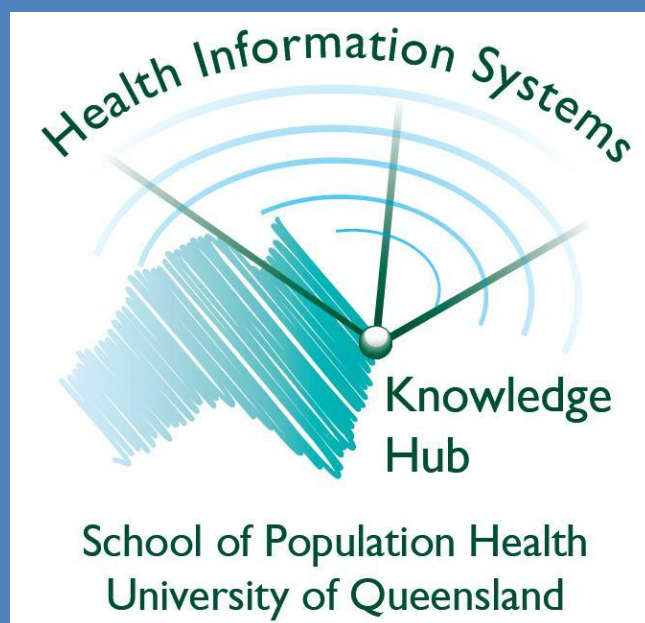


2011 WORK PLAN



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Acronyms List

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
AusAID	Australian Agency for International Development
CEO	Chief Executive Officer
CoD	Cause of Death
DHS	Demographic Health Survey
DoHA	Department of Health and Ageing
ESCAP	Economic and Social Commission for Asia and the Pacific
FSMed	Fiji School of Medicine
HIS	Health Information Systems
HMN	Health Metrics Network
HQ	Head Quarters
ICT	Information and Communications Technology
IFHRO	International Federation of Health Records Organisation
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
M&E	Monitoring and Evaluation
NZ	New Zealand
PHIN	Pacific Health Information Network
PSHON	Pacific Senior Health Officials Network
PMA	Pasifika Medical Association
PRISM	Pacific Regional Information Systems
QUT	Queensland University of Technology
SEARO	South East Asia Regional Office
SIGIH	Special Interest Group International Health

STA	Short Term Advisor
ST	Short Term
SPC	Secretariat of the Pacific Community
SPH	School of Population Health
TAG	Technical Advisory Group
UN	United Nations
UQ	University of Queensland
VA	Verbal Autopsy
VR	Vital Registration
WCH	Women's and Children's Knowledge Hub
WHO	World Health Organization
WPRO	World Health Organization Western Pacific Region

1. Executive Summary

The Health Information Systems (HIS) Knowledge Hub has continued to expand the evidence- base about the best methods for improving HIS to strengthen country health systems in developing countries in the Asia Pacific region. The following work plan for 2011 builds on the overarching activities initiated throughout 2009 and 2010. The proposed work plan for 2011 continues the expansion and consolidation of research priority investments with an emphasis and focus on dissemination of Hub products for stakeholders. The importance of translating new knowledge into policy appropriate formats for dissemination is a priority activity for the 2011 work plan.

2. Introduction

In 2008, the Australian Agency for International Development (AusAID) established four Knowledge Hubs for health, each addressing different dimensions of the health system: Health Policy and Finance; Human Resources for Health; Women's and Children's Health and Health Information Systems.

The School of Population Health (SPH) at the University of Queensland (UQ) signed a funding agreement with AusAID in April 2008 to initiate and operate the Health Information Systems (HIS) Knowledge Hub.

Phase 1 of the Hub (2008) focused on the establishment of infrastructure, office space, recruitment of personnel, development of the HIS design documents (including the 2009 work plan), identification of priority HIS areas, building networks and development of an assessment tool. The HIS work plan for Phase 1 was completed on 31st January, 2009.

Phase 2 focused on enhancing and further developing the knowledge and evidence-base for HIS development. Seven products were undertaken as part of the HIS Knowledge Hub's Phase 2 in 2009. The products were designed to support countries and stakeholders in development to strengthen health information systems. These were seen as the initial steps, to be built on in each subsequent annual work plan.

Phase 3 has continued to build on overarching and priority activities initiated as part of Phase 1 and 2. The HIS Knowledge Hub activities are targeted to conceptually and critically enhance and develop knowledge in-under-researched areas.

Phase 4 will continue the development and consolidation of already targeted investments. The primary focus of the 2011 plan is the completion of complex initiatives and strategic dissemination in appropriate formats for partners and stakeholders.

3. Aim and Objectives

The overall **aim** of the **Health Information Systems Knowledge Hub** is 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. The HIS Knowledge Hub will challenge existing assumptions about best practice in HIS development and will add to the body of knowledge in the area of HIS through targeted research within the region.

This overall aim will be accomplished through the following four key **guiding objectives**:

- I. To increase the critical, conceptual and strategic analysis of key HIS issues relevant to the Asia-Pacific region that can be used to inform policy thinking and practical application at the national, regional and international levels;
- II. 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;
- III. To effectively disseminate relevant and useful HIS knowledge resources which aim to influence policy thinking at national, regional and international levels;
- IV. To expand the HIS capacity of Australia institutions and professionals to participate effectively in evidence informed policy making.

The HIS Knowledge Hub is working in partnership with global and regional organisations to facilitate development and integration of health information systems and local capacity to ensure that cost-effective, reliable and relevant information is available, and used, to better inform health development policies across the region.

Each of the HIS Knowledge Hub products are built upon the following operational principles:

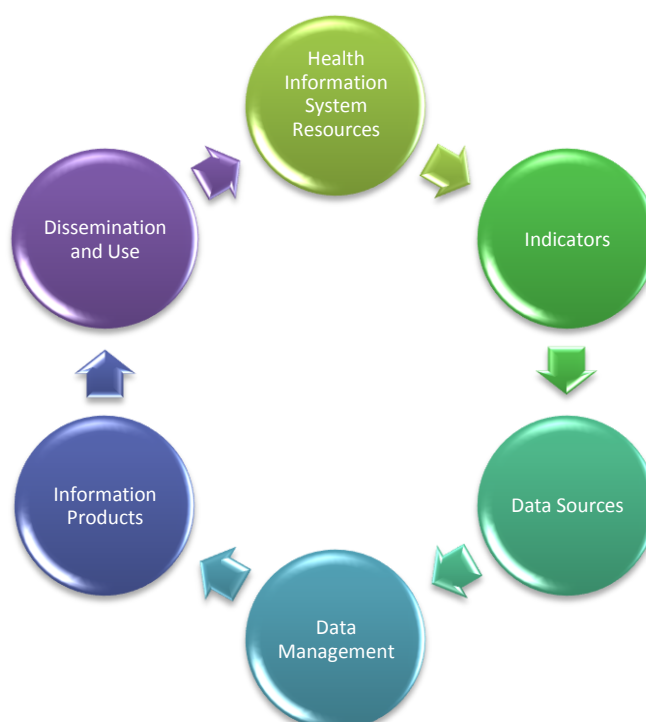
OPERATIONAL PRINCIPLES	
CONTESTABILITY	The HIS Knowledge Hub will challenge conventional thinking and promote accountability for HIS developments.
INNOVATION	The HIS Knowledge Hub will push the boundaries by developing knowledge in areas that have not yet been explored, and seek out and discover new ways to improve information for evidence-based decision making at all levels of the health system.
PRACTICALITY	Products will be able to be realistically applied to and by the Asia Pacific region.
ACADEMIC RIGOUR	The strength of our global networks will be applied to the work of the Hub through peer review and critique of our findings, ensuring global relevance and academic excellence is achieved.
CAPACITY DEVELOPMENT	The HIS Knowledge Hub will engage key partners in sustainable capacity building efforts.

4. Defining Health Information Systems

A HIS should be an integrated effort to collect, process, report and use health information and knowledge to influence policy and decision-making, programme action and research. Sound decision-making at all levels of a health system requires reliable health statistics that are disaggregated by sex, age and socioeconomic characteristics. At a policy level, decisions informed by evidence contribute to more efficient resource allocation and, at the delivery level, information about the quality and effectiveness of services can contribute to better outcomes.

Information systems, particularly at the lower levels of the health system, need to be simple and sustainable and not overburden health delivery staff or be too costly to run. Peripheral staff need feedback on how the routine data they collect can be used and to understand the importance of good quality data for improving health. Capacity building is also required to ensure policymakers at all levels have the ability to use and interpret health data, whether it originates from routine systems, health surveys or special operational research. It is also important that staff working at the periphery of the health system understand the significance of local data for local program management, and that their needs for strengthened capacity for critical health statistical analysis are met. Local use of data collected at lower levels of the health system is a key step for improving overall data quality.

The Health Metrics Network (HMN), in their *Framework and Standards for Country Health Information Systems*¹, has defined the health information system as consisting of six components. The activities and research at the HIS Knowledge Hub adhere to the standards and guidelines of the HMN Framework and other global standards for health information, as necessary.



¹ World Health Organization (2008), *Framework and Standards for Country Health Information Systems*. Health Metrics Network, Second Edition. Geneva

5. Key Achievements 2009

The 2008 work plan focused on the infrastructure and staffing recruitment of the Hub. Based on this foundation, the 2009 work plan progressed into both **consolidating** and **synthesising knowledge** on the state of health information systems in the Asia Pacific region and **creating knowledge** on improving utility, utilisation, cost effectiveness and sustainability of health information systems in the region. Underpinning these activities was ensuring the effective dissemination of this knowledge amongst various stakeholders in the region and in development agencies.

The 2009 work program focused on two key areas, firstly, the Pacific and specifically understanding and assessing the status of health information systems in this region the areas of weakness and the areas of challenge. The second area of focus was an investment in activities that identified best practice scenarios in health information systems in particular it considered what best practice HIS could tell us about “how to” improve health information systems in developing countries.

Seven products were undertaken as part of the HIS Knowledge Hub’s Phase 2 in 2009 and resulted in the development of 9 working papers and 5 documentation notes (Appendix 1). The products were innovative activities that supported countries and stakeholders to strengthen health information systems, as well as providing continuance of knowledge building generated since the establishment phase of the HIS Knowledge Hub. Both these aims and the over arching guiding AusAID objectives for the Knowledge Hubs to “expanded expertise and knowledge” provided the context for the development of the 2009 work plan. The following is a description of the 2009 work products and how they contributed to overall objectives of the Knowledge Hub initiative together and the lessons learnt for Aid Effectiveness.

Product	Activity
I	Pacific Focus: Reviewing health information system development in the Pacific region
II	Critical review and appraisal of HIS development in partner countries/ region
III	Field-testing guidelines for assessing quality and functioning of Vital Registration Systems
IV	Role of Health Surveys in HIS development
V	Building networks within Australia, regionally and globally
VI	Convene a regional HIS development forum
VII	Initiate Australian and regional training programs

A) Objective1:

Increasing the critical, conceptual and strategic analysis of key HIS issues

The contribution of critical and conceptual health information analysis deliverables was a key component of the 2009 work plan. The HIS Knowledge Hub targeted Objective One primarily through four of its seven products

The new knowledge and evidence generated from the Hub's work has been fed back into the evolution of the HMN Framework and related tools and products globally, and shared with countries and development partners. Thus, the work of the HIS Knowledge Hub has complemented that of HMN², and builds on existing country assessments that have already been undertaken in the Asia-Pacific region. This dynamic approach has ensured that the HMN Framework remains an instrument of consensus, as intended, and that the vision, standards and processes required of HIS will evolve as systems mature. More broadly, the HIS Knowledge Hub has collaborated closely with HMN and WHO to improve health information systems knowledge and performance, particularly in the Asia-Pacific region, by focussing on those priority activities in which the Hub can add value and has a comparative advantage.

Product I: Pacific Focus

The Pacific region represents a diverse and complex range of countries at different stages of development. The Mapping Product included a two country qualitative study. The findings of the mapping were distilled and provide a baseline of knowledge about the current state of the health information systems in a cross-section of the Pacific which had previously not been documented nor critiqued. They can be used as a strategic overview of the common issues faced in the region, as well as a baseline for use by countries, donor organisations and development agencies, in determining areas requiring improvement and further research and analysis. Vanuatu has utilised this work to commence discussions with development partners on HIS strengthening. (See Documentation Notes 3 and 4 from the 2009 Series).

²www.healthmetricsnetwork.org

Product II: Critical appraisal of HIS developments

The HIS Knowledge Hub reviewed Asia Pacific HIS developments conducted in the period 2000-2010, and listed them by country, type and date. Originally it was felt to be a valuable way to gain lessons learnt from efforts within the region. Several difficulties were faced in accessing this predominantly grey literature. The Technical Advisory Group (TAG) reviewed progress made (November 2009) and advised that an in-depth critical assessment was not a practical course of action to be of use for policy thinking, or practical application. A full critical appraisal was deemed an extremely large piece of work to successfully complete in one year. The Hub assessed the advice from the TAG and accepted their concerns regarding the ongoing viability of this product and subsequently reoriented our thinking and work plan to take account of these issues. The information collected for this product flows into Product 1 of the 2010 work plan is designed to result in a practical product that informs health service managers in partner countries. (See Working Papers 3 and 7 from the 2009 Series). Working paper 7 specifically highlights the many issues and challenges facing Pacific countries and recommends a series of ideas that are useful in the consideration of improving regional HIS investments.

Product III: Field testing of Vital Registration Tool

In 2008 a detailed tool for self assessing the quality and functioning of country vital statistics was developed by the HIS Knowledge Hub, WHO and Health Metrics Network. In 2009 the tool was field tested by the HIS Knowledge Hub in Sri Lanka and the Philippines, whilst WHO funded field testing in Syria and Ecuador. These pilots greatly helped determine the usefulness of the tool for countries to assess their current vital statistics systems, as well as assisting both Sri Lanka and the Philippines to develop plans to improve their own systems. The field testing results were used to refine the tool, which was published (See Working Papers 1 and 2 from the 2009 Series) by WHO co-badged with the HIS Hub and made available for use by other countries. The guidelines also include a Rapid Assessment component which ESCAP and WHO has distributed to 55 member states including 12 Pacific countries. To date 15 countries globally have completed the tool including two Pacific nations. The Pacific experience was shared at an international conference in Bangkok in June 2010 and the learning from this exercise will be shared with the Pacific region more widely as part of an overall strategy to improve vital registration systems in the Pacific. The HIS Hub has included some critical work to build capacity in the Pacific to use and respond to this effort in product Four of the 2010 work plan. The results will be used to prioritize WHO and ESCAP vital statistics improvement plans (See Working Papers 1, 2 and 8 and Documentation Notes 1 and 2 from the 2009 Series).

Product IV: Health Surveys in HIS

The HIS Knowledge Hub collaborated with the Institute for Health Metrics Evaluation (IHME) at the University of Washington and the Australian Bureau of Statistics (ABS) to provide a review of health surveys as a data collection method, in order to provide practical guidance on the “best use” cases for this approach. Two working papers were completed on the role health surveys play within the broader need for health data collection. These papers provided guidance on the best use cases and the cost implications of undertaking health surveys, including some discussion of the pros and cons of surveys for various elements of data required. The working papers provide extensive usefulness to countries and international donor and development organisations when assessing health information (See Working Paper 5 and 6 from the 2009 Series).

Lessons for improving aid effectiveness

The most successful method of increasing the critical, conceptual and strategic analysis of HIS Knowledge Hub was through direct country participation. This was well demonstrated through the field-testing of the Vital Registration tool in Sri Lanka and the Philippines. By engaging the countries to undertake the research themselves and take ownership of the process, the rate of successful uptake of the new knowledge is likely to be increased, as will be the sustainability of the outcomes (WHO 2009).

There are unique challenges in the Pacific that need to be recognised in development assistance, especially in the area of HIS. These include:

- Greatly limited human resources to manage and develop systems;
- Range of cultural and “colonial” influences on the region determining various ways of addressing and using health information;
- Heavy reliance on often expensive technology for communications because of the geographic isolation within countries and territories across the region;
- The relative newness of the concept of HIS in the country systems has resulted in both poor resource (financial and human);
- Poor understanding amongst the health workforce of the utility of HIS;
- The role of political imperatives in decision making over a strong health information evidence base; and
- Professional isolation; and varying levels of interest and investment by development partners into HIS in Pacific Countries and territories, especially the smaller nations and territories.

A key lesson learnt whilst undertaking the Pacific focus work was the recognition that measurement of policy thinking and uptake as well as practical application requires a longer time period to allow judgement of an increase in critical, conceptual and strategic analysis of HIS issues. The central lesson has been that if policy is to be influenced and changed then political commitment is essential.³ What is recognized is that much of the historic HIS investments in the region have focused on technology,

³ Scaling up Research and learning for health systems: now is the time WHO 2008

hardware and software (e.g. PATIS) often to the detriment and lack of broader approaches to HIS investments.

A challenge encountered was that of limited human resources and time and donor fatigue in partner countries. Often there were multiple groups in country researching similar information. This made consultation with stakeholders and decision-makers complex. The HIS Knowledge Hub addressed these issues by only engaging with countries when asked or through adjacent and complementary opportunities with key development partners to enter the country. This ensured there was no duplication of work within the country and that the Hub remained within the confines of partnership principles whilst working in the Pacific.⁴ More importantly, a major lesson learnt is recognizing that Pacific development approaches are often unique and inclusive of cultural respect and reciprocity.

B) Objective 2:

Expand convening powers and engagement

In 2009 the establishment, development and maintenance of international, regional and national relationships was deemed a priority for the Hub and has been the cornerstone of most activities throughout the year. This priority was reinforced by the 2008 consultations within the region with countries and major development partners and the TAG. The Hub identified the importance of targeting relationships with organisations with specialized expertise related to the specific products of the work plan as well as building upon existing relationships of the University of Queensland's School of Population Health that provided long term strategic support and information dissemination opportunities. In addition major gaps in networks were identified, especially within the Pacific region. This resulted in the establishment of a range of new relationships and supporting the emergence of a new organization in the HIS profession namely the Pacific Health Information Network (PHIN). These have been outlined in Appendix 2. The emphasis on convening and partnerships was built into all Products, however was reflected specifically in Products V and VI.

⁴ Key principles that guided the development of the Hub and its work programme have emanated from the Compact principles working with partners' mutual respect, shared vision, MDG development and integrated efforts. www.usaid.gov.au/publications/pdf/anzpacpartnership.pdf

Product V: Building Networks

The key achievements in this area have been:

The establishment of a MoU with the Fiji School of Medicine to undertake collaborative work around HIS curriculum development and regional training programs. This relationship has further been expanded and built upon both the 2010 and 2011 work plans.

The support and establishment of the Pacific Health Information Network (PHIN) evolved from a meeting held in Nadi, Fiji in September 2009. Operational health information professionals from twelve Pacific nations attended and gave presentations on their countries' health systems and the status and use of technology in their health systems. Organisations such as the FSMed, WHO, SPC and AusAID attended. The group maintains regular email contact to continue the mentoring, knowledge sharing and networking between members, and formalisation of the group is currently being arranged through linkage with the HIMAA (See Working Paper7); an example of the real benefits of the PSHON network lies in the ability for 12 member Pacific countries to discuss key HIS issues without leaving their country. The Hub provides a network facility where many day to day HIS issues are discussed and ongoing support and information can be transferred quickly.

A close partnership with National Centre Health Information Research Training (NCHIRT) (located at QUT) has resulted in its contribution to various aspects of our work program and helped strengthen the capacity of the NCHIRT an Australian institution to support coder training in the region. Within the 2010 work plan this partnership has resulted in a tripartite relationship that now includes the Fiji School of Medicine. NCHIRT, the Hub and FSMed will conjointly deliver the first death certification training in the region to 6th year medical students at the FSMed an initiative that will also provide validation of a WHO training tool, which will then support its further rollout both in the Pacific and globally.

Central to the development of the Hub has been the joint partnership with the Health Information Management Australian Association (HIMAA), the Australian national professional association of health information specialists. Aspects of this partnership include development of mentoring relationships between HIMAA members and HIS people in the region and junior Australian HIS professionals and building Australian professionals, increasing access to HIMAA products and tools through the Hub and its dissemination networks.

The strategically chosen membership of the TAG from international experts across the broad range of Health Information System topics and key HIS agencies globally has provided a strong entree into a larger network of influence and dissemination than the Hub could have achieved alone. This has also increased the focus of a greater number of development agencies including WHO, ESCAP and HMN to the needs of the Pacific. Convening the TAG on an annual basis has ensured that the Hub's products and technical processes have remained at the forefront of key international and regional experts and that they are being rigorously peer reviewed by members and their agencies. Various members of the TAG have made themselves available on an individual basis to provide technical expertise to Hub staff during the development of the 2010 work plan. Further there has been a greater customisation of the tools and products due to the breadth of Asian and Pacific expertise in the TAG, which has guided the Hub through individual local experience of specific country needs, then successful dissemination.

Product VI: Convening HIS Forum

The Pacific HIS Development Forum in November 2009 brought together 75 policy-makers (which included 16 partner countries), national and regional institutions, and global HIS www.uq.edu.au/hishub leaders who debated the latest knowledge developments in HIS and shared their own experiences. The Forum was deliberately held back-to-back with the Pacific Senior Health Officers Network (PSHON) meeting (facilitated by the Australian Government's Department of Health and Aging [DoHA]) in Brisbane to get a beneficial cross-over of meeting participants, and limited the time out of country.⁵ The Forum was successful in raising the prominence of HIS issues and challenges in the Pacific Islands to a global audience and recognised the work already undertaken in country. More importantly however senior Pacific policy makers were engaged in HIS issues often for the first time. The results of this particular meeting has led to a number of countries increasing their attention on HIS issues and six countries in particular has sought direct assistance from the Hub to provide technical advice.⁶ It has further cemented emerging network opportunities within the Region by HIS professionals and operational managers and provided a useful dissemination channel for their work as well as allowing for world experts in HIS who had not understood Pacific country contexts to understand Pacific challenges and feed this learning into international arena (See Working Paper 7 from the 2009 Series).

Lessons for Aid Effectiveness

1. The HIS Knowledge Hub has been successful in leveraging greater dissemination and influence upon the effectiveness of development partner investments into HIS through identifying and working with key development agencies and professional organisations in the field. Success was gained through: strategic membership of the TAG; utilising existing relationships of the University to further Hub work; and building collaborations that are sustainable. Utilising the TAG strategically has provided great value and leverage to the Hub. Hub members are particularly interested in the innovative ideas and critical analysis done on the Hub and engaging and utilising them more as partners in this work, than peer reviewers. This broadens the “value for money” of the Hub. In the 2010 work plan, a stronger engagement of TAG members on specific products, will further this value-add. This approach has already demonstrated that the combination of both annual meetings and individual meetings with TAG members provides a new level of robustness to Hub thinking. This internationally accepted practice of academics and UN agencies providing pro-bono review is uniquely available through use of universities to host such a Hub. Further, HIS Hub leadership has provided ability to access networks and advice at both strategic and practical levels, allowing for the smooth alignment of products and dissemination of information;
2. The HIS Knowledge Hub identified a major gap in support to the operational managers of HIS in the Asia Pacific region. Bringing this gap to the attention of HIMAA – Australia's peak organisation for operational managers in HIS – is likely to bring a sustainable resource and network to support the HIS managers in the region. Ongoing support of the HIS regional workforce will be a challenge from a policy perspective, as there will always be competing investments for other high priority population health needs. How the Hub

⁵ PHIN members have identified the tension between the need for ongoing workforce development outside of country and the problem of leaving their posts for long periods of time and the disruption this causes for countries.

⁶ Nauru and Solomon Islands, Fiji, Cook Islands, Vanuatu and Samoa

and its partners manage this tension will require careful assessment and strategic consideration in the wider approach of the development of health system strengthening generally in the region.

C) Objective 3:

Disseminate relevant and useful HIS knowledge resources

All products in the 2009 work plan were developed to ensure that knowledge generated would be disseminated in a relevant and useful way to interested stakeholders. The Hub worked on the design and launch of a new website⁷, hosted through UQ, to be a knowledge repository for HIS related resources and articles. It contains information on news and events, and acts as the central point for accessing the Hub's working papers and publications. The first quarterly newsletter⁸ was published in December 2009, summarizing the work that the Hub undertook over the course of 2009. Additionally, being invited to and presenting proffered papers at key professional conferences and meetings within the region and globally for the HIS profession, has been an invaluable means of dissemination both through formal paper presentations, in addition to the working groups and key networking opportunities availed at these meetings. A broad range of dissemination outputs in each product – such as the documentation notes, working papers, policy briefs and peer reviewed papers (see Appendix 2) have been finalised and disseminated through in-country briefings, direct mail outs to policy makers, health services managers and development partners, and placed on the web for broad access. Monitoring of the utility and accessibility of these means of dissemination is ongoing; to continually improve the effectiveness of the means of dissemination. Immediate dissemination of findings has also been achieved by use of the 2009 product findings into the 2010 work plan, and broadening of activities.

Product I: Pacific Focus

To the best extent possible, all activities undertaken in-country were summarised in the exit briefing to the relevant country partners and development agencies. A summary report on the findings was provided to some countries within 1-2 months to allow their use in planning and implementation activities within country. Preliminary findings from the Pacific mapping undertaken were presented at the Pacific Senior Health Officer Network (PSHON) 2009, Pasifika Medical Association (PMA), 2009 International Federation Health Records Organisation (IFHRO), and Public Health Association of Australia (PHAA) Special Interest Group International Health (SIGIH). The varying range of participants present at each of these meetings provided a different and unique opportunity to share and disseminate the work of the Hub to a wider pool of stakeholders, and increase awareness of HIS and the priority needs and challenges in the region (See Working Paper 10 and Documentation Notes 3 and 4 from the 2009 Series).

⁷ Accessed at www.uq.edu.au/hishub

⁸ Accessed at www.uq.edu.au/hishub

Product III: Field testing of Vital Registration Tool

The Vital Registration tool was launched for testing in Sri Lanka and the Philippines. This was specifically targeted to influence the policy thinking of decision makers across the sectors that were involved in vital statistics in both countries. The results of the field testing were then submitted to feedback and review at a meeting with WHO and its regions in Geneva in August. The results of Product III were again disseminated at the ESCAP meeting in Bangkok in September. Capacity was built both in Sri Lanka and the Philippines for critical analysis of the functioning and data quality to emerge from VR systems. The VR process has meant that there is now human resource capacity in these countries to decide on appropriate measures and evaluations periodically to rapidly improve the value of this cornerstone of health information systems (See Working Papers 1, 2 and 8 and Documentation Notes 1 and 2 from the 2009 Series).

Product IV: Health Surveys in HIS

During the development of two health survey knowledge pieces meetings were held with the IHME team in Seattle, and a presentation of the preliminary work was provided to the TAG in November. The Papers have been completed and peer reviewed and are currently being disseminated (See Working Paper 5 and 6 from the 2009 Series).

Product V: Building Networks

A meeting of a number of key regional agencies working to strengthen health systems in the Pacific, known as the Pacific Partners, was held in Suva, in April, with a follow up meeting in Brisbane in July. The group included AusAID, NZAID, SPC, WHO, WB, and the Knowledge Hubs for Health. These networks became a dissemination resource centre for HIS Hub knowledge to a broader group of interested persons and stakeholders beyond the formal HIS networks. Both the Secretariat of the Pacific Community (SPC) and the Fiji National University (FNU) have been engaged as part of the development of the 2010 and 2011 plan and these networks have further supported the dissemination of information in the region.

Product VI: Convening HIS Forum

Senior executives from Ministries of Health and Statistical Agencies from 16 countries attended the Pacific HIS Development Forum. Also in attendance were global HIS experts, regional agency representatives, and Australian HIS stakeholders. The Forum facilitated the sharing of new knowledge about best practice in HIS development, and participants shared their own experiences in HIS, specifically related to Pacific Island Countries. As noted above in lessons learnt, it is vitally important to have a targeted dissemination strategy for policy makers, which this forum provided (See Working Paper 7 from the 2009 Series).

Product VII: Training Programs

The PHIN conference provided a training platform for Pacific HIM workers where training sessions were conducted to update knowledge and skills in medical records management, clinical and coding and IT solutions relevant to health in the Pacific. Further, a literature review on evaluation of educational interventions on CoD certification was undertaken, and a paper on teaching cause of death certification was peer-reviewed and is soon to be published in the Postgraduate Medical Journal. The results from this review will be used to inform future training CoD training for clinicians. This paper has directly resulted in the tripartite opportunity to deliver death certification training at the Fiji School of Medicine. A one week HIS Course was delivered in September targeting both Pacific and Asian policy makers. Ten Pacific countries and two Asian countries were represented on the program.

Lessons for Aid Effectiveness

1. Key lessons learnt include recognition that dissemination activities can be used as capacity development opportunities. Targeting dissemination activities at the “point of change” and engaging those who will be engaged in advocacy for, and implementation of the change, is critical for successful translation of “research” into policy and practice;
2. Dissecting the dissemination strategies into the various layers of “who wants to and/or needs to know” and “how do they want to hear about it” is vital to ensure that change can be facilitated. Supporting the alignment between changes identified at the implementation level with “political will” at the policy level is an important role of the dissemination strategy;
3. The dissemination strategy for HIS reforms and developments needs to take into account the level of understanding and knowledge/ experience with HIS in the country or region. The Pacific, with less experience, needs a stronger “introduction” to HIS and its role and function than Asian countries, which have a longer history of investing in HIS and progressing broad health system reforms. However to quote one of our TAG members who works in Asian Health Systems... “ ***The Pacific is in dire need of assistance at all levels of HIS strengthening, Asia however has had longer term investments but the quality of their information and what they do with it is poor***” (Professor Terry Hull, ANU).

D) Objective 4:

Expand HIS Capacity in Australia and internationally

Completion of the 2009 work plan has contributed to an increase in evidenced-informed policy making via the strengthening of HIS capacity nationally and internationally. This was expanded through raising the profile of health information system issues and solutions and has been delivered by using the HMN conceptual framework as a basis of discussion, and through our extensive convening of relationships. Capacity expansion is defined as increased access to knowledge; deliberate training efforts mentoring; networking; twinning with other institutions. The need for specific strategy for building capacity in HIS was identified in 2008 by the TAG, further discussion on this need was carried out through a HIS Capacity Building Think-Tank in June 2009. Capacity expansion underpins the approaches for all products however there are some products which emphasized capacity expansion as the key output.

The PHIN meeting provided a training platform for Pacific health information professionals to update knowledge and skills in medical records management, clinical coding and IT solutions relevant to health in the Pacific. The PHIN email network maintains a regular focus on the technical capacity building of its members. The PHIN meeting included a number of participants from Australian government departments, NGO's, academic institutions, as well as regional partners such as SPC and WHO. Supporting HIS leadership capacity within the PHIN network is an important focus of the Hub.

Product VII: Training Programs

The key achievements in this area have been:

An MPhil research scholarship has been awarded to an Australian student to undertake a project that investigates reporting of health information in the Pacific and how it is used for policy-making. The results of this project will be complete in 2010. This scholarship is part of the process of developing the new generation of HIS experts with high level critical analysis skills used by the HIS Knowledge Hub.

A 3-month fellowship was undertaken by a senior clinician from Sri Lanka. The Fellow contributed to the Hub's Products and working paper series, as well as attending summer courses offered by SPH. Dr Saman is now a key resource person in the Sri Lankan HIS community.

The HIS Knowledge Hub coordinated a Fiji clinical coder study tour to Australia in August. This focused directly on facilitating the expansion of the HIS capacity of a small group that are responsible for the day to day collection and management of health information in Fiji, at divisional and national levels.

The HIS Knowledge Hub became an Australian Partner Organisation (APO) for AusAID's volunteering programs – Australian Youth Ambassadors for Development and Volunteers in International Development Australia (AYAD and VIDA). A health information manager from Australia was recruited and matched with a 12-month capacity building assignment in Tonga.

The Hub has taken full advantage of working alongside Australian based institutions such as AIHW, QUT, DoHA and ABS. Relationships with all these organisations have included both training and joint work projects.

Lessons for Aid Effectiveness

1. In the busy health and development sectors, the largest challenge encountered in expanding the capacity of Australian institutions and professionals has been to gain adequate attention and focus on HIS issues. It is often overlooked as a minor component of health systems strengthening, in favour of the human resources and policy areas. Most public health and international public health training programs do not have a course or specific component looking into HIS issues. However all agree that producing reliable and valid data is integral to producing quality information for decision and policy. It is the challenge of the HIS Knowledge Hub to engage proactively with Australian stakeholders and provide them with opportunities to learn from new knowledge created over the course of 2009;
2. A second lesson learned is around the importance of the role of clinicians in HIS as primary data collectors; and for leadership and advocacy in partner country health systems. There is a need to build and encourage national and regional "champions" in each priority clinical area that will take a deeper interest in the HIS issues surrounding these areas. A regional HIS role with the FSMed has been conjointly established with the Hub;
3. The Hub will complete the Death certification module pilot in December 2010 with 6th year Medical students at the FSMed and conjointly with Queensland University of Technology;
4. Engaging partners in developing products builds their confidence and capacities, both in implementing and sustaining the outcomes of specific products as well as having an approach to HIS

that can be applied in new situations. This was keenly obvious in the work on Vital Registration testing.

6. Key Achievements 2010

The work plan for Phase 3 focused on seven key products which commenced in January 2010, as outlined below. The following is an overview of the progress and achievement of the 2010 work plan

Product I – Essential HIS Investments for Health Services Management

ITEM	DESCRIPTION
Activity	Identification of the 5-10 most important activities for strengthening HIS of partner countries for health system management.
Summary	Focusing on the key information needs of health ministers and senior health decision makers, this product aims to answer the question “Which aspects of the health information system should I invest the limited resources I have to more effectively manage my health system?”.
Expected Outcomes	<ul style="list-style-type: none"> Working papers , policy briefs and summary documents regarding the key health information needs of senior health decision makers.
Achievements as of 30 November 2010	<ul style="list-style-type: none"> Working paper on the information needs of Ministers (2010 Working Paper Series); Working paper on the use of health system information by politicians (2010 Working Paper Series).
Early Lessons Learnt	<ul style="list-style-type: none"> This body of work has identified that the information needs of Ministers and senior health decision makers for decision making is complex, the traditional frameworks used as guiding tools to help understand what key health information investments might need for decision making are emerging as unhelpful. This body of work is attempting to understand how Ministers of health seek information and how they use it; Engagement with Health Ministers and senior officials in the development of this product has allowed the Hub to promote the importance of HIS at the highest level of country health systems and for them to engage in leading these developments.

Product II – Understanding the Role of Technology in HIS

ITEM	DESCRIPTION
Activity	Analysis of the potential utility role of various technologies for to advance HIS In the Asia Pacific region.
Summary	This product aims to provide an evidence-base for decision makers, both within countries and donor organisation, on what health information technologies warrant investment and the circumstances in which these are best applied.
Expected Outcomes	<ul style="list-style-type: none"> Case studies and summary documents of a range of technologies to support efficiency and effectiveness of HIS, particularly in dispersed island populations of the Pacific.
Achievements	<ul style="list-style-type: none"> Working paper on “understanding the role of technology in health information systems” (2010 Working Paper Series).
Early Lessons Learnt	<ul style="list-style-type: none"> This product has highlighted the importance of technology discussions in the region. What the Hub has demonstrated is that decision making around investments in technology are difficult for countries as they often don’t have good information regarding best use of technology for different country settings. Sustainability issues related to technology investments are problematic.

Product III – Supporting the Use of HIS in Disasters and Complex Emergencies

ITEM	DESCRIPTION
Activity	Strengthen the capacity of health systems to more effectively respond to natural or manmade disasters, complex emergencies ,response and recovery activities through strengthened local health related surveillance and information management and use.
Summary	This product aims to identify the core components of a HIS that are essential to better manage the health aspects of disaster and emergency preparedness and response.
Expected Outcomes	<ul style="list-style-type: none"> Working paper detailing essential requirements of routine health information systems to support disaster preparedness.
Achievements 30 November 2010	<ul style="list-style-type: none"> Working paper on “preparing health information systems for immediate health response in natural disasters” (2010 Working Paper Series).
Early Lessons Learnt	<ul style="list-style-type: none"> This work demonstrates that there is a need to improve routine health information systems as part of the early warning systems for disasters; There are different groups (those involved in disaster) which need access to and various ways of packaging routine health

information. This product will add to knowledge regarding cost effective ways of responding to disasters which is a key issue of debate in both the Pacific and Asia region.

Product IV – Methods to Improve Cause-of-Death Data

ITEM	DESCRIPTION
Activity	Assist countries to improve the timely collection, quality, use and dissemination of birth and death information as the cornerstones of health information required for health policy and planning.
Summary	In collaboration with Australian and regional agencies, the HIS Knowledge Hub focused on building the knowledge base, guidelines and capacity to strengthen country vital registration (VR) systems, including cause of death data.
Expected Outcomes	<ul style="list-style-type: none"> • Hub/UNESCAP regional initiative launched; Joint Hub/SPC/Who initiative launched for strengthening VR in Pacific Island countries; • New tool developed to assist countries to assess quality of VR data; new Resource Kit to assist countries to utilize most recent methods and tools to generate vital statistics in resource-poor settings; • Initial draft of the new Hub/WHO HMN Resource kit.
Achievements November 2010	<ul style="list-style-type: none"> • Working paper on “rapid assessment of vital statistic systems: evaluation of the application in 26 countries in the Asia Pacific region” (2010 Working Paper Series); • Working paper on “developing a business case for civil registration systems” (2010 Working Paper Series); • Working paper on “assessing the quality of mortality statistics; a basic guide and tool kit” (2010 Working Paper Series); • Working paper on “Promoting the Routine Assessment of Hospital Mortality data: Lessons learnt from study of Medical records to validate cause-of-death data in Sri Lanka” (2010 Working Paper Series).
Early Lessons Learnt	<ul style="list-style-type: none"> • This product highlights that one of the key measures of the health status of a nation lies in the analysis and understanding of key changes in trends in mortality measures linked to good vital registration systems including the burden from NCDs. There is a mindset in many of the developing countries that the dead don’t matter anymore to a health system, but this is beginning to change slowly. The product has shown how intermediate steps on the path to improved vital registration are possible and do improve the capacity of the HIS to support planning performance measurement and resource allocation.

Product V – Making Better Use of Existing Data Sets

ITEM	DESCRIPTION
Activity	Through the use of case studies, , this activity will create simple, practical tools on how to better use and interpret data already available in countries at various levels.
Summary	This product aims to provide tools and methods and specifically tailored learning by doing workshops for countries to understand how to make better use of the existing wealth of data that is already at hand. These tools and methods will assist the countries to leverage additional benefits for the production of relevant health indicators without increasing the reporting burden of healthcare workers.
Expected Outcomes	<ul style="list-style-type: none"> • Documentation of case studies illustrating practical ways to improve the utilization of existing data sets to support health systems development.
Achievements	<ul style="list-style-type: none"> • Working paper on what can we learn from an assessment of water quality and health in an era of climate change: future threats and solutions” (2010 Working Paper Series); • Documentation note on preliminary learnings on Methods to improve use of existing data: The Samoan experience (2010 Documentation Note Series).
30 November 2010	
Early Lessons Learnt	<ul style="list-style-type: none"> • In 2009 we showed that there is a role for health surveys in improving health information. What is emerging in this product is the recognition of the under utilisation of survey information in the region and in particular lack of in country capacity to analyse the same information for health policy and planning. This product is highlighting that there are important models of capacity development including training, coaching and mentoring and “job aids” that can be considered in supporting the development of the capacity of countries to extract and analyse data.

Product VI – Strengthening and Expanding the HIS Workforce

ITEM	DESCRIPTION
Activity	This is a continuation of the 2009 product that aimed to strengthen HIS workforce capacity both within Australian and regionally.
Summary	HIS is a neglected area of focus within health systems which has lead to a critical shortage of qualified health information professionals needed to undertake HIS related work at all levels. This product intends to develop a HIS specific curriculum for delivery in Australia and internationally.
Expected Outcomes	<ul style="list-style-type: none"> • Development and implementation of HIS short course, leading to

<p>Achievements 30 November 2010</p>	<p>increased numbers of people within the region, in a range of health planning, services, programme and policy positions with increased knowledge of and/or skills in a range of health information systems tools and approaches.</p> <ul style="list-style-type: none"> • Delivery of a HIS short course from 27 September to 1 October 2010; • Evaluations by participants and demonstrated improvements in understanding (Evaluation activities).
<p>Early Lessons Learnt</p>	<ul style="list-style-type: none"> • 2009 work showed that there was a gap in training and development of opportunities and that the status of HIS as a workforce category in the region was still largely undervalued. This product is demonstrating that short HIS courses designed and delivered appropriately can influence and promote the HIS profile in country as well as help fill knowledge gaps for HIS workers. Further HIS champions still need to be further supported to continue to take on leadership roles in the region.

Product VII – Measurement and Interpretation of Indicators of Maternal and Child Health

ITEM	DESCRIPTION
<p>Activity</p>	<p>Focus is on improving indicators for countries to monitor of progress with Millennium Development Goals 4 & 5 (Reduce Child Mortality and Improve Maternal Health).</p>
<p>Summary</p>	<p><u>Part A:</u></p> <p>This component will critically appraise maternal mortality information from available data sources including DHS, MICS, vital registration, modeling from health service utilisation data, sentinel site and research based demographic surveillance studies, and offer scientifically sound, but practically useful advice about how to interpret often conflicting information on maternal health.</p> <p><u>Part B:</u></p> <p>Product 7(B) is a clinician led project with the prime objective of improving clinical decision making through improved health information. The focus of the project is to develop a set of functional indicators which accurately and effectively reflect the priority clinical issues for child health in the Pacific, initially focusing on Samoa and Tonga.</p>
<p>Expected Outcomes</p>	<ul style="list-style-type: none"> • Working papers offering practical advice and guidance on how to use existing data for county, provincial and district level understanding of progress towards and interventions required to improve achievement of MDGs 4 and 5 in regional countries.

Achievements	<ul style="list-style-type: none"> Working Paper on “interpretation of maternal mortality data” (2010 Working Paper Series).
Early Lessons Learnt	<ul style="list-style-type: none"> Knowledge regarding improving the use of data for clinical decision making and for improved use of service delivery. This project is highlighting that indicators are limited in their ability to reflect in a timely way the morbidity and service delivery for paediatrics and maternal health. This project has worked with Clinicians to identify the priority child health concerns in their countries and then gone on to find available data that might reflect those health concerns in a meaningful way. The limitation of data are important in developing countries, so the emphasis is very much on available data, validating data with more than one source and mapping the human and clinical structure in that information generation and use. To date the project has produced information on nine health priorities.

7. Approach to work plan development 2011

The 2010 work plan has continued the strategic approach of 2009 which has focused on identifying gaps in HIS knowledge specifically in the Pacific region. In addition in 2009 the Hub has made a number of investments that focused on promoting the adoption of best practice for Health Information Systems.

The 2010 approach has built on the 2009 strategy with a more comprehensive focus on working in country with partners to advance health information capacity. The 2010 work program subsequently has had a stronger focus on capacity development and training, including a focus on supporting the development of a Pacific Health Information Network as a regional capacity of education, training and development. The development of the 2011 work plan has also focussed upon ensuring the important principles of the aid effectiveness and Compact Agreement for Pacific Countries - namely country leadership, mutual accountability and responsibility and harmonisation of activities underlie the approach, the planning and the way of working with each country, whilst minimising the opportunity costs to the country partners.

Aid Effectiveness:

The principles of the Compact Agreement for Pacific⁹ countries are recognized as the key development and partnership principles whilst working the Region, are paramount to progressing successful development outcomes. Further the HIS Knowledge Hub is committed to supporting countries commitments to achieving MDGs in the region. The HIS Hub will build upon the processes it has developed acknowledging the principles such as:

⁹ Cairns Compact agreement, Strengthening Development Co ordination in the Pacific 2009

- Working with the FSMed, designated by the Pacific Ministers of Health as the regional location for HIS training for the health sector. This relationship is managed through in a joint partnership based on an MOU with clearly defined capacity development, mutual roles and responsibility;
- Continuing to work, in a supportive manner, through the PHIN, a network of the country leaders in HIS, who are supporting country led strategic plans for HIS development.

Harmonization:

The HIS Knowledge Hub is committed to ensuring that its work programme and knowledge generation activities are more strategically aligned with other partners and agencies working in similar areas, such as vital statistics and training and capacity building areas where there are a number of donors and agencies that are active. The Hub is intending to host several harmonization activities over the next 12 months to ensure alignment and more importantly actively reduce the burden of coordination within countries.

Both these principles have been infused into the development of the 2011 work plan, which the descriptions of these products will demonstrate.

In July 2010, the AusAID Knowledge Hub Initiative completed its first review. Feedback to the HIS Knowledge Hub in this process has highlighted the need for the Hub to consider the further packaging of its knowledge products, firstly for a wider range of different stakeholders allowing a greater usability and secondly for the purpose of translating and packaging knowledge for country policy improvements.

Over the past 18 months the HIS Knowledge Hub through its academic and research partnerships and project collaborations have worked extensively with a range of organisations to support the development and piloting of the Knowledge products.

Through these existing relationships the Hub has had the benefit of discussing the validity and usefulness of products to end users as well as consulting extensively regarding ongoing investments and improvements. These reflections have formed part of the decision making process and discussions for the 2011 work plan. Where the Hub has engaged with countries through Hub activity we have been able to more directly assess Hub product usefulness and subsequently been able to better customise and refine products to suit more appropriately country needs.

Included below are key organisations that the Hub has collaborated with on the development, piloting or implementation of Hub products and activity.

International

- AusAID, Suva, Fiji – country and regional staff
- Fiji School of Medicine , Fiji National University
- Ministry of Health Tonga
- Ministry of Health Samoa and National Health Service Samoa
- Health Metrics Network (Executive Director; Director of Country Programs)
- Institute for Health Metrics and Evaluation, University of Washington

- International Federation of Health Records Organisations
- Massey University
- Pacific Health Information Network
- Pacific Open Learning Health Network
- Pasifika Medical Association
- NZ AID
- Secretariat of the Pacific Community
- University of Auckland
- University of Tokyo
- UNFPA
- UNICEF
- United Nations Economic and Social Commission for Asia and the Pacific (Director, Statistics Division)
- The World Bank, Washington and Sydney (Health, Population and Nutrition Program/ East Asia & the Pacific Department)
- WHO, Geneva (Department of Health Statistics and Informatics)
- WHO country representatives – Indonesia, Tonga, and Fiji
- WHO/WPRO (Regional Advisor, Health Information)
- WHO/SEARO (Regional Advisor, Health Information)
- WHO Family of International Classifications – Education committee

National

- Australian Institute of Health and Welfare
- Australian Bureau of Statistics
- Commonwealth Department of Health and Ageing, International Strategies Branch
- National Centre for Classification in Health
- National Centre for Health Information Research and Training
- Other Knowledge Hubs
 - Women's and Children's (WCH) Health Knowledge Hub
 - Health Finance and Health Policy Knowledge Hub
 - Human Resources for Health Knowledge Hub

Continuation and Consolidation:

Over the next 12 months the HIS Knowledge Hub will focus on consolidating product and research in areas of knowledge commenced in Phases 1, 2 and 3 of the Hub work program. Specifically, the principle of consolidation is focused on ensuring that products are purposefully extended and built upon to ensure

that key knowledge gaps, capacity and dissemination are effectively addressed. The 2011 work plan consists of four consolidated products that continue the evolution of strategic health information investments over the past two years. Products 1, 2 and 3 of the 2011 work plan are a continuation and compilation of products 1 - 6 from the 2010 work program. Product 4 of the 2011 work plan is focused on consolidating the learning's and new knowledge from Product 7, 2010. The importance of continuation and consolidation as principles for ongoing investments ensures that products are given sufficient time for knowledge transference and dissemination as highlighted by the Mid Term Review (AusAID)¹⁰

Consolidation of relationships built over the past 18 months will be an important strategic investment of the Hub. Significant product collaborations with WHO (HQ), ESCAP, Fiji School of Medicine, SPC and WHO/WPRO are paramount and they remain central collaborators in the piloting, testing and dissemination of knowledge created and consolidated by the HIS Knowledge Hub.

8. Program of Work 2011

The key products identified for delivery in 2011 as part of Phase 4 are:

Products	Description	Guiding Objectives*
1	Essential HIS Investments for Health Service Management	1, 2, 3, 4
2	Strengthening and Expanding the HIS Workforce	2, 3, 4
3	Strengthening Vital Statistics and Cause-of-Death Data	1, 2, 3, 4
4	Health Information Systems Strengthening and Maternal and Child health	1, 2, 3, 4

*Key to Guiding Objectives for the 2011 work plan:

1. Increase the critical, conceptual and strategic analysis of key HIS issues
2. Expand convening powers and engagement
3. Disseminate relevant and useful HIS knowledge resources
4. Expand HIS capacity

A more detailed description of each of these products is outlined in the following pages.

¹⁰ Aus Aid Review 2010

PRODUCT 1- Essential HIS Investments for Health Service Management

Rationale:

This product is a core element of the 2010- 2011 work plan, and is focused on the key information needs of senior health decision makers. It builds on the work commenced in 2009 (Products I and II) and 2010 (Product 1) as well as utilizing learnings from all products of the HIS Knowledge Hub work which have identified best buys, better utilization, best practices and cost effective approaches. This product aims to answer the question: “on which aspect(s) of the health information system should I, the senior health decision maker, invest the limited resources I have available to more effectively and efficiently manage my health system?”

Description:

People with senior national level responsibility for health systems need to focus on health information that will allow them to make decisions related to health system functioning and performance. Ministers and senior officials are expected to use information for several purposes:

1. Identifying current and future issues affecting their countries’ health
2. Monitoring health system performance
3. Developing plans for health services
4. Exercising stewardship over health and/or
5. Reporting to, and being held accountable by politicians, the public and other stakeholders
6. Managing organisations as CEOs
7. Developing national strategies
8. Managing national and international stakeholders

Further they have specific responsibilities in the realm of stewardship that are not replicated at lower levels within the health system. The 2010 work investments in this product have focused on identifying whether there is in fact a distinct category of health system information needs that are significant for senior decision makers and which can be categorised as lying between the detailed information required for operational management and that derived from health system performance frameworks for national level monitoring and reporting.

In 2010 the HIS Knowledge Hub has completed three major programmes of work. One programme focused on undertaking systematic reviews of the available literature to find evidence on use of health system information by politicians. The review focussed upon three key areas:

1. What is the potential use of the health information system by politicians;
2. What was their attitude to using it; and
3. How did they use the health information.

The second programme of work has been a content analysis of questions asked of by Ministers of Health in Parliament (or equivalent) in selected countries. The objective of this programme of work is to identify what categories of information a health minister really needs to know to answer some of the major

stakeholder groups – Parliament and the government of the day and the “people” through their representatives.

The third programme of work has been a series of semi structured interviews with Ministers of Health and senior health decision makers. The purpose of the interviews has been to identify what Health Ministers and senior health decisions makers understand to be their essential health information needs necessary to make decisions.

The combination of these three programmes of work is intended to provide a better understanding of what health leaders voice as their health information needs. Preliminary results of this project indicate that the realm of health information needed and used by senior health decision makers is complex and not necessarily driven by traditional or standard health information systems frameworks nor the standard building blocks of health information systems.

In addition to ensuring that routine HIS meet the needs of senior decision makers, and thereby consolidate their support for investment in HIS, a business case is being developed that demonstrates to senior decision makers the rationale for investing in HIS. In 2011, this business case will be packaged into HIS Hub advocacy tools and a policy brief, based on 2010 outputs

The issue of equity and health service coverage has been a long standing concern in the development of health care systems. An important aspect of Product 1 for 2011 is a consolidation of knowledge in the literature and through experience in developing the investment cases for MDGs 4 and 5, and from other development agencies e.g. Global Fund, WHO which are focussing on this issue, into policy briefs and guidelines for country programmes on key health information needs, and better use of existing data, necessary for understanding equity and health service quality.

Method:

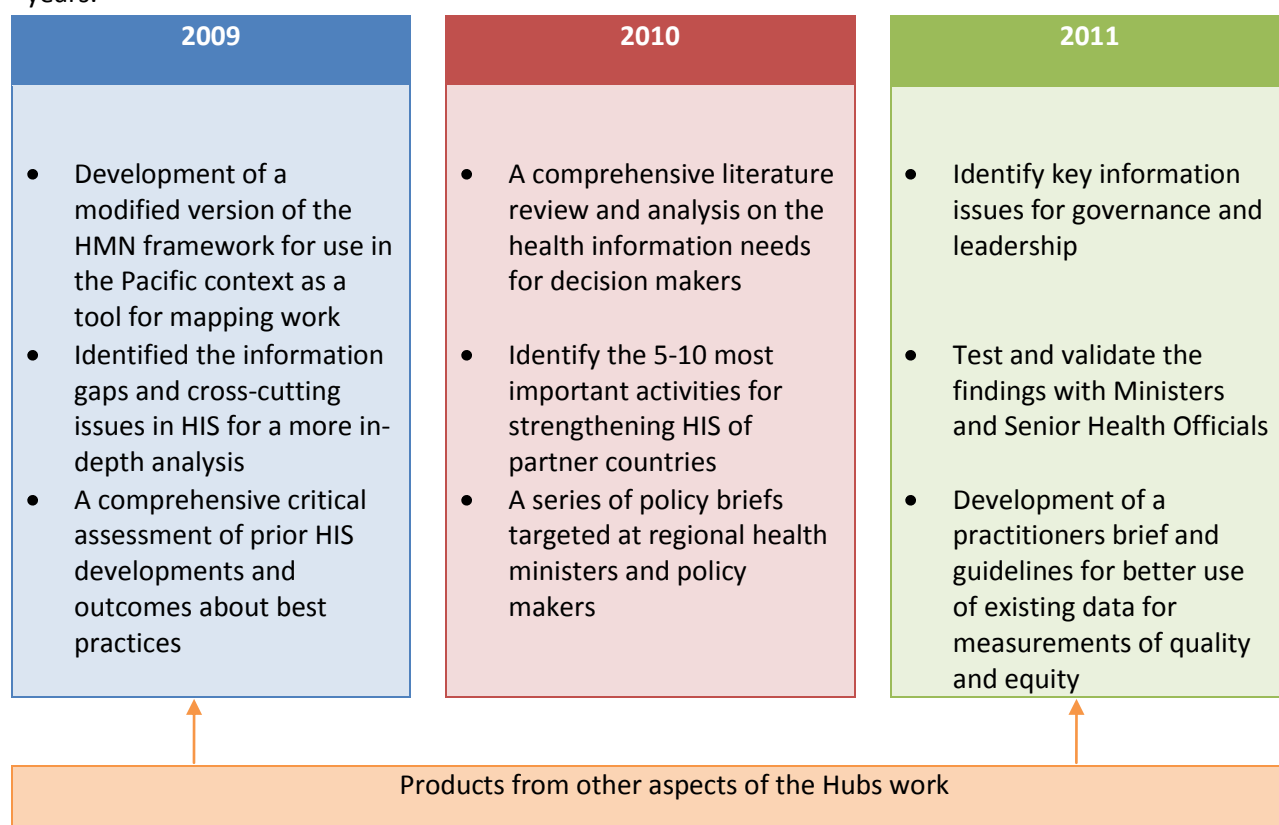
Building on 2010 research the Hub will identify key information issues for governance and leadership. These will be tested and validated with Ministers and Senior Health officials using methodologies to be developed in question 1, 2011 derived from qualitative research approaches. A publication series made up of policy briefs and working papers will be developed from the project findings.

From the business case undertaken in 2010 the key points of the business case will be packaged in ways that can be used by country health managers and development partners to advocate for HIS investments as part of the resource allocation processes.

In order to develop guidance on measurement of equity and health service quality, a review of published and grey literature will be undertaken. This will include lessons learnt from the Investment case for MDGs 4 and 5.

A working paper on the pros and cons of different ways of measuring equity and quality of health services and coverage will be developed. Other packages for dissemination will include a development practitioners brief and guidelines of better use of existing data for measurement of quality and equity.

Representation of the flow of product development, continuation and consolidation across the three years.



Outputs:

1. A working paper on the health information needs for governance and leadership of a health system for organisational management;
2. Two to Four policy briefs focusing Health information needs of Health Leaders (At least 2 of the following 4 topics)
 - For Organisational Management
 - For Financial Management
 - For Crisis Management
 - For Political Management
3. A peer reviewed paper on “What do health Ministers need to know?” A study on health information needs of Health Ministers and senior health decision makers and best investments to meet HIS requirements for crisis management;
4. Presentation to Health Ministers and Senior Health Decision Makers on findings from this product



PRODUCT 2 –Strengthening and Expanding HIS Workforce

Rationale:

Through a range of stakeholder consultations including the Pacific Health Information Network meeting, (2009) the Pacific HIS Development Forum (2009), and the Capacity Building Think Tank (2009), the HIS Knowledge Hub identified the need for the development of HIS specific curriculum for delivery in both in Australia and internationally. HIS is a neglected area of focus within health systems which has lead to a critical shortage of qualified health information professionals needed to undertake HIS related work at all levels. In 2009 the approach to strengthening this component of this product has been to develop a general HIS short course and a range of specialised courses targeting various aspects of health information, such as Cause-of-Death certification and the application of Verbal Autopsy. In 2010 the pilot testing approach has been a combination of course development, testing, evaluation and review. The focus of this product in 2011 is to build on the results of the pilot testing of curricula and the short courses to scale- up into educational products available for capacity development, dissemination and advocacy for use by a range of partner institutions at both country and regional levels.

Course development and implementation have been undertaken with joint partners, including the Australian Institute of Health and Welfare, the Fiji School of Medicine, Queensland University of Technology, the Health Information Management Association of Australia, and ACT Health.

Description:

This activity builds on the 2009 work program (Product VII and Product V) in the 2010 workplan related to Capacity Building within Australia and the Asia Pacific region and will deliver a number of key activities as well as take into account regional issues and approaches to training and best practice methods in the areas of coding and technology.

To date, work by the Hub and partners has suggested that the single greatest impediment to improving vital registration systems in the region is the poor quality and lack of understanding about the policy value of reliable cause-of-death data. The Hub in this regard has developed a series of training products that focus on improving the ability of physicians to certify causes of death more reliably. In addition, the development of Verbal Autopsy education and training modules for clinicians has been piloted in two countries and is under review and evaluation. This method has the greatest promise for application in countries such as PNG in the short to medium term to yield essential epidemiological information for planning.

The successful development and pilot of the HIS short course in 2010 will be packaged and branded for wider dissemination for countries and partners. WHO/WPRO has already expressed a keen interest in seeing this product widely disseminated in the Region and five countries have expressed interest its in country provision as part of their health system strengthening reforms.

Method:

Activities planned to be undertaken as part of this product will include:

- Undertake adaptations and finalise packaging of
 1. The evaluated short HIS course delivered in September 2010;
 2. A range of training and development courses piloted with the FSMed (which has also been part of the Hub's undertaking to support the regional development of Health Information Systems Development and Workforce including training on cause-of-death certification for undergraduate medical students;
 3. HIS Hub short course on how to improve the use of available data for health information system users. This will be piloted in collaboration with the FsMed and the Ministry of Health in Fiji, Vanuatu, and PNG drawing on the facilitator materials developed for the programme in Samoa carried out in 2010.
- The establishment of two Fellowships at the Health Information Systems Hub, University of Queensland. These 3-6 month (1 Pacific and 1 Asia) positions will be established in the Hub and linked to on-going product development and research, consolidation and development of guidance and training materials;
- Support the ongoing development of a Pacific Health Information Strategic Plan in collaboration with the Pacific Health Information Network.

Development consolidation and continuation process of product dissemination:

2009	2010	2011
<ul style="list-style-type: none">• Pacific focus• Delivery of PHIN meeting• Delivery of Capacity Building Think Tank and development of a strategy• Delivery of Pacific HIS Development Forum• Evaluation of best ways of teaching CoD• Building networks	<ul style="list-style-type: none">• Development of HIS short course curriculum• Delivery of intensive five day HIS short course• Short course on how to improve use of existing data (pilot)• Development of curriculum on death certification for use at FSMed• Pilot testing of death certification curriculum at FSMed	<ul style="list-style-type: none">• Final packaging of HIS short course• Short course of COD certification for physicians• Training manual on improving use of existing data• Support for two fellowships• Supporting the ongoing development of the PHIN

Outputs:

1. Finalise and package for joint dissemination and delivery of:
 - a) An introductory short course on HIS for health managers;
 - b) A Short course of CoD certification for training physicians;
 - c) A Training manual on improving use of existing data;
 - d) Modules for clinicians to improve clinical decision making through the use of improved health information especially focussed on MDGs 4-6.

Each package will include as relevant:

- a) Development of facilitator guides, training materials, pre-prepared overheads, sample timetable and curriculum, case study and other training exercises, sample budget for training courses, list of resource persons and organisations, resource materials and handouts, excel programmes and worksheets.
2. Development of the PHIN strategic plan supported and funding proposal preparations for donor country consideration facilitated.
3. Two fellowships based at the HIS Knowledge Hub from two partner countries (one Pacific and one Asian Country). The purpose of the fellowships are to strengthen the knowledge of individuals and or academics working in their own country institutions in health information related roles.

PRODUCT 3– Strengthening Vital Statistics and Cause-of-Death Data

Rationale:

Cause-of-death (CoD) information is the cornerstone of any health information system and is, or should be, widely used in health policy debates to guide health priorities. Countries are often unaware of poor practices with their CoD systems, or of available methods and measures that can be feasibly implemented to provide critical information on health status for planning. Much of this knowledge is fragmented, or poorly disseminated by agencies such as WHO, leaving countries without the confidence and knowledge resources to rapidly improve their cause of death data systems. This is of critical importance for resource allocation in the health sector in countries undergoing rapid epidemiological transition.

In 2009 and 2010, the Hub collaborated closely with WHO and the HMN to develop, pilot finalize and disseminates a tool for countries to use to assess the functioning of their vital statistics system. The tool was subsequently promoted and used as the basis for the UNESCAP/WHO Regional Initiative to strengthen vital statistics systems, launched in Bangkok in 2010. The assessment tool is likely to be most useful for countries with reasonably well developed vital registration systems. It is unclear how it will perform in small island populations or in countries with very fragmented and poorly developed vital statistics systems. To meet these needs, the Hub launched in 2010 a program of work to:

- a) Develop a “Resource Kit” of options for countries to pursue to obtain, and use, essential vital statistics for their populations while conventional civil registration systems are being developed; and
- b) Engage and harmonize the activities of regional development and academic institutions in order to identify key vital statistics needs and priorities, specifically in Pacific Island countries. The medium (3-5 years) objective of this initiative is to maximise the utility of regional investments into vital statistics development so that countries can achieve useful, informative and valued vital statistics systems within a relatively short (3-5 years) period of time.

In 2010 the Hub developed a draft ‘cause-of-death tool and manual’ for developing countries with weak VR systems. The primary purpose of this product is to provide countries with the knowledge to access and apply latest developments/thinking about interim measures to derive policy-relevant information on causes of death in their populations, pending attainment of full VR with medical certification. The activity focused on critically reviewing the HMN Resources Kit and other methodological advances in CoD reporting and providing targeted adaptation for countries with weaker VR. A new guidance tool with a much more practical focus is being prepared for use by countries and to add new research knowledge about best practices for cause of death data collection, including ‘verbal autopsies’ (VA). This is primarily a desk-based review and update, but with VA fieldwork and review in selected populations including PNG, to test applicability of methods and knowledge products. All of these various products will be packaged with checklists and guidelines into a “resource kit”.

Description:

Following on the testing and refinement of the Civil Registration and Vital Statistics Review Tool in 2009, the HIS Knowledge Hub is continuing to work in collaboration with Australian and regional agencies to focus on building the knowledge base and tools to strengthen country vital registration (VR) processes. The overall objective of this activity is to assist countries to improve the timely collection, quality and dissemination of birth and death information as one of the critical cornerstones of health information required for health policy and planning.

- a) Collaborate with FSM, WHO and SPC to oversee the application of the HIS Hub/ WHO VR Rapid Assessment in all WHO Member States in the Pacific. The objective is to explore the implications/suitability of the tool to assist countries to understand in detail the gaps/weaknesses in their VR systems, according to international 'best-practice' standards. This application will be a specific knowledge development activity under the broader Hubs engagement in guiding the application of the tool throughout the entire UNESCAP region, in close collaboration with WHO & ESCAP. The key product from this activity will be a Working Paper on the challenges, priorities and resources needed/available for Pacific Island countries to rapidly strengthen their VR systems. This will establish the principles of VR and the purpose of the tool in country, demonstrate sub-national differences, for example in equity of access to vital registration in remote locations, and will provide insight into variations in data quality between data sources. A paper on the key messages on improving VR systems of Pacific Island and poor Asian countries will be written. This will build into the Secretariat of the Pacific Community's work on the Pacific Regional Information Systems (PRISM) and its work with National Statistics Offices and AusAID-funded work on Mortality Systems in the Pacific currently being undertaken by the UQ. Optimal pathways towards reliable, complete vital statistics for all Pacific Island countries will be developed based on knowledge of current systems, as well as guidance for seeking donor support;
- b) A 'Resource Kit' including detailed guidance on the purpose, utility, strengths, weaknesses and implementation requirements of various resources to assist countries to obtain reliable, timely minimal vital statistics data will be finalised in collaboration with WHO and HMN. The content of the Resource Kit will be finalised by mid-2011 with the intention to pilot the Kit (via consultation) in 2-3 countries (likely to include PNG and Solomon Islands and Vanuatu). The 'Kit' will then be finalised in collaboration with WHO and HMN as a consolidated HIS Hub/WHO/HMN product.

Method:

It is intended to identify two - three countries that will fit the criteria for testing the Resource Kit supported through the HIS Hub. Once identified, a negotiation process will commence and approval will be sought to field test the resource kit. At the completion of field testing, the analysis and results will be submitted to an expert group for finalisation of the resource kit. The Kit will be disseminated via regional partners and according to methods identified through the Dissemination activities detailed later in this workplan.

Development consolidation and continuation process of product dissemination:

2009	2010	2011
<p>Development of a detailed tool for assessing the quality and functioning of country vital registration systems</p> <p>Field testing of the Civil registration and vital statistic review tool in Sri Lanka and the Philippines</p> <ul style="list-style-type: none"> • Health survey information work • 	<ul style="list-style-type: none"> • Revised resource kit for improving mortality reporting practices including the use of verbal autopsies • Guidelines & step-by-step instructions for data validation and quality assessment of various types of existing datasets <p>Pilot of Rapid Assessment tool</p>	<ul style="list-style-type: none"> • Pilot test the resource kit in two-three countries • Launch of implementation of Pacific Vital Stats Development Initiative

Outputs:

1. Resource Kit products with key aspects incorporating the state of the art thinking on:
 - How to develop and advocate from a business case for vital statistics
 - Best practice and practical methods to collect CoD data using verbal autopsy;
 - Sampling strategies to obtain representative vital statistics in poor countries;
 - Basic analyses to check the quality of vital statistics to estimate community mortality patterns especially for MDGs 4,5, and 6 including Non Communicable Diseases
2. Pilot testing of the resource kit conducted in two –three countries
3. Launch the implementation of the Pacific Vital Statistics Development Initiative in collaboration with SPC, WHO, UNICEF, UNFPA academic and country partners.

PRODUCT 4 – Health Systems Strengthening and Maternal and Child Health

Rationale:

The overall aim of the project is to build upon the 2010 HIS Knowledge Hub work on “ways to improve Maternal and Child Health (MCH) in the Asia-Pacific region through the development of sustainable, useful, reliable MCH indicators and the systems necessary for their ongoing collection, and the monitoring of maternal and child health progress, health services and systems”. There are numerous, often conflicting measures of key maternal and child health indicators that make policy and service planning difficult to decide and monitor.

Description:

In order for countries to comprehensively monitor their progress against Millennium Development Goal (MDG) 4 – *Reduce Child Mortality* and MDG 5 – *Reduce Maternal Mortality* countries need an accurate and consistent method of measuring MCH progress and indicators that reflect the local health challenges. Currently MCH data is available from multiple sources and is of varying accuracy. It is not always reflective of “in country” MCH status, nor does it measure MCH service delivery and quality in a timely and meaningful way not at provincial, district and local levels. Indicators are needed for MCH priority issues to assist country decision makers with policy and planning to enhance health care systems and disease prevention and management.

In 2010 the Hub critically appraised a range of information from various data collection sources such as DHS, MICS, vital registration, modelling from health services utilisation data, sentinel site and research based demographic surveillance studies) and developed scientifically sound, but practically useful advice on how to interpret levels and trends in key MCH indicators from the broad range of data sources available.

In 2010, the Hub will pilot the advice/guidance framework in selected countries in the region to ascertain the utility of the approach before finalising the recommendations.

In 2010 the Hub successfully completed a two country study on child health indicators. It is intended that the findings of the project will be disseminated and specifically packaged for policy makers. The focus of the 2011 work is related to translating data into policy. Other spin offs in this regard have assisted the two countries to consider improvements in both health service designs and improved clinical decision making. The key findings of the Child health indicator project are intended to influence policy and decision making for Samoa and Tonga. Transference of knowledge and learning's to other Pacific island country settings will be supported through the development of a series of policy briefs. Of significant interest is the need to understand and identifying whether clinicians require information to be packaged and disseminated in various or specific formats that lead to improved clinical decision making.

The HIS Knowledge Hub will collaborate conjointly with other key stakeholders to develop and pilot the results of the work carried out in part A product 7 (measurement of maternal health) from 2010 and linking with the work of the Women and Children Knowledge Hubs. The focus of the 2011 work will investigate how to support maternal health improvements through use of quality health information at various levels of the health system. It is intended that this work will collaboratively be undertaken with the WCH Hub.

Method: Part A

1. Identify key countries for the piloting results of Hub framework on “How to interpret MCH data for local level decision making to accelerate progress towards meeting MDG 5”
2. Negotiate collaboration with countries that will be part of the pilot;
3. Develop pilot approach
4. Undertake pilot testing
5. Write up findings and publish learning’s.

Method: Part B

Develop, design and package policy briefs for Tonga and Samoa:

1. Present policy recommendations to Policy makers in both countries;
2. Support the scoping and development of further roll out of Child Health Indicator Project initiative with donors and funders;
3. Identify appropriate packaging of data for improved utilisation by clinicians;
4. Peer reviewed published paper on exploring different methods of influencing clinician’s behaviour: A case study of Tonga and Samoa.

Development consolidation and continuation process of product dissemination:

2009	2010	2011
<ul style="list-style-type: none">• Pacific focus• Building Networks• HIS Forum	<ul style="list-style-type: none">• Establishment of a Pacific Paediatrician Group• How to interpret Maternal Health data for local level decision making to accelerate progress towards meeting MDG 5• Implementation of child health Indicator Project/two country study• How to improve clinical decision making through improved health information systems	<ul style="list-style-type: none">• Draft set of child health indicators• Synthesis report on implementation on Child Health indicator project• Pilot test strategies to improve maternal health data interpretation

Outputs:

1. Establishment of Pacific Paediatrician Group to endorse terms of reference and set guidelines for the project. The group comprises of local and paediatricians and public health physicians with the Pacific Region and other key stakeholder groups;
2. Synthesis report on implementation of the process of developing a two country case studies and associated workshops held in Samoa and Tonga detailing achievements and risks;
3. Draft set of child health indicators that will be useful and relevant, evidence and best practice based and clinician determined and culturally appropriate for the Pacific region, developed and disseminated.

9. Dissemination, Translation and Knowledge Management

Disseminating new knowledge in appropriate formats for specific stakeholders is an important aspect of knowledge sharing and information. The HIS Knowledge Hub will strategically focus on developing appropriate packaging, and marketing of products to key stakeholders. The effective dissemination of all HIS Knowledge Products 2009-2011 will be a priority in 2011, as recommended by the Review Team (AusAID). The Hubs key stakeholders include policy makers (national, development agencies), senior health managers, HIS technicians, academics engaged in HIS research, trainees in public health and clinical services, development practitioners, and other partners in development.

The HIS Knowledge Hub is working to ensure that the new knowledge is collected, stored and used in a way that supports donor investment strategies as well as policy makers and decisions makers within countries. The 2011 workplan continues to consolidate the knowledge management processes developed, including the web site, and incorporating inputs from expert short term advisers to the Hub on dissemination and knowledge management for policy and practice influence.

Rationale:

- Key products and outputs of 2009-2011 will be repackaged purposefully for specific audiences and stakeholders. Repackaging will include the identification of key messages and the best dissemination strategy;
- The strategy will be informed by best practice from literature on dissemination of research for policy and practice.

Method:

- Develop matrix internally and through inputs from HIS Knowledge Hub network including AusAID on modes of dissemination for their needs, and key messages;
- Consult best practice literature;
- Facilitate a cross Hub seminar to investigate dissemination synergies;
- Develop draft plan for discussion with Short Term Advisor (STA) on dissemination;
- Develop work plan and priority for dissemination of Hub products;
- Short Term (ST) support for editor for non-scientific audiences;
- Short term support from dissemination expertise in area of dissemination for policy and practice;
- Use of ST editor;
- Develop and disseminate according to plan.

Outputs:

- Dissemination of all HIS Hub knowledge products in a range of accessible formats for a disaggregated audience of development practitioners, in-country policy makers, donors and HIS Managers, trainees and advocates;
- Training materials, including print and web based, informed by best practice in dissemination literature and access.

10. Monitoring and Evaluation

The monitoring and evaluation (M&E) framework will facilitate the tracking of progress of the HIS Hub's activities and achievements. The indicators should be objectively verifiable, specific, measurable, achievable, realistic and timely. Output indicators are more likely to fulfil these criteria than indicators for outcomes or impact, which are difficult to measure especially during the work plan's life span. The framework incorporates both quantitative and qualitative aspects of monitoring and evaluation where ever possible.

At the output level, monitoring involves simply ensuring completion of activities and achievements as planned and in the given time period through basic quantitative assessment, i.e. checking whether the planned tasks are completed and the expected number of papers, guidelines, etc. produced. It also involves checking whether the outputs meet the expected quality. Quality checks will be done through external/peer reviews, including by the Technical Advisory Group (TAG), which meets annually to review the work of the Hub. Policy relevance and academic rigour of the products will be assessed by the following guidelines.

Guidelines on assessing policy relevance of indicators*

- Relevance and significance of policy issue selected
- Appropriateness of area of work in terms of evidence gaps, work being undertaken by others
- Contribution / consideration of key cross cutting issues, e.g. gender, aid effectiveness
- Quality of documentation produced
- Significance of new ideas / approaches/ policy recommendations in terms of policy area (innovation)
- Practicality, degree to which focus is on issues of practical significance to policy makers
- Contestability, degree to which approach / results challenges prevailing concepts & ideas

Guidelines on assessing knowledge contribution / academic rigour of indicators**

- Methodology – appropriateness; strength in addressing problem; feasibility to provide desired results
- Process of implementing methodology and adherence to research best practice
- Quality of outputs in terms of documentation, clarity of description, level of analysis, evidence provided for results claimed

Quality checks for convening activities will be done using the following quality standards:

- Appropriate experts / stakeholders involved in terms of interests / expertise
- Hub engages with / participates in appropriate networks / groups
- Neglect of any who should have been involved
- Degree / method of involvement
- Impact / contribution from involvement
- Degree to which this is a new involvement or strengthening of existing involvement, or no change

Dissemination mechanisms of each knowledge product will be reviewed according to the following characteristics:

- Target groups for use of the knowledge product (national, regional and international)
- Expected / potential benefits or use by the target groups

- Processes to disseminate / provide access to the knowledge product by the target groups either directly or indirectly (through publication, websites, conferences)

Evaluation will also be done at the cross-hub level by an external evaluator. Potential users of the Hub's products and expected uptake and outcomes will be identified to assist the evaluation process.

Technical Advisory Group:

The HIS Knowledge Hub has a technical advisory group (see appendix). The TAG has convened twice over the past two years. They have provided important, technical and strategic advice to the Hub in particular on the work programs for 2009 and 2010. A strategic decision was made early in 2010 to engage the TAG differently.

Consultation and engagement with TAG members individually rather than as a joint group, has allowed the Hub to work with TAG members more specifically in their areas of expertise and has allowed for a more robust and helpful approach to the real work of the Hub. TAG members have joined Hub activities and contributed to product development and peer review in areas of mutual interest.

It is intended that the TAG will reconvene in 2011 at a point next year when decisions have been made on the ongoing life of the Hub.

Matrix of Proposed Products for 2011

PRODUCTS	GUIDING OBJECTIVES			
	Increase the critical, conceptual and strategic analysis of key HIS issues	Expand convening powers and engagement	Disseminate relevant and useful HIS knowledge resources §	Expand HIS capacity
I – Essential HIS investments for health service management				
1. A working paper on the health information needs for governance and leadership of a health system produced and disseminated.	✓		✓	✓
2. Two to Four policy briefs focusing Health information needs of Political Health Leaders (what they want to know versus what they need to know) produced and disseminated	✓		✓	✓
3. A peer reviewed paper: “What do Health Ministers need to know?” (A study on health information needs of Health Ministers and senior health decision makers and best investments to meet HIS requirements) produced and disseminated	✓		✓	✓
4. Presentation to Health Ministers and Senior Health Decision Makers on findings from this product		✓	✓	✓

PRODUCTS	GUIDING OBJECTIVES			
	Increase the critical, conceptual and strategic analysis of key HIS issues	Expand convening powers and engagement	Disseminate relevant and useful HIS knowledge resources §	Expand HIS capacity
II – Strengthening and expanding the HIS workforce				
1. An introductory short course on ‘HIS for health managers’ finalised and packaged for joint dissemination and delivery *		✓	✓	✓
2. A short course on ‘Cause-of-Death certification training for physicians’ finalised and packaged for joint dissemination and delivery *		✓	✓	✓
3. A training manual on ‘improving use of existing data’ finalised and packaged for joint dissemination and delivery *		✓	✓	✓
4. ‘Modules for clinicians to improve clinical decision making through the use of improved health information (especially focussed on MDGs 4-6)’ finalised and packaged for joint dissemination and delivery *		✓	✓	✓
5. Development of the strategic plan of Pacific Health Information Network (PHIN) supported and funding proposal preparations for donor consideration facilitated.		✓		✓

PRODUCTS	GUIDING OBJECTIVES			
	Increase the critical, conceptual and strategic analysis of key HIS issues	Expand convening powers and engagement	Disseminate relevant and useful HIS knowledge resources §	Expand HIS capacity
6. 'Two fellowships from two partner countries (one Pacific and one Asian Country), but based at the HIS Knowledge Hub' supported. (The purpose of the fellowships is to strengthen the knowledge of individuals and or academics working in their own country institutions in health information related roles.)		✓	✓	✓
III – Methods to improve cause-of-death (CoD) data				
1. Resource kit produced with key aspects incorporating the state of the art thinking on: <ul style="list-style-type: none"> • How to develop and advocate from a business case for vital statistics; • Best practice and practical methods to collect CoD data using verbal autopsy; • Sampling strategies to obtain representative vital statistics in poor countries; • Basic analyses to check the 	✓			✓

PRODUCTS	GUIDING OBJECTIVES			
	Increase the critical, conceptual and strategic analysis of key HIS issues	Expand convening powers and engagement	Disseminate relevant and useful HIS knowledge resources §	Expand HIS capacity
<p>quality of vital statistics data.</p> <ul style="list-style-type: none"> • Use of hospital statistics to estimate community mortality patterns especially for MDGs 4, 5, and 6 including Non-Communicable Diseases 				
2. Pilot-testing of the resource kit conducted in two - three countries		✓	✓	✓
3. “Pacific Vital Statistics Development initiative” launched in collaboration with SPC, WHO, UNICEF, UNFPA, academics and Country partners.		✓		
IV – Health systems improvements and Maternal and Child Health				
1. “Pacific Paediatrician Group to endorse terms of reference and set guidelines for the Child Health Indicator project” established. #		✓	✓	✓
2. “Synthesis report on implementation of the process of developing two country case studies and associated workshops on Child Health Indicators (in Samoa and Tonga)” produced and disseminated	✓		✓	

PRODUCTS	GUIDING OBJECTIVES			
	Increase the critical, conceptual and strategic analysis of key HIS issues	Expand convening powers and engagement	Disseminate relevant and useful HIS knowledge resources §	Expand HIS capacity
3. “Draft set of child health indicators that will be useful and relevant, evidence- and best-practice-based and clinician-determined and culturally appropriate for the Pacific region” developed and disseminated	✓		✓	✓

§ Dissemination of HIS Knowledge Hub’s work will be done according to the Hub’s dissemination strategy.

* Each package will include as relevant:

- Development of facilitator guides
- Training materials
- Pre-prepared overheads/presentation slides
- Sample timetable and curriculum
- Case studies and other training exercises
- Sample budget for training courses
- List of resource persons and organisations
- Resource materials and handouts
- Excel programmes and worksheets

The group comprises of local paediatricians and public health physicians in the Pacific Region and other key stakeholder groups. This group will disseminate Child Health Indicators developed in this Child Health Indicators Project to its membership and other Pacific professional organisations. The Child Health

Indicators are developed by the Pacific partners themselves, and hence promoting the engagement of partners in this development process and ownership of the indicators.

HIS Knowledge Hub Monitoring and Evaluation Framework

Products	Indicators	Means of Verification	Assumptions
Objective 1: To increase the critical, conceptual and strategic analysis of key HIS issues relevant to the Asia-Pacific region that can be used to inform policy thinking and practical application at the national, regional and international levels			
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 Broader indicator based on our network process developed in 2009			

Products	Indicators	Means of Verification	Assumptions
Objective 3: To effectively disseminate relevant and useful HIS knowledge resources which aim to influence policy thinking at national, regional and international levels.			

Products	Indicators	Means of Verification	Assumptions
<u>Objective 4:</u> To expand the HIS capacity of Australia institutions and professionals to participate effectively in evidence informed policy making.			

4. Convening and Strategic Partnerships

The HIS Knowledge Hub launched its strategic work programmes on a strong foundation of existing relationships and strategic alliances. These important relationships with a range of domestic and international partners are a continuation of the significant investments the Hub has made since it was launched in 2008. During 2010, the HIS Knowledge Hub invested into sustaining existing relationships with partners including:

- WHO - Geneva, WPRO, SEARO, Suva and Vanuatu
- ESCAP
- SPC
- AusAID, Canberra, regional and country based staff
- FSMed
- DoHA
- ABS
- QUT
- AIHW

New strategic relationships were developed to help with the implementation of the 2010 work plan. Through these relationships with credible agencies and organisations, the HIS Knowledge Hub has ensured that HIS will remain an ongoing priority in developing health systems in the Asia Pacific region. These include:

- Fiji School of Medicine
- Nauru Ministry of Health
- Samoa Ministry of Health
- University of Auckland
- International Federation of Health Records Organisation
- UNICEF
- UNFPA

In an effort to ensure those interested and involved in the Hub's activities were kept informed, the HIS Knowledge Hub attended and presented at a number of key global events including:

- UNESCAP Forum on Vital Statistic & Civil Registration (Bangkok, May 2010)
- Health Information Management Association of Australia Conference (Sydney, October 2010)
- HIC Conference (Melbourne, August 2010)
- International Federation of Health Record Organisations, AiDOS Conference (Milan, November 2010)
- Pasifika Medical Association Conference (Auckland, September 2010)
- PHSON Meeting (Vanuatu, September 2010)
- Prince Mahidol Award Conference/ HMN Global Health Information Forum (Bangkok, January 2010)
- SPC regional meeting of Heads of Planning & Statistics (July, 2010)
- World Bank, FSMed Flagship Course (Fiji, June 2010)

Using communications strategy developed throughout Phase 1 & 2, the Hub ensured the knowledge and evidence created from the work programmes was disseminated and understood by key partners and interested colleagues. The communication strategies used to circulate the outputs for 2010 included:

- Cross-Hub brochure, developed in collaboration with the other Hubs
- Conference presentation, meetings with senior staff in development and technical agencies, scientific collaboration and publication.
- Simple website for promoting activities and disseminating relevant documents
- 2009 Working Paper and Documentation Note Series – Available to download from the HIS Knowledge Hub website and on CD ROMS
- HIS Knowledge Hub newsletter – Quarterly issues posted on the HIS Knowledge Hub website and circulated to established contacts list
- School of Population Health Seminar Series – Speaker presentations
- Short summaries of working papers

5. Governance

Technical Advisory Group

In 2008, the HIS Knowledge Hub established a Technical Advisory Group (TAG) to guide the work of the Hub and to draw on extensive professional knowledge and experience in various aspects of health information systems. The TAG is a pre-eminent group of individuals that are well respected for their contributions to the international development of health information systems research.

The TAG is engaged by the Hub throughout the year to provide specific advice on relevant matters, to review papers for publication, or to undertake bodies of work, as appropriate. The feedback and critique gained from the TAG is incorporated into the Hub's product activities. The Terms of Reference of the TAG are contained in Appendix 3, and a list of the current members can be found in Appendix 4.

Hub Personnel

The HIS Knowledge Hub comprises the Executive Director, Director, Manager, together with other administrative and academic staff and consultants. The Hub draws extensively, through fractional appointments on the expertise of staff and collaboration of the School of Population Health at the University of Queensland. The organisational structure of the HIS Knowledge Hub can be found in Appendix 5.

6. Budget and Justification

The proposed budget for the HIS Knowledge Hub work plan for **Phase 4** is as follows:

DESCRIPTION		TOTAL
P	Personnel	\$ 847,000
I	Support country collaborators / product development / key objectives	\$ 362,250
T	Training / Education	\$ 101,000
C	Consultation	\$ 49,750
E	External communication / dissemination	\$ 390,000
M	M&E Development	\$ 10,000
A	Administration and management costs	\$ 240,000
Total		\$ 2,000,000

Appendix 1

Working and Documentation Series Papers 2009

Improving the quality of birth, death and cause-of-death information: Guidelines for a standards-based review of country practices. HIS Hub Working Paper Series No. 1, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Lene Mikkelsen, Alan Lopez, Debbie Bradshaw, John Cleland, Francesca Grum, Rafael Lozano, Prasantha Mahapatra, Cleone Rooney, Kenji Shibuya, Sue Walker, Eduardo Zacca, Carla AbouZahr Estuardo Albán, Lourdes J. Hufana, Charity Tan, Lucille Nievera, Rasika Rampatige, Sunil Senayake, Jun Gao, Mohamed Ali, Enrique Loyola, Vicki Bennett, Alejandro Giusti, Fatima Marinho, Doris MaFat, Mie Inoue, William Soumbey-Alley, Fiona Gore, Robert Jakob, Mark Amexo

Rapid assessment methods for vital statistics systems. HIS Hub Working Paper Series No. 2, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Lene Mikkelsen, Alan Lopez, Debbie Bradshaw, John Cleland, Francesca Grum, Rafael Lozano, Prasantha Mahapatra, Cleone Rooney, Kenji Shibuya, Sue Walker, Eduardo Zacca, Carla AbouZahr Estuardo Albán, Lourdes J. Hufana, Charity Tan, Lucille Nievera, Rasika Rampatige, Sunil Senayake, Jun Gao, Mohamed Ali, Enrique Loyola, Vicki Bennett, Alejandro Giusti, Fatima Marinho, Doris MaFat, Mie Inoue, William Soumbey-Alley, Fiona Gore, Robert Jakob, Mark Amexo

Assessing health systems performance using information on effective coverage of interventions. HIS Hub Working Paper Series No. 3, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Chris Murray, Alan Lopez

Impact of interventions to improve cause-of-death certification. HIS Hub Working Paper Series No. 4, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Eindra Aung, Chalapati Rao, Sue Walker

Improving the quality and use of health information: Essential strategic issues. HIS Hub Working Paper Series No. 5, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Health Information Systems Knowledge Hub, School of Population Health, University of Queensland, Institute for Health Metrics and Evaluation, University of Washington

Role of health surveys in national health information systems: Best use scenarios. HIS Hub Working Paper Series No. 6, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Health Information Systems Knowledge Hub, School of Population Health, University of Queensland, Institute for Health Metrics and Evaluation, University of Washington

Issues and challenges from HIS development in the Pacific. HIS Hub Working Paper Series No. 7, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Miriam Lum On, Maxine Whittaker, TAG members Pacific Health Information Network members, Pacific Health Information System Development Forum participants

Case studies of the application of vital statistics assessment tool: Lessons learnt from Sri Lanka and the Philippines. HIS Hub Working Paper Series No. 8, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Lene Mikkelsen, Alan Lopez, Eindra Aung

Critical issues in the development of health information systems to support environmental health policies and programs: A case study of ciguatera. HIS Hub Working Paper Series No. 9, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Sarah Goater, Bonnie Derne, Phil Weinstein

Assessing the production, quality and use of national vital statistics: A case study of Sri Lanka. HIS Hub Documentation Note Series No. 1, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Saman Gamage, Rasika Rampatige, Janaki Samarakoon, Susantha Ranadheera, Lene Mikkelsen, Eindra Aung

Assessing the production, quality and use of national vital statistics: A case study of Philippines. HIS Hub Documentation Note Series No. 2, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Lene Mikkelsen, Eindra Aung, Lilian Garcia, Charity Tan, Josephine Camata-Copada, Josefina Natividad, Felicidad Cruz, Joseph Cajita, Maria Josefina Encarnacion Ocampo, Lourdes Hufana, Juanita Basilio, Jose Basas, Frances Rose Elgo, Socorro Abejo, Marizza Grande, Nimfa Ogena, Ma. Goretti Novilla, Ivy Gamino-Turno, Aurora Reolalas, Vikki Carr delos Reyes, Gemma Suarez, Sheryl Abiog, Annabelle. Cabral, Grace T. Cruz, Rosalina Caraan, Ruth Punzalan, Juan Lopez, Evangeline Co-Guillherme, Ledesma Morante, Alfred Zamayla Jr, Josefina Cabigon

Assessing the HIS systems of Pacific Nations: The Vanuatu Case Study. HIS Hub Documentation Note Series No.3, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Miriam Lum On, Maxine Whittaker, Vicki Bennett, Gordon Burns, Kendra Derousseau, Lynnette Pirie, Len Tarivonda, Yvannah Taga, Roy Tarosa, Danjeck Tari, Rachel Takoa, Marcel Braun, Joao Costa, George Taleo, Ron Glastonbury, Morris Amos, Bernard Fabre-Teste, Hensley Garaeliu, Patrick Shing, Hilson Toaliu, Karen Carter, Leipakoa Matariki, Margaret Lui

Assessing the HIS systems of Pacific Nations: The Wallis and Futuna Case Study. HIS Hub Documentation Note Series No. 4, School of Population Health, University of Queensland, Brisbane, 2010

Contributors: Miriam Lum On, Francois Fao, Maxine Whittaker

Appendix 2

Relationships Matrix

International Collaborations

Name of Organisation	Type of Relationship	Relationship	Involvement	Product Association
The World Bank, Washington and Sydney (Health Population and Nutrition Program/ East Asia & the Pacific Department)	Strategic	New	TAG consultation and review	V
WHO, Geneva (Department of Health Statistics and Informatics)	Collaboration and Strategic	Existing	Joint product development and dissemination TAG consultation and review	III, V
Institute for Health Metrics and Evaluation, University of Washington	Collaboration and Strategic	Existing	Joint product development TAG consultation and review	IV, V
University of Tokyo	Strategic	New	TAG consultation and review	V
University of Auckland	Collaboration	New	Joint product development 2010	V
Massey University	Collaboration	New	Possible joint publications 2010	I, V
Pasifika Medical Association	Strategic	New	Consultation and review	I, V
WHO Family of International Classifications	Collaboration and Strategic	Existing	Consultation and review	V, VII
International Federation of Health Records Organisations	Collaboration and Strategic	Existing	Consultation and review	V, VII

Regional Collaborations

Name of Organisation	Type of Relationship	Relationship	Involvement	Product Association
WHO country programs (Indonesia, Sri Lanka, Philippines, Tonga and Fiji)	Strategic	Existing	Consultation	I,V
WHO/ WPRO (Regional Advisor on Health Information)	Strategic and Contract	Existing	Consultation and review and Country Health Information Profile review	I, II, III, V, VII
WHO/ SEARO (Regional Advisor on Health Information)	Strategic	Existing	Consultation and review	III, V, VII
AusAID country office, Fiji and Vanuatu	Strategic and Contract	Existing	Joint product development Consultation and review	I,II, V
United Nations Economic and Social Commission for Asia and the Pacific	Collaboration and Strategic	Existing	Joint product development Consultation and review	III, V
Secretariat of the Pacific Community	Collaboration and Strategic	Existing	Consultation and review	I, V, VI, VII
Pacific Health Information Network	Collaboration and Strategic	New	Consultation and review	I, II, V, VII
Fiji School of Medicine	Collaboration	New	Joint product development Consultation and review	V, VII
Pacific Open Learning Health Network	Collaboration and Strategic	New	Consultation and review	V, VII
Fiji Health Sector Improvement Program	Strategic and Contract	New	Fiji Coder Study Tour	V, VII

National Collaborations

Name of Organisation	Type of Relationship	Relationship	Involvement	Product Association
Australian Institute of Health and Welfare	Contract	New	Joint product development - publications TAG Consultation and review	V
Australian Bureau of Statistics	Contract	New	Joint product development Consultation and review	IV, VII
Commonwealth Department of Health and Ageing, International Strategies Branch	Contract	New	Joint product development - Nauru Consultation and review	I, II, V
National Centre for Classification Health, University of Sydney	Strategic	Existing	Consultation and review	V
National Centre for Health Information Research and Training Queensland University of Technology	Collaboration, Strategic and Contract	Existing	Joint product development Consultation and review	I, II, III, IV, V, VI, VII
Health Information Management Association of Australia	Collaboration and Strategic	Existing	Consultation and review	V, VII
Other Knowledge Hubs	Collaboration	Existing	Joint product development Consultation and review	V

Appendix 3

Technical Advisory Group (TAG) Terms of Reference

The **Terms of Reference** for the TAG are as follows:

TERMS OF REFERENCE	
SCOPE OF WORK	<ol style="list-style-type: none">I. To review key technical areas of work for the Hub and planned activities in health information systems to ensure that they add value to or challenge what donor agencies, and regional and country partners have identified as important current issues that require technical assistance, research and policy analysis;II. To advise on how the Hub can support the needs of different groups involved in technical assistance to donors, policy makers, regional partners and country partners;III. To provide technical scrutiny and peer review of Hub related activities, ensuring outputs (such as guidelines and tools) meet global standards of technical excellence and are relevant to global and regional health information system needs;IV. To advise on, and participate in policy debates that emerge from Hub related activities, such as research findings, publications and policy briefs;V. To advise on strategic dissemination activities such as conferences and reports that deliver relevant and useable technical advice to various partners; andVI. To facilitate strategic partnerships with key donor and technical agencies and countries focussing on health development, particularly in the Asia Pacific Region.
KEY FOCUS AREAS	<ul style="list-style-type: none">• Defining key areas of knowledge development for health information support;• Advising the Hub on related work being undertaken by institutions/individuals elsewhere of direct relevance to the Hub's goal in health information systems; and• Identifying immediate health information needs to monitor progress towards health related goals, including MDG health-related goals, especially maternal and child health in priority countries of Asia and the Pacific.

Appendix 4

Technical Advisory Group Membership

The members of the **TAG** are as follows:

TECHNICAL ADVISORY GROUP MEMBERS	
Dr Jane Thomason	CEO, JTA International
Dr Carla Abou-Zahr	Coordinator, Statistics, Monitoring and Analysis, Department of Health Statistics and Informatics, WHO
Professor Kenji Shibuya	Head of Department, School of International Health Graduate School of Medicine, Department of International Health Policy and Planning, University of Tokyo
Associate Professor Rosemary Roberts	Health Information Consultant, and Former Director of the Australian National Centre for Classification in Health
Professor Ian Riley	Emeritus Professor, University of Queensland
Dr David Evans	Director, Department of Health Systems Financing, WHO
Dr Ajay Tandon	Senior Economist, Health, Nutrition, and Population, Human Development Network (HDNHE), World Bank
Professor Adrian Bauman	Director, Australian Centre for Health Promotion, Sesquicentenary Professor of Public Health School of Public Health, University of Sydney
Professor Rafael Lozano	Visiting Professor, Institute for Health Metrics and Evaluation (IHME), University of Washington
Ms Debbie Sorensen	Director, Health Specialists Ltd , New Zealand
Professor Terry Hull	Professor of Demography, National Centre for Epidemiology and Population Health (NCEPH), Australian National University
Dr Penny Allbon	Director, Australian Institute of Health and Welfare
Ms Marjorie Greenberg	Executive Secretary, National Committee on Vital and Health Statistics (NCVHS), National Center for Health Statistics, Centers for Disease Control and Prevention ¹¹
Professor Ian Rouse	Dean, Fiji School of Medicine
Ms Leanne Riley	Team Leader Surveillance, Department of Chronic Disease and Health Promotion

Appendix 5

HIS Knowledge Hub Organisational Structure

