition, investment in reproductive health has been shown to lead to significant returns in terms of poverty reduction, women's empowerment, child and newborn health, and the prevention of HIV.¹⁰

The aim of this product is to investigate how best to scale-up three interventions known to be essential for achieving MDG 5b: improved access to family planning at the community level, the development of competencies for primary level health workers providing reproductive health services for adolescents, and how to involve men in reproductive health in contexts where this is appropriate.

Activity 1: Increasing investment in family planning in the Pacific

Background and Approach

The recent *Demographic and Health Surveys* carried out in the Solomon Islands, PNG, Marshall Islands, Tuvalu and Nauru, and the *Multiple Indicator Cluster Survey* in Vanuatu, reveals that the unmet need for family planning in the Pacific remains high. This is the case for adolescent girls and women wanting to delay their first birth, as well as for girls and women who wish to space or limit their births. Barriers to accessing family planning include socio-cultural norms, knowledge of family planning options, reliability of commodity supply, cost of accessing services and commodities, and the supply, skills and attitudes of health service providers.¹¹ Although these barriers are more pronounced for adolescents, they impact on the capacity of women of all ages to choose the timing and number of their births.

The interventions required to overcome these barriers in the Pacific are well known,⁴ but will require a significant increase in expenditure for family planning by both Pacific Island governments and donors. The aim of this activity is to utilise Pacific data (most likely from the six countries listed above) to develop country-specific and evidence-based advocacy messages that highlight the health and economic benefits of scaled-up investment in family planning in the Pacific.

A Steering Committee comprising key regional reproductive health organisations (IPPF, Family Planning International, Burnet Institute, Secretariat of the Pacific Community and UNFPA) will be formed in order to finalise the choice of countries, identify appropriate data, determine the data analysis methods and underlying assumptions, oversee the technical aspects of the work, and develop a dissemination strategy for the findings. It is expected that the Steering Committee will meet at the commencement of the activity, and again once the draft country profiles have been produced. Compass will undertake all Steering Committee coordination including arranging the meetings, facilitating regular communication, and data collation.

The country profiles for the six countries chosen will be produced collaboratively by Compass and Family Planning International. Technical support for the cost benefit analysis and modeling will be provided by the Burnet Institute's Centre for Population Health and SPC's Demographics Unit. Although dependent on data availability, it is expected that each country profile will include:

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

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: USAID.

¹¹ 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.

- An overview of current family planning use and need (e.g. data on contraceptive prevalence, unmet need for family planning, available methods of contraception, locations where family planning is available, and user costs)
- Current government and donor expenditure on family planning provision
- Cost of scaling up the provision of family planning services to meet a target (e.g. reduction of unmet need, a specified contraceptive prevalence rate, or a specified total fertility rate)
- Benefits of scaling up the provision of family planning services to meet this target (including health benefits in terms of reductions in mortality, savings on health and education expenditure, environmental benefits, employment benefits, and economic benefits at both the national and household levels)
- Where age-disaggregated data are available, a sub-analysis of the benefits of specific family planning interventions aimed at adolescents will be estimated

Each country profile will inform the development of country-specific advocacy messages to be used by the regional stakeholders on the Steering Committee to advocate for increased government and donor investment in family planning.

Intended audience

- Ministries of Health in included Pacific Island Countries (Solomon Islands, Vanuatu (Len Tarivonda), Samoa, Marshall Islands, Tuvalu and Nauru). Key contacts in all countries apart from Vanuatu to be identified during the planning phase.
- Donors active and emerging in the Pacific region (including AusAID, NZAID and World Bank).
- It is expected that UNFPA Representatives in each country will also use the outputs of this product as an advocacy tool. Virisila Raitamata, the Deputy Representative for UNFPA in Solomon Islands and Vanuatu, has already been engaged. Further contacts to be identified during the planning phase.

Key partners

This activity will be undertaken in collaboration with FPI (Sumi Subramaniam and Sean Mackesy-Buckley). Other key partners will be the Steering Committee Members (Kabwea Tabwan from IPPF Sub-regional Office for the Pacific, Viri Raitamata from UNFPA, a representative from the Demographic Unit of SPC, and Jackie Edmond from Family Planning International), and representatives from the MoH from each country (yet to be identified) to assist in accessing relevant data.

Impact

The aim of this activity is to make the case for increased investment in family planning in the Pacific and identify the systems requirements for doing this in six Pacific Island Countries (PICs). It is expected that the outputs of this activity will be used to advocate for increased investment from both PIC governments and donors in order to accelerate progress towards the achievement of MDG 5 in the Pacific region.

Outputs

- Six country profiles and associated country-specific advocacy messages
- A regional report aggregating the data from the six country profiles to produce a regional case for increased investment in family planning
- A Policy Brief drawn from the regional report
- A regional launch to introduce the findings to stakeholders (if sufficient funds)
- Papers for regional journal publication and conference use
- Strengthening of the network of reproductive health organisations working to promote increased investment in family planning in the Pacific

Dissemination

This work will be disseminated through a variety of channels. The country-specific profiles will be presented to the MoH and AusAID post in each country and advocacy will be conducted with these stakeholders to increase investment. The regional report and policy brief will also be made available to the MoH and AusAID posts, as well as other relevant stakeholders in development in the Pacific Region. It is expected that these will include SPC, UNFPA, UNDP, IPPF (see key partners above) and local community-level NGOs providing reproductive health services such as Wan Smolbag in Vanuatu. If sufficient funding is available, a regional launch will also be held to introduce the findings to stakeholders.

It is also hoped that this work may be used as a model for similar work in other regions including South-East Asia. Papers for regional journal publication and conference use will be prepared, and stakeholders with engagement in both the Pacific and other regions (including UNFPA and IPPF) will be approached.

Timeframe

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Formation of Steering Committee												
Determine Methods												
Produce Country Profiles												
Write Policy Brief, Regional Report												
Produce Papers for Publication												
Presentation of results to MoH / AusAID posts / Steering Committee												

Activity 2: Improving competence in adolescent health for health workers at primary care level

Background and Approach

This activity will be conducted in partnership with WHO Geneva and WHO Regional Offices: SEARO and WPRO. It stems directly from Compass' work in developing competencies for adolescent health for primary level health workers in 2010. By the end of 2010, it is expected that the following activities will be completed:

- A draft of Adolescent Health Competencies for Primary Level Health Workers; and
- Identification of WHO and other training resources and tools required to support the introduction of Adolescent Health Competencies into health worker curricula.

All work will be undertaken in collaboration with WHO headquarters as well as SEARO / WPRO. Compass will provide technical support in order to:

- Develop and finalise (responding to feedback) a WHO document entitled "Competencies in Adolescent Health for Primary Level Health Workers"; and
- Support orientation of at least two Faculties of Public Health (to be identified by WHO - ideally one in SEARO and one in WPRO Region) to Adolescent Health Competencies.

The activities that will be undertaken are:

- Endorsement of Adolescent Health Competencies by WHO Headquarters: this is required before work can continue;
- Refinement of the competencies in light of feedback from WHO;
- Identification of at least two Faculties of Public Health (ideally one in SEARO and one in WPRO Region), this will be lead by WHO;
- Provide support for orientation of these Faculties of Public Health to Adolescent Health Competencies; and
- Provide support to these Faculties of Public Health to incorporate the Adolescent Health Competencies into their curricula.

Intended audience

- Departments of Child and Adolescent Health, World Health Organization, Geneva, SEARO and WPRO
- Faculties of Public Health, West Pacific and Southeast Asia Regions (to be identified in collaboration with WHO)

Key Partners

- Dr Venkatraman Chandra-Mouli, Coordinator Adolescent Health, Department of Child and Adolescent Health, World Health Organization Geneva

- Dr Neena Raina, Regional Adviser, Child and Adolescent Health, World Health Organization - SEARO
- Dr Marianna Trias, Regional Adviser, Child and Adolescent Health, World Health Organization - WPRO

Impact

Improved competence (knowledge and skills) in adolescent health for health workers working at primary care level, leading to more appropriate health care and better health and development outcomes for young people

Output

- A document entitled “Essential Competencies in Adolescent Health for Health Workers Working at Primary Care Level”;
- Orientation of at least two Faculties of Public Health (to be identified by WHO - ideally one in SEARO and one in WPRO Region) to Adolescent Health Competencies;
- At least two Faculties of Public Health to incorporate Adolescent Health Competencies into curricula; and
- Documentation of the process for publication in an international journal (ideally Journal of Adolescent Health).

Dissemination

The outputs are all in themselves a means of disseminating the generated knowledge. Additionally, and not funded by Compass, the outputs of this product will be disseminated in other WHO Regions; SEARO and AFRO, with support from WHO. Documentation of the process for journal publication will also contribute to dissemination of generated knowledge.

Timeframe

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Finalisation of Draft Document												
Identification of Collaboration Faculties of Public Health												
Orientation of Faculty to Competencies												
Support to incorporate Competencies into Curricula												
Documentation of process												

Activity 3: Engaging men in sexual, reproductive, maternal and child health - why is progress so slow?

Background and Approach

There has been increasing recognition of the negative and positive impact of men's knowledge and behaviour on the health of their partners and families and the importance of greater engagement of men in sexual, reproductive, maternal and newborn health.^{12,13} Family planning, pregnancy, childbirth, infant feeding and newborn care tend to be thought of as “women's business” but are often governed by men. Pregnancy is a time when expectant fathers feel proud and responsible, and likely to be more open to health promotion messages and to attending health services.

However, men's participation remains low and progress in making the needed changes to antenatal and postnatal care, to health care provider training, to clinic protocols and communication tools, and to indicators for monitoring and evaluation, has been slow. The push to prevent mother-to-child transmission of HIV has stimulated most

¹² UNFPA. It Takes Two: Men as Partners in Maternal Health. 11 July 2007 <http://www.unfpa.org/public/global/pid/84>

¹³ Sternberg P, Hubley J. Evaluating men's involvement as a strategy in sexual and reproductive health promotion. Health Promotion International. 2004;19(3):389-396.

studies to date, most of which have been in Sub-Saharan Africa, with few published studies from Asia and the Pacific.^{14,15} However, there are examples of successful efforts to improve men's involvement in reproductive and maternal health in several settings in Asia and the Pacific in the grey literature.

There is generally much interest and willingness by men and women for expectant and new fathers to be more involved. Barriers are context specific and include both structural and socio-cultural factors, such as cultural and gender roles and expectations, lack of time, men being away from home for seasonal work, individual and community education, provider attitudes, the clinic environment, and economic factors. Potential strategies to involve expectant fathers include 'parentcraft' classes (Sri Lanka), a couple antenatal and postnatal visit, information for groups of fathers at antenatal clinics (Lao PDR), and reaching expectant and new fathers in the workplace.

A Masters of Public Health (international health stream) student will be recruited to undertake this consultation and review work as an MPH Research Project in 2011. Under supervision the student will:

- identify and document examples of good practice in relation to greater engagement of men in SRH and MCH, through review of the peer-reviewed and grey literature and consultations with relevant academics, UN and other development agencies, and national MCH officials
- map the extent of these examples
- review existing maternal and reproductive health guidelines for the extent to which they encourage male involvement, and review the availability of supportive tools including consultation protocols, research instruments, cost analysis tools, communication materials, and indicators

The review will draw on Compass' own and others' experiences of encouraging male involvement in antenatal care in Laos, Indonesia, PNG and Sri Lanka. Compass will collate, develop and disseminate examples of relevant guidelines, protocols, research tools, tools for cost analysis, communication materials, and indicators to encourage greater progress in the region.

Intended audience

Greater involvement of men is a cross-cutting issue of relevance to a broad array of sexual, reproductive, maternal and child health initiatives so the intended audience is wide.

- Ministries of Health in WHO WPRO and SEARO priority countries
- Donors including AusAID and World Bank.
- WHO, UNFPA and UNICEF
- International NGOs
- Provincial / District level planners
- Consultants

Key partners

This activity will be undertaken in collaboration with UNFPA, Asia Pacific Regional Office, (Dr Saramma Mathai, Regional Team Coordinator and Maternal Health Advisor) and the International Women's Development Agency (Jo Hayter, CEO).

Impact

The aim of this activity is to engage with the regional offices of WHO, UNICEF and UNFPA to analyse the reasons for slow progress; to promote varied models for greater male involvement, that may be applicable in different settings in the region; and to make recommendations in relation to relevant tools and indicators.

It is expected that greater engagement by men will result in:

- Increased attendance of pregnant women at antenatal care
- Improved maternal nutrition contributing to lower risk of anaemia and low infant birth weight
- Improved birth preparedness contributing to less delay in reaching emergency obstetric care when there

¹⁴ Iliyasu Z, Abubakar IS, Galadanci HS, Aliyu MH. Birth preparedness, complication readiness and father's participation in maternity care in a northern Nigerian community. *Afr J Reprod Health*. 2010;14(1):21-32.

¹⁵ Theuring S, Nchimbi P, Jordan-Harder B, Harms G. Partner involvement in perinatal care and PMTCT services in Mbeya region, Tanzania: the providers' perspective. *AIDS Care*. 2010;24:1-7.

are delivery complications¹⁶

- Higher rates of exclusive breastfeeding with lower rates of infant infections and deaths¹⁷
- Higher uptake of contraception use with fewer induced abortions
- Less risk of STIs and HIV for men, women and children
- Decreased exposure of children to passive smoking
- Improved couple communication and greater support for women with less risk of violence, and better mental and emotional health and well-being.¹⁸

Outputs

- Report with collection of good practice examples useful for advocacy and teaching, and review of literature
- Policy analysis paper
- Two page policy brief with recommendations
- Collection of tools: protocols (couple ANC visit), couple counselling guidelines, communication materials and indicators

Dissemination

The report, policy recommendations, tools and reference materials will be disseminated through the Compass web-site (with a time-bound interactive question and answer forum), with an alert through electronic mailing lists, other relevant web-sites, AusAID, PMNCH, relevant regional meetings and conferences, through Compass' contacts in relevant international NGOs, and regional offices of WHO and UNICEF. Compass will collaborate with IWDA, the Australian White Ribbon Alliance and Neil Pakenham-Walsh, Co-Director of the Global Healthcare Information Network. in dissemination and advocacy efforts.

Timeframe

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Recruitment of appropriate post-graduate student												
Literature review and consultations												
Write report and Policy Brief												
Prepare paper for publication												
Disseminate findings and recommendations												

Dissemination: Achieving MDG 5 for adolescents

In 2009 and 2010, Compass undertook a program of work on ensuring equitable progress towards MDG 5 for adolescents. This comprised three activities:

1. A review of the extent to which national-level data sources capture data on reproductive health outcomes for adolescents, neonatal outcomes for the babies of adolescent mothers, and access to reproductive health services for adolescents;
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.

¹⁶ Shefner-Rogers CL, Sood S. Involving husbands in safe motherhood: effects of the SUAMI SIAGA campaign in Indonesia. J Health Commun. 2004;9(3):233-58.

¹⁷ Susin LR, Giugliani ER. Inclusion of fathers in an intervention to promote breastfeeding: impact on breastfeeding rates. J Hum Lact. 2008;24(4):386-92.

¹⁸ Cook J, Bewley S. Acknowledging a persistent truth: domestic violence in pregnancy. JRSoc Med. 2008;101(7):358-63.

These activities confirmed that adolescents have specific reproductive health needs, face particular barriers to accessing reproductive health information and services, and that context-specific responses are required. Much of this work has already been disseminated through a variety of channels including:

- Preparation of a Briefing Paper and Annex available on the Compass website;
- Submission of two papers for publication in peer-reviewed journals;
- Presentation at a number of international conferences and meetings including the UNICEF Adolescent Health and Development Regional Meeting (Bangkok, June 2009), PHAA International Health Special Interest Group Meeting (Canberra, September 2009), International Association of Adolescent Health Congress (Kuala Lumpur, October 2009), AMREP Global Health Forum (Melbourne, April 2010), UN DPI-NGO Conference (Melbourne, September 2010), and Family Planning International Conference (Wellington, October 2010);
- Dissemination of Briefing Paper in print and CD formats through Compass Exhibition Booths at Women Deliver (Washington, June 2010) and the UN DPI – NGO Conference (Melbourne, September 2010); and
- Preparation of a two-page Policy Brief available on the Compass website and distributed through regional networks including the Pacific Senior Health Officers Network (PSHON) and the newly created Australian Sexual and Reproductive Health Network, of which Compass is a founding member.

In 2011, there will be ongoing dissemination of the results of the Vanuatu case study through the following channels:

- Direct feedback to the Vanuatu MoH, Vanuatu AusAID post, Compass' in-country research partner (Wan Smolbag), and study participants in March;
- Engagement with the Vanuatu MoH to ensure that the findings of the study inform the development of Vanuatu's Guidelines for Youth Friendly Health Services (which has been requested by the MoH and is planned for March 2011) and the next iteration of Vanuatu's Reproductive Health Strategy (due for review in 2011);
- A formal research report which will be available on the Compass website;
- A series of four two-page Policy Briefs on key findings to be available on the Compass website and disseminated through regional networkers including PSHON, the SRH Network, UNFPA and IPPF;
- Preparation of two papers for peer review publication; and
- Presentation at regional meetings and international conferences where appropriate.

In addition, Compass has been approached to disseminate the results of the above work through two specific opportunities to leverage external funds. The first is that in July 2010 Compass was approached by Marie Stopes International to submit a joint proposal to the World Bank's Reproductive Health Capacity Building Grant scheme. The proposal is to develop youth friendly health service guidelines and a training manual for health workers providing adolescent reproductive health services in Timor-Leste. This is consistent with Timor-Leste's National Health Priorities and would utilise the knowledge generated through Compass' adolescent reproductive health work. It is also an opportunity to strengthen Compass' engagement in reproductive health in the region.

The second opportunity is that Compass has been approached by the World Bank Institute to adapt its course on Reproductive Health and Health Sector Reform to a Pacific audience. Discussions are currently at an early stage and involve sourcing external funding and developing a ToR for a Pacific needs assessment to see whether such a course may be of value to Pacific participants.

Product 3: Solutions for Maternal and Newborn Care in Difficult Settings

This product draws together earlier work that examined how standard strategies for delivering maternal and newborn care need to be adapted to difficult settings, that is: where mortality rates are high, access to services is low and there are many barriers to timely emergency referral. Special attention is paid to building evidence that is tailored to settings in Asia and the Pacific. In 2011 Compass will consolidate previous work on overcoming the second delay, reaching the urban poor and expanding options for community-based childbirth and postnatal care by:

- undertaking one new activity, on maternal sepsis (described more fully at the end of this section), that addresses a knowledge gap identified in 2010; and
- completing and disseminating outputs from 2009 and 2010.

Background and Approach

In 2009 and 2010 Compass work on the 'second delay' (delay in reaching emergency obstetric care following a life-threatening complication) provided new thinking around what families and district health managers can do to enable timely referral. Similarly, work on the potential of community-based care, such as community-level provision of oxytocic medicines to prevent post-partum haemorrhage, demonstrated that it may be possible to adapt successful models from countries like Nepal to other difficult settings in the region. However, this is not without risks and introduction will require a systems approach that carefully measures any unintended outcomes. This work revealed a number of knowledge gaps, the most significant of which is the lack of current information regarding true causes of maternal sepsis, especially community-acquired infection after childbirth or abortion. The research also highlighted the importance of timing to provide care immediately after childbirth, in the early postnatal period. Evidence has now accumulated but is not well expressed in health service delivery. In 2010 Compass explored, through a best practice consultation held in partnership with WHO, the potential for greater integration between programs for birth-dose vaccination against hepatitis B (which must be delivered within 24 hours of birth) and other aspects of maternal and newborn post-natal care.

New work in 2010 recognized that while many difficult settings are rural or remote, achieving significant, equitable progress in maternal and child health in Asia will increasingly depend on improving the health of city dwellers and, in particular, improvements in health of the urban poor. Compass commenced two case studies of smaller cities in The Philippines, as characteristic of a rapidly growing demographic with increasing health inequities. Under decentralized administration, local level governments have responsibility for delivery and some funding of health services, however, many do not have the capacity to take advantage of their autonomy. These case studies are documenting the challenges encountered by city governments in effectively delivering maternal, newborn and child health services to a rapidly growing urban population and their experiences in trying to respond to the challenges.

Work during 2010 also identified deficiencies in current systems for maternal mortality surveillance and audit, including their failure to measure indirect causes of death, capture deaths in the community, or measure severe acute maternal morbidity. A working paper was commenced late in 2010 that aimed to build on WHO-led consensus, link to new work by others (including the HIS Hub) on causes of death, describe current practice and potential for future improvements.

Intended audience

- National family health or MCH program managers, and their district level counterparts, seeking a broader range of options for settings characterised by difficult access to care and high mortality;
- Health advisors within government ministries and in-country posts of development partners (such as AusAID) providing policy advice to national governments and to those responsible for resource allocations within national health plans and/or plans for testing innovative approaches to service delivery;
- Researchers and health advisors in multilateral health agencies, global health initiatives and the national offices of development agencies (such as AusAID) interested in critique or expansion of current global guidance on maternal and newborn care.

Special interest is expected from audiences who are working in Papua New Guinea (PNG), Philippines, Solomon Islands, Lao PDR, Indonesia, and Pacific Island countries because these settings have been studied specifically within various aspects of this product.

Key partners

- Researchers and health advisors within UN agencies, academic institutions and national governments,

- who have been consulted through the development of products during 2009 and 2010;
- National and district health managers considering innovative approaches to maternal and newborn care services in PNG and Laos;
- Wellcome Trust funded researchers studying maternal sepsis in Africa, Nepal and (possibly) Vietnam;
- WHO health advisors in WPRO and SEARO and researchers in international NGOs and academic institutions studying maternal mortality audits, surveillance and responses.

Impact

The intended impact is for better delivery of an expanded range of interventions for maternal and newborn care in settings in Asia and the Pacific where access is currently difficult. The following objectives contribute to this :

1. A practical approach is identified and described to support health planners in identifying needs and responses for reduction of deaths and disability related to maternal sepsis;
2. Government policy-makers and health managers, at national and sub-national levels, will have access to evidence developed through the work of Compass, in forms that are useful to them, to improve the delivery of maternal and newborn care in difficult settings, both rural and urban;
3. Development partner policy-makers and program staff will have policy-relevant briefs, based on sound evidence, to enable them to improve the application of global evidence to settings in the region.

Outputs

1. Policy Briefs on:
 - a. Reaching Emergency Obstetric Care - Overcoming the Second Delay;
 - b. Expanding Community-based Care at Child-birth in Difficult Settings;
 - c. Integrating Immunisation and MNH Programs for Stronger Child-birth and Post-natal Care
 - d. Improved Systems for Maternal Mortality Surveillance and Response
2. Working Papers on:
 - a. Community-based Care at Child-birth (2011 update of 2010 paper), with special emphasis on PNG, Solomon Islands, Lao PDR and NTT province of Indonesia, which will also include new work on the treatment and prevention of maternal sepsis, oriented to community-based care (either standalone or as part of update to the above working paper)
 - b. Strengthening MNCH services for the urban poor in the Philippines (2011, including case studies)
 - c. Improved Systems for Maternal Mortality Surveillance and Response in Asia and the Pacific (2011)
3. Specific Guidance Documents
 - a. WHO Monograph on the Integration of Birth-dose Vaccination with Post-natal Care
 - b. Checklist for district health managers for improved access to emergency obstetric care;
 - c. In-depth case studies on MNCH access for the urban poor in two cities in the Philippines
 - d. Literature review on good practice in maternal mortality surveillance and audit
 - e. Literature review on contribution of maternal sepsis, oriented to community-based care
 - f. Implementation research guide for introduction of new models of community-based care
 - g. Tool for rapid assessment of the contribution of maternal sepsis

Dissemination

This will initially be through research partners working in similar programs and within WHO, to test the quality of outputs. Following completion of communication products, direct contacts will be sought with government and non-government policy-makers in selected countries where the burden of maternal sepsis is expected to be both high and under-estimated. Dissemination will also be through policy brief and seminars to development partners such as the Asia-Pacific Network for Maternal, Neonatal and Child Health, as well as forums within WHO, Partnership for Maternal, Neonatal and Child Health and academic journals. Additional detail on various aspects of dissemination is provided at the end of this section.

Timeframe

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Policy briefs												
a. Reaching Emergency Obstetric Care - Overcoming the Second Delay;												
b. Expanding Community-based Care at Child-birth in Difficult Settings draft one;												
c. Expanding Community-based Care at Child-birth in Difficult Settings draft two;												
d. Integrating Immunisation and MNH Programs at birth												
e. Improved Systems for Maternal Mortality Surveillance and Response												
Working Papers												
a. Community-based Care at Child-birth (update with maternal sepsis)												
b. Strengthening MNCH services for the urban poor												
c. Improved Systems for Maternal Mortality Surveillance and Response												
Specific Guidance Documents												
a. WHO Publication on the Integration of Birth-dose Vaccination with Post-natal Care												
b. Checklist for district health managers for improved access to emergency obstetric care												
c. In-depth case studies on MNCH access for the urban poor in two cities in the Philippines												
d. Literature review on good practice in maternal mortality surveillance and audit												
e. Literature review on maternal sepsis												
f. Implementation research guide for introduction of community-based care												
g. Tool for rapid assessment of the contribution of maternal sepsis												

Activity 1: Expanding options for community care after child-birth through follow-up of knowledge gaps in maternal sepsis

Background and Approach

This emerged from a knowledge gap identified in 2010 after completing a comprehensive literature review on community-based maternal and newborn care and consulting with other researchers working in the field (including WHO and the London School of Hygiene and Tropical Medicine). It relates to the significance of maternal infection as a cause of death, and the direct causes of life-threatening infections. Infection is the cause of an estimated 12% of maternal deaths in Asia. These infections include those associated with abortion, either, natural or induced, amnionitis and puerperal sepsis. Furthermore, post-partum haemorrhage is estimated to be responsible for over 30% of deaths and while this is most often caused by retained products of conception, a substantial proportion is due to infection. Thus the true contribution of infection to the burden of maternal mortality may be

underestimated, more so in difficult settings¹⁹.

Studies of the bacteriological cause of maternal infections from industrialised countries in earlier times when it was common, and from the present time, found Group A Streptococcus to be the dominant cause.² There appear to be few systematic studies of maternal infections in developing countries in the modern era. One recent review, Wellcome Trust partnerships²⁰, has begun to compile this evidence for sub-Saharan Africa, but there is little evidence available from Asia or the Pacific. This is important for three reasons: to guide the management of women presenting with signs of infection during or soon after pregnancy; to help determine the contribution of infection to the burden of maternal mortality, and to identify, where possible, specific strategies that might help to alleviate this problem. This is particularly relevant to difficult settings where the child-birth or post-natal periods may be subject to unhygienic practices, but is also important for settings where facility-based childbirth has been rapidly expanded with some compromise in quality of care, and/or rapid return of mothers to the home very soon after child-birth.

Early post-natal infections of newborns have been researched to a greater degree, but little has been done, in resource-poor settings, to test the extent to which newborn and maternal infections are from a common source. In addition, this analysis of sepsis is likely to be specific to various regions, and there is a need to develop practical models to guide health planners in responding to this issue in local settings, especially where maternal and newborn mortality is high.

Compass will carry out a comprehensive review of the published literature and program evaluations to identify, and avoid duplication of, any existing important studies. This may also include a critique of current WHO prevention and treatment guidelines, oriented to difficult settings, and identification of research needs

Compass will also continue to consult with WHO and with other researchers, especially Wellcome Trust laboratories, to follow-up with other relevant activities. Initial investigations, following contacts made in 2010, have identified settings with established research facilities, likely to be instructive in the region. These include active programs in two countries in Africa, in Vietnam and a smaller operation in Nepal, where in the Patan region of Kathmandu the Wellcome Trust has established a quality bacteriology laboratory that is currently focused on typhoid studies. Compass may also contribute modest resources to support, in one site, partners such as these to expand current work within an existing research program to include maternal sepsis. One simple exploratory approach may be based on a brief clinical questionnaire, supported by a blood culture.

The intended audience, key partners, and expected impact relating to this activity are as described in the opening section above.

Outputs

Working paper and associated policy brief outlining the:

- contribution of maternal sepsis, especially in difficult settings,
- current state of knowledge, and
- potential for new local knowledge on maternal sepsis to alter policy, including community-based care with antibiotics

Guidance document describing a tested approach to the rapid initial assessment of maternal sepsis in other settings, based on experience with partners as above. If required, proposal for research protocol/s will be developed to establish a multisite study to address this issue in Asia and/or Pacific settings with high home-birth rates.

Completing and disseminating outputs from 2009 and 2010.

Dissemination of second delay and community-based care activities (including maternal sepsis)

Compass will continue to adapt knowledge products on these topics developed in 2010 to be useful in different ways to national government policy-makers, national or sub-national (usually district) health managers, and senior staff in development agencies (bilateral, multilateral or NGO). Draft policy briefs were prepared and circulated in 2010, however in 2011 feedback will be sought and policy briefs referring to different aspects of this evidence base tailored to these different users. Additional communication mechanisms for community-based care will be

¹⁹ See Prata N, Sreenivas A, Vahidnia F, Potts M. Saving maternal lives in resource-poor settings: Facing reality. Health Policy 89 (2009) 131–148 and Pagel C *et al.* Estimation of potential effects of improved community-based drug provision, to augment health-facility strengthening, on maternal mortality due to post-partum haemorrhage and sepsis in sub-Saharan Africa: an equity-effectiveness model. Lancet 2009; 374: 1441–1448.

²⁰ Seale AC, Mwaniki M, Newton CRJC, Berkley JA. Maternal and early onset neonatal bacterial sepsis: burden and strategies for prevention in sub-Saharan Africa. Lancet Infect Dis 2009; 9: 428–38.

developed, depending on demand and feedback received. These may include models for the introduction of new community interventions adapted, for example to PNG or Laos, and/or modelling of the potential lives saved with various community-based strategies.

Dissemination of integration of birth-dose vaccination with post-natal care activities

The WHO/Compass best practice consultation is took place in December 2010. This output will then comprise a WHO guidance document, along with case studies, which will be disseminated through WHO networks as well as Hub contacts. A policy advocacy document, building on new momentum for hepatitis control within WHO will be released in February and an additional policy brief will be developed to alert development partner and national government policy-makers to the existence of these new materials, and the way they may apply in countries that are attempting to scale-up birth-dose coverage, or better integrate immunisation with other services.

Dissemination of reaching the urban poor activities

The key aspect of dissemination is to understand and learn from cities' experiences to improve access and use of maternal, neonatal and child health (MNCH) services. During 2010 Compass examined MNCH health service delivery to urban poor populations in The Philippines, including case studies of two smaller cities experiencing rapid urbanisation. These case studies aimed to document the perspectives of a variety of stakeholders on the barriers to MNCH service delivery and access by and among the urban poor, and the challenges faced by city governments in implementing plans and programs to overcome these barriers. During 2011, these case studies will be finalised and disseminated within The Philippines and to external audiences. The documentation of these experiences will provide valuable lessons for governments in other cities and countries who are also confronted with these issues. It will also provide guidance for donor agencies and national governments in understanding the technical and administrative challenges experienced by local governments in responding to the MNCH service needs of a growing urban population, and how these governments may be supported in developing an effective response.

This product will result in a report reviewing current initiatives to strengthen MNCH service access and delivery among the urban poor in the Philippines; including the in-depth city case studies describing local implementation challenges. Findings will be disseminated to government, development partners and other stakeholders at local, regional and national level in the Philippines through face-to-face presentations and circulation of written outputs. Australian and regional dissemination of findings will occur primarily through direct distribution to key technical development partners such as AusAID, WHO Kobe Centre, WHO, UNICEF and AUICK at central, regional and country levels, and to interested researchers.

Throughout product development, Compass continues to consult with development partners and with participating local governments to guide the format(s) considered most suitable and useful for product dissemination. Donors and development partners will also be asked whether findings can be disseminated via their internal channels (e.g. memos and newsletters) to other groups within their organisation and to other stakeholders, including local governments. Opportunities for presentation at conferences or during other relevant forums will also be explored.

Dissemination of maternal mortality surveillance and audits

At the time of work plan development the working paper flagged in the 2010 work plan was still at an early stage. It aims to focus on countries in south-east Asia or the Pacific, adapting approaches tested elsewhere in the world. As it is being developed in communication with a range of expert stakeholders (including WHO) in the region and other centres of expertise (such as in South Africa, and the University of Queensland), it is expected that these contacts will help identify useful points of dissemination, with others working on this aspect of the evidence base.

In addition, the initial paper aims to identify examples of national, sub-national and selected facility-based programs that identify maternal deaths; especially identify mechanisms whereby health authorities can effectively analyse and respond to causes of maternal death in a timely way. It is expected that these good practice examples will be of interest and use to national health planners, for example those working on the maternal mortality response in PNG.

Product 4: Supporting governments to prioritise and manage the scale-up of effective nutrition interventions: the nutrition critical appraisal tool (NCAT) and associated resources

Background and Approach

The achievement of the targets for MDGs 4 and 5 by 2015 requires urgent, accelerated, coordinated and concerted efforts to improve the nutrition and food security of women and children in many countries in Asia and the Pacific. Undernutrition is the underlying cause of 3.5 million child deaths and 11% of the total global burden of disease²¹. While the causes of undernutrition are mostly predictable and preventable²¹, countries with a high burden of undernutrition often lack the knowledge, capacity and resources to prioritise and scale up effective nutrition interventions, and to engage partners in a comprehensive integrated approach to addressing the issues.²² Frequently, governments are overwhelmed with a multitude of nutrition activities undertaken by a wide range of partners, some of which may be ineffective or even harmful²³.

Many countries in the region have developed or are in the process of developing national nutrition plans. One of the greatest challenges for national nutrition programs is to coordinate stakeholders at the national, provincial and district levels, as well as numerous external partners, to support, promote and respect the implementation of these plans. Additionally, there are limited mechanisms for national nutrition programs to assess the effectiveness of current and proposed nutrition activities and deliver actions and policies in a coordinated and responsive manner. This is highlighted in the recent Scaling up Nutrition (SUN) Road Map²⁴, which calls for global multi-stakeholder processes to assist national authorities, practitioners and policy makers to scale up effective nutrition interventions in ways that respond to the needs of people within countries affected by undernutrition.

Extensive consultation with stakeholders and nutrition experts in Australia, Asia and the Pacific led to Compass developing the concept of the NCAT, a practical guide for national nutrition programs to appraise new and existing nutrition activities against a set of criteria including feasibility, proven effectiveness, cost-effectiveness, benefit to most vulnerable, added value, capacity required, and government ownership and control.

A review of the grey literature identified that the proposed tool fills a necessary gap in the nutrition landscape. Although a tool with the same proposed scope and function was not found, the literature review identified the REACH Ending Child Hunger and Undernutrition Partnership²⁵, a collaboration initiated by WHO, FAO, UNICEF and WFP, as an initiative with a similar approach.

REACH has developed the 'Acting at Scale' series (AASS)²⁶, a set of resources designed to support the implementation of appropriate nutrition interventions to achieve MDG1. Compass will review and redesign the series in order to improve the applicability to government stakeholders with limited nutrition knowledge and to add additional suites to include nutrition interventions designed specifically to address MDGs 4 and 5.

A joint Concept Note has been developed between Compass and REACH, detailing Compass' proposed role in revising the AASS and pre-testing and field testing the updated resources with the governments and stakeholders in Asia and the Pacific. To inform the technical content of the tool and the revised AASS, an extensive review of the literature pertaining to the nutrition interventions outlined in the 2008 Lancet Maternal and Child Undernutrition Series²⁷ is almost complete. The information gathered in these reviews will be collated into simple, practical messages around what, why, when and how to implement appropriate interventions. Case studies demonstrating examples of effective practice from Asia and the Pacific, gathered from the literature as well as dialogue with regional stakeholders will be included in the tool. The case studies will provide a mechanism for improved sharing of experiences between countries and regions which is highlighted as a key tool to assist governments and development partners to effectively scale up nutrition interventions to address undernutrition in the SUN Road Map.

Early negotiations have taken place to field test the revised AASS and the NCAT in one country in Asia and one country in the Pacific. REACH has also agreed to field test the resources in at least one country in Africa. Broad

²¹ REACH Ending Child Hunger and Undernutrition Partnership, <http://www.reach-partnership.org/>

²² 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](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61694-8/fulltext)

²³ 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](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61694-8/fulltext)

²⁴ Scaling up Nutrition (SUN) Road Map, <http://un-foodsecurity.org/sites/default/files/SUNRoadMap.pdf>

²⁵ REACH Ending Child Hunger and Undernutrition Partnership, <http://www.reach-partnership.org/>

²⁶ REACH Ending Child Hunger and Undernutrition Partnership Knowledge Sharing, http://www.reach-partnership.org/knowledgesharing?p_id=58&p_p_lifecycle=1&p_p_state=normal

²⁷ Bhutta, Z., et al., *Maternal and Child Undernutrition 3 What works? Interventions for maternal and child undernutrition and survival*. Lancet, 2008. 371: p. 417-40; [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(07\)61693-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61693-6/fulltext)

stakeholder participation throughout the field testing process will ensure that the capacity of stakeholders is enhanced, and that the resources are effective and appropriate for application at the national level, and relevant at the regional and international levels.

A common concern identified throughout the course of the work to date is that stakeholders working in nutrition and food security often have no prior nutrition training and/ or little opportunity to learn from past experiences, to reflect on best practice or to recognise key intervention points for nutrition specific interventions and nutrition-focused development. In order to build the capacity of nutrition stakeholders from Australia, Asia and the Pacific, Compass, in partnership with the Fred Hollows Foundation and regional nutrition stakeholders, is developing a flexible delivery short course entitled '*Nutrition and Food Security Approaches to Improving the Health of Women and Children*'. The course will be unique in its content, capitalising on the knowledge assembled in the process of developing the NCAT and revising the AASS, and drawing on case studies, concepts, learnings and key messages from the field of international and indigenous public health nutrition. Flexible delivery will ensure that the course is accessible to and appropriate for participants with limited English and/ or in regional and remote areas.

Approach: NCAT development, pre-testing and field testing

Compass will complete and compile a set of reviews of the published literature based on the 42 interventions outlined in the 2008 Lancet Maternal and Child Undernutrition Series. These reviews, in addition to broad stakeholder consultation, will inform the development of the NCAT and the review of the AASS technical guides and case studies. This process will be undertaken in partnership with REACH nutrition and food security experts.

Compass will identify appropriate existing nutrition proposals from the region against which to pre-test the NCAT criteria. The NCAT will be modified based on the results of the pre-test.

Compass will continue to consult and negotiate with proposed field testing countries to jointly develop a field testing framework and project plan. Working with Australian Volunteers International (AVI), Compass has recruited at least one public health nutritionist to coordinate in-country field testing and relevant capacity building. A series of workshops on the use of the NCAT and the AASS will be conducted in each country prior to field testing. Evaluation workshops, engaging key national stakeholders, will be held after the field testing. The process and findings of the field tests will be documented, and the results will inform further revision of the NCAT and AASS, before the resources are piloted and disseminated more widely.

Approach: Short course development

Consultation with regional stakeholders identified a lack of targeted flexible delivery training opportunities in maternal and child nutrition. This gap is particularly acute for both government and non-government nutrition stakeholders with limited prior nutrition training, and those with limited English and/ or working regionally or remotely.

Compass has the opportunity to utilise the knowledge assembled in the process of developing the NCAT, revising the AASS and collaborating with nutrition stakeholders in the region and Australia to develop and deliver a short course series in order to address this gap. The course has received funding from the Fred Hollows Foundation and a reference group represented by key nutrition experts from Australia and the region will guide the development and implementation of the course. The first module will be piloted in Australia in May 2011. Participants for the pilot will include six nutritionists from Timor Leste sponsored under the AusAID Australian Leadership Awards Fellowships (ALAF) scholarship. At least one of the four modules will be delivered in Asia or the Pacific and follow-up support will be provided by Compass in 2011.

Intended audience

Nutrition stakeholders responsible for influencing, making and implementing government policy and nutrition activities in countries with limited nutrition capacity and a high burden of child and maternal undernutrition.

Key Partners

Partner organisation	Key contact and position
Albion Street Centre	Julian Gold, Director
Australian Volunteers International	Eleanor Loudon, Country Manager, Thailand and Cambodia
Australian Youth Ambassadors for Development	David Sharmen-Selvidge, In-Country Manager, Thailand and Lao PDR

Partner organisation	Key contact and position
Fiji School of Medicine	Wendy Snowden, Co-ordinator of CPOND
Food and Agriculture Organisation	Shashi Sareen, Senior Food and Nutrition Officer
The Fred Hollows Foundation	Alison Rogers, Health Promotion Women's Development Co-ordinator
Mahidol University	Pattanee Winichagoon, Associate Professor (Community/International Nutrition)
Nepali Technical Assistance Group (NTAG)	Kalpana Tiwari, Co-ordinator, NTAG
REACH Ending Child Hunger and Undernutrition Partnership	Brenda Pearson, Deputy Director Sally Sakulku, Lao REACH Facilitator Malichan Srithirath, Consultant
South Asian Infant Feeding Research Network/ University of Sydney	Michael Dibley, Associate Professor, International Public Health
UNICEF	France Begin, Regional Nutrition Advisor
World Food Programme	Rita Bhatia, Senior Regional Programme Advisor
World Health Organisation	Jenny Busch-Hallen, Consultant Tommaso Cavalli-Sforza, Regional Advisor, Nutrition and Food Safety

Impact

- Improved mechanisms for national nutrition programs to assess the effectiveness of current and proposed nutrition activities and deliver actions and policies in an integrated and responsive manner.
- Improved capacity of regional nutrition stakeholders to prioritise, select and scale up appropriate nutrition interventions.

Outputs

- A report outlining the outcomes of the pre-testing phase
- A policy brief at the end of the pre-testing phase
- A report outlining the outcomes of the field testing in both field testing sites
- A revised and field tested Acting at Scale Series (AASS), incorporating the NCAT, ready for piloting in the region
- A collated set of reviews of the published literature pertaining to the interventions outlined in the 2008 Lancet Maternal and Child Undernutrition Series
- The delivery and an evaluation report of the core module of a short course, Nutrition and food security short course – approaches to improving the health of women and children
- The delivery and evaluation report of the core module of the short course in the region
- Three elective modules of the short course developed ready to pilot in 2012
- Academic papers published in peer-reviewed journals on infant and young child feeding, balanced protein energy supplementation and zinc supplementation

Dissemination

- Direct feedback to (and from) the governments of countries involved in pre-testing and field testing, including the dissemination of a report outlining the outcomes of the pre-testing and field testing phase
- A short course designed to disseminate the key learnings and case studies assembled through Compass activities in 2009-11 with regional stakeholders
- Participation in, and presentations to, established regional networks and meetings including, the Nutrition Cluster Meeting (Vietnam), the Nepali Technical Assistance Group, the South Asian Infant Feeding

- Research Network, the Asian Congress on Nutrition (ASN)
- Contribution to the establishment of, and participation in, a pre-congress workshop on nutrition capacity building at the XI ASN Singapore
- Revised AASS, incorporating the NCAT, to be disseminated through the REACH Knowledge Sharing Platform (<http://www.reach-partnership.org/knowledgesharing>)

Timeframe

Output	J	F	M	A	M	J	J	A	S	O	N	D
A report outlining the outcomes of the pre-testing phase												
A policy brief at the end of the pre-testing phase												
A report outlining the outcomes of the field testing in both field testing sites												
A revised and field tested Acting at Scale Series (AASS), incorporating the NCAT, ready for piloting in the region												
A collated set of reviews of the published literature pertaining to the interventions outlined in the 2008 Lancet Maternal and Child Undernutrition Series												
The delivery and an evaluation report of the core module of a short course, <i>Nutrition and food security – approaches to improve the health of women and children</i>												
The delivery and evaluation report of the core module of the short course in the region												
Three elective modules of the short course developed												
Academic papers published in peer-reviewed journals on infant and young child feeding, balanced protein energy supplementation and zinc supplementation												

Monitoring and Evaluation

Compass is completing the final year's program of work within the current framework of the AusAID Strategic Partnerships for Health Knowledge Hub Initiative. There is a strong focus on dissemination and consequently a need to focus on evaluation of uptake and relevance of the work. Compass' monitoring and evaluation approach draws upon feedback documented by Adrienne Chattoe-Brown, (AusAID Health Resource Facility Consultant) in the *Finalising the Monitoring and Evaluation Frameworks and Planning for the Mid-Term Review* and preliminary 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' Monitoring and Evaluation Framework (see below) are directly aligned to those in the Cross-Hub Monitoring and Evaluation Framework (MEF) finalised in February 2010. This framework outlines the indicators to be measured for the program of work both internally and externally and tools used to monitor the outputs' quality and process.

Consistent with the 2010 work plan, Compass will continue to use the *quarterly reports* and *activity matrix* as internal tools to monitor the progress and quality of activities under each product. A *product overview* tool has been developed as an internal quality insurance mechanism to ensure that each product contributes to the overall guiding objectives outlined in the Cross Hub Monitoring and Evaluation Framework. In line with the 2011 strategic direction, Compass will also introduce a *dissemination log* as a means of verification to monitor the dissemination and uptake of Compass products, to take advantage of cross and intra-Hub synergies, avoid duplication and facilitate coordinated opportunities for AusAID, development partners and in-country stakeholder to engage in the process of knowledge transfer and uptake.

The extent to which the Technical Advisory Groups (TAGs) and key stakeholders are consulted in the product design process is critical to the overall quality of the products. Compass continues to use the comparative advantage as three partner organisations to utilise the wider network of technical expertise in a peer review process. Other quality assurance mechanisms include: (a) TAG review of work plans and individual products; and (b) peer review as part of international journal submissions. Final products will include working papers, policy option papers, peer reviewed journal publications, case studies, conference presentations, guidance briefs, and on-line resources.

COMPASS: Monitoring and Evaluation Framework

	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.	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. • Case studies of policy engagement or of increased capacity for engagement of Australian expertise. 	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Key informant interviews and evaluation workshops • 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 studies of policy engagement 	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Self-assessment against the work plan on convening activities in product design, implementation, review and dissemination. • Case study on collective, cross hub themes. • Case studies on networks established and supported for selected products. 	
Objective 3: To effectively disseminate relevant and useful knowledge resources which aim to influence policy thinking at national, regional and international levels.	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Self-assessment and reports against individual product dissemination strategies • Monitoring tools: <i>product overview, quarterly reports, dissemination log.</i> • 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.	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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

