# AUSTRALIA SUPPORT TO PRIMARY HEALTH CARE STRENGTHENING AND MATERNAL NEWBORN HEALTH (PERMATA) PROGRAM DESIGN

July 2014

# LIST OF ACRONYMS AND ABBREVIATIONS

2H2 SMS information system for reminder and referral related to pregnancy and birthing

ACCESS Australian Community Development and Civil Society Strengthening Scheme

ADB Asian Development Bank

AIPD Australia Indonesia Partnership for Decentralization

AIPHSS Australia-Indonesia Partnership for Health Systems Strengthening

AIPMNH Australia Indonesia Partnership for Maternal and Neonatal Health

ANC Antenatal care

APBD Anggaran Pendapatan Belanja Daerah (District or Provincial Government Consolidated

**Budget)** 

APBN Anggaran Pendapatan Belanja Nasional (National Government Consolidated Budget)

Bappeda Badan Perencanaan Pembangunan Daerah (Regional Development Planning Agency at

provincial and district levels)

Bappenas Badan Perencanaan Pembangunan Nasional (Ministry of National Development

Planning)

BEMONC Basic Emergency Obstetric and Neonatal Care

BKKBN Badan Kependudukan dan Keluarga Berencana Nasional (National Population and

Family Planning Board)

BPJS Badan Penyelenggara Jaminan Sosial (National administrator of social security scheme)

BPMPD Badan Pemberdayaan Masyarakat dan Pemerintahan Desa (Community Development

and Village Governance Agency at Provincial and District level)

BPPSDM Badan Pengembangan dan Perencanaan Sumber Daya Manusia (MOH Human Resource

Planning and Development Board)

BPS Badan Pusat Statistik (National Statistics Board)

BUK Bina Upaya Kesehatan (MOH Directorate General for Medical Services)

Bupati Elected Head of a District

CEmONC Comprehensive Emergency Obstetric and Neonatal Care

CPR Contraceptive Prevalence Rate

DAK Dana Alokasi Khusus (Special Allocation Fund)

DALY Disability-adjusted life year

DCC District Coordinating Committee

Desa Village

Desa Siaga Health aware and alert villages

DFAT Department of Foreign Affairs and Trade

DFID Department for International Development of the British Government

DHO District Health Office

Dinkes Dinas Kesehatan (Provincial/District Health Office)

DJSN Dewan Jaminan Sosial Nasional (National Social Security Council)

DPRD Dewan Perwakilan Rakyat Daerah (Provincial/District Level Parliament)

EMAS Expanding Maternal and Newborn Survival (program supported by USAID)

EmONC Emergency Obstetric and Neonatal Care (referring to both Basic and Comprehensive

emergency care)

GDP Gross Domestic Product

GoA Government of Australia

Gol Government of Indonesia

HR Human Resources

HSB Health-seeking Behaviour

ICMM Improving Contraceptive Method Mix (an advocacy and research project supported by

DFAT, USAID and Gates Foundation)

IDHS Indonesia Demographic and Health Survey

ICT Information Communication Technology

IT Information Technology

IUD Intrauterine Device

Jamkesda Jaminan Kesehatan Daerah (local government health insurance scheme)

Jamkesmas Jaminan Kesehatan Masyarakat (national health insurance for the poor)

Jampersal Jaminan Persalinan (community insurance for ante-natal, child birth and post natal

care)

JHPIEGO Johns Hopkins Program for International Education in Gynecology and Obstetrics

JKN Jaminan Kesehatan Nasional (National Health Insurance Scheme)

KARS Komite Akreditasi Rumah Sakit (Indonesia's Hospital Accreditation Committee)

KUA-PPAS Kebijakan Umum Anggaran dan Prioritas Plafon Anggaran Sementara (is a budget

document prepared by District Secretary submitted to the Head of District as guidelines

in developing APBD based on RKPD by first week of June at the latest)

LAPM Long-acting and permanent methods

MAMPU Empowering Indonesian Women for Poverty Reduction – Australian Government

program

M&E Monitoring and Evaluation

MC Managing Contractor

MCC Millennium Challenge Corporation

MDG Millennium Development Goal

MMR Maternal Mortality Ratio

MNH Maternal and Neonatal Health

MoF Ministry of Finance

MoH Ministry of Health

MoHA Ministry of Home Affairs

Musrenbang Musyawarah Perencanaan Pembangunan (Participatory Development Planning

Meeting)

NCDs Non-Communicable Diseases

NHA National Health Accounts

NICE Nutrition Improvement through Community Empowerment (loan project from ADB)

NMR Neonatal Mortality Rate (death within the first 28 days of life)

NTB Nusa Tenggara Barat (West Nusa Tenggara)

NTT Nusa Tenggara Timur (East Nusa Tenggara)

PAMSIMAS Penyediaan air minum dan sanitasi berbasis masyarakat (Indonesian Government's

national program to deliver water supply, sanitation and improved hygiene practice to

rural and peri-urban areas)

PBF Performance-based financing

PCC Provincial Coordination Committee

Perda Peraturan Daerah (Local Government Regulation)

PHC Primary Health Care

PHO Provincial Health Office (Dinas Kesehatan or Dinkes)

PKH Program Keluarga Harapan (National Household Conditional Cash Transfer program)

PMNCH Partnership for Maternal, Newborn and Child Health

PNC Post Natal Care

PNPM Program Nasional Pemberdayaan Masyarakat (National Program for Community

Empowerment providing unconditional cash grants to community at village level)

PNPM GSC Program Nasional Pemberdayaan Masyarakat Generasi Sehat dan Cerdas (National

Community Empowerment Program for a Healthy and Clever Generation providing

conditional cash grants to community at village level)

PNPM MPd Program Nasional Pemberdayaan Masyarakat Mandiri Perdesaan (National Community

Empowerment Program for Village Development)

Polindes Poliklinik Bersalin Desa (Village Maternity Clinic or Village Birthing Centre)

Poskesdes Pos Kesehatan Desa (Village Health Post)

Posyandu Pos Pelayanan Terpadu (Integrated Health Post for MCH)

PSC Program Steering Committee

Puskesmas Pusat Kesehatan Masyarakat (Community Health Centre at the sub-district level)

Pustu Puskesmas Pembantu (Auxiliary Puskesmas)

Puskesmas Health Centre Reform

Reformasi

Renja Rencana Kerja (Work plan)

Renstra Rencana Strategis (Strategic Plan)

Riskesdas Riset Kesehatan Dasar (Basic Health Research – undertaken every three year by MoH)

RKA Rencana kerja dan anggaran (Workplan and budget)

RKPD Rencana Kerja Pemerintah Daerah (Work Plan of Local Government)

RPJMN Rencana Pembangunan Jangka Menengah Nasional (National Medium Term

Development Plan)

SEKDA Sekretariat Daerah (District Secretariat)

SIKDA Sistem Informasi Kesehatan Daerah (Provincial/District Health Information System)

SKPD Satuan Kerja Perangkat Daerah (Local government agency or department)

SUPAS Survey Penduduk Antar Sensus (Intercensal Population Survey)

Susenas Survey sosial ekonomi nasional (National socio-economic survey)

TA Technical Assistance

TBA Traditional Birth Attendant

TTS Timor Tengah Selatan (South-Central Timor)

TTU Timor Tengah Utara (North-Central Timor)

UN United Nations

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

WFP World Food Programme

WHO World Health Organisation

WiPS Working in Partner Systems

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# **EXECUTIVE SUMMARY**

This paper presents the design of the Primary Health Care Strengthening and Maternal and Newborn Health Program (PERMATA), a \$165 million eight-year program of Australian support to assist Indonesia in reducing maternal and newborn mortality and stunting and improving the performance of the primary health care system. The duration reflects the long-term commitment that will be required to make a lasting difference to the health and nutrition of poor women and children in Indonesia and to make a sustainable impact on the performance of the primary health care system.

### **Rational for Australia's investment**

Health and nutrition status in Indonesia: Indonesia has made considerable progress in improving the health of its population over the last 20 years but compares poorly with other countries in the region on key health and nutrition indicators. Maternal mortality has worsened over the last five years and remains extraordinarily high for Indonesia's middle income status and there has been limited progress in reducing neonatal mortality. Maternal and young child under-nutrition is a serious problem and a major factor in maternal, newborn and child mortality and morbidity. 37% of children under five are stunted, inhibiting economic growth through reduced education performance, earnings and labour productivity. Family planning has plateaued and at current levels will prevent the country from reaping the demographic dividend that other countries in the region have benefitted from to boost economic growth. The equity gap in health and nutrition outcomes is significant and widening, putting social cohesion and stability at risk. Rates of maternal and neonatal death and stunting are higher in the poorest provinces of Eastern Indonesia and among the poorest women and children. This is at a time when non communicable diseases are increasing in Indonesia and infectious diseases, such as TB, also remain a high contributor to death and illness in the country, placing a double burden on Indonesia's health system.

**PERMATA** is aligned with the Australian Government's newly-launched policy *Australian aid:* promoting prosperity, reducing poverty, enhancing stability — particularly by strengthening human development, contributing to economic growth, empowering women and girls and supporting private sector development.

Australian support to reduce high-risk births; improve primary health care to prevent, detect and manage disease earlier; and ensure women and newborns get quality care before, during and after delivery will assist Indonesia to reduce unnecessary deaths and improve human development and participation in the economy, particularly for women and girls. Women's empowerment is fundamental to economic and social development, and improved reproductive and maternal health is a key development medium for empowering women and girls. Enabling women to access their reproductive health rights and control their own fertility will allow them to participate more fully in economic and social life and help them and their families escape from and remain out of poverty. This will have high returns for Indonesia's economic progress, affecting both the quantity (through reduced mortality and absenteeism) and quality (higher productivity) of human capital, including for the workforce.

Health and nutrition investments, particularly those that avert maternal deaths, provide high **economic returns** and social benefit. Global and regional estimates show that an additional investment of \$5 per capita per year in maternal and child health interventions will return over nine times this amount in economic and social returns. Poor nutrition is estimated to reduce GDP in Indonesia by 3-4 per cent a year. Rates of return to nutrition investment in Indonesia are estimated to

be as high as 48 dollars per dollar spent. The investment case prepared for PERMATA calculates that the program will achieve a rate of return of about \$20 for each \$1 invested.

The economic value of saving a mother's life is estimated to return between 1.25 and 1.75 times the annual per capita GDP, including increasing the survival chances of her existing children. By reducing maternal and neonatal mortality and increasing contraceptive prevalence, the program also directly contributes to Indonesia's achievement of a demographic dividend, which is expected to be a key driver of economic growth in the short to medium term. These opportunities to promote human development and economic growth will in turn reduce poverty and promote greater social stability and cohesion for Australia's close neighbour.

Globally, many significant innovations for health improvement and access to services have been developed and scaled up in partnership with the **private sector**. Working to improve primary health care and maternal and newborn health and nutrition in Indonesia includes opportunities to work with the private sector in a variety of ways and in accordance with the Australian Government's priorities. PERMATA will work with private firms in Indonesia that are key developers and suppliers of health-related commodities, diagnostics and ICT tools. Partnerships with the food industry will be explored for improved community nutrition, including potential for public private partnership and innovative financing mechanisms to improve quality and access. More challengingly and as appropriate, PERMATA will explore working with private providers of health care, including private practices of midwives and doctors who also work in the public sector and separate private sector clinics and health facilities, to increase access to essential health services and commodities.

A further phase of Australian investment to maternal and newborn health also provides an opportunity to **strengthen the bilateral relationship** between Australia and Indonesia, which welcomes our support in this subsector. PERMATA draws on Australia's value-add in the health sector, particularly its technical and research expertise and strong track record working in Indonesia. Through the demonstration of innovative cost-effective models and approaches and provision of quality technical assistance, the program will leverage Indonesia's own resources to scale up successful approaches through the public health system and private providers. Through integrated support across multiple sectors, Australian assistance will unlock a wide range of resources to have a greater impact on maternal and neonatal mortality and stunting.

PERMATA also aligns with the Australian Government's new performance framework *Making Performance Count: enhancing the accountability and effectiveness of Australian aid.* Health interventions provide measurable results that can be robustly monitored and evaluated. Strong performance monitoring and evaluation of investments are being built into the program.

### What will PERMATA do?

PERMATA will have a two pillar focus: 1) to directly address key determinants of maternal and newborn death and childhood stunting, including family planning, nutrition and access to quality care before, during and after delivery (including to address complications); and 2) to strengthen primary health care systems to not only improve maternal and child health but also better address the double burden of disease Indonesia faces, including rising chronic diseases.

**Evidence base:** There is a strong evidence base for proven interventions that can prevent maternal and neonatal death, a clear case for investing in family planning to reduce mortality in women and young children and global consensus on cost-effective health sector interventions to tackle maternal and young child under-nutrition. There is regional and global evidence to show that strengthening the

primary health care system to deliver more affordable and accessible quality services is essential for achieving sustained and equitable improvements in maternal and neonatal health and nutrition outcomes and to detect and manage other chronic, diseases before they result in costly hospital care, significant disability and/or death.

Challenges to be addressed: Lessons learned from GoI programs and previous Australian support show what can be achieved as well as what still needs to be done. Indonesia needs to address multiple challenges in order to improve health and nutrition outcomes. In maternal and neonatal health, these include: raising community commitment to women's and children's health; empowering women, families and communities to make healthier decisions where traditional beliefs and practices may be harmful to mother and child; improving service coverage (in particular facility delivery and basic and comprehensive emergency obstetric and neonatal care); tackling inequalities between provinces and between the rich and the poor; improving referral systems; and addressing poor quality of care. The Australia Indonesia Partnership for Maternal and Neonatal Health (AIPMNH) has achieved remarkable success in Nusa Tenggara Timur (NTT) province by addressing all of these together, contributing to a decrease in maternal deaths of over 30% in four years.

PERMATA is designed to build on this experience and address gaps that were not covered by AIPMNH. Family planning challenges include unmet need for contraceptives and over-reliance on short-term contraceptive methods that are more costly for the user than longer acting methods. Coverage of proven nutrition interventions delivered by health services is low and NTT has the highest rates of under-nutrition in Indonesia

The primary health care system is poorly equipped to respond to the health challenges that Indonesia currently faces. There is an over-focus on facility-based curative services often at the expense of outreach and prevention. The quality of care provided is low with a poor distribution of skilled and experienced health workers in rural and remote areas, frequent shortages of equipment and supplies of core commodities and poor quality and use of health information. All this is further compounded by the weak capacity of local governments to plan and manage health services. Though PERMATA will work nationally and sub-nationally on MNH issues, national reform support and policy dialogue for primary health care system strengthening is being undertaken by DFAT's Australia-Indonesia Partnership for Health Systems Strengthening (AIPHSS). That includes overall health financing patterns, cost-effective and equitable implementation of the national health insurance scheme, health human resources planning and management and strengthening regulation and performance monitoring. PERMATA will therefore work sub-nationally on PHC strengthening and through AIPHSS on national issues, bringing local perspectives to national policy reform and involving PERMATA districts in pilots of suggested reforms.

# Alignment with key stakeholder priorities and activities

Government of Indonesia priorities: Across government, decision makers are very conscious of key lagging health outcome indicators, particularly maternal mortality, high fertility and poor nutrition, coupled with the growing burden of non-communicable disease. There is now growing policy discussion on the importance of primary care and prevention and promotion for health, but resourcing and implementation have yet to follow these discussions. Over recent years, Indonesia has played a central role in developing the post-MDG agenda, has made commitments to the World Health Assembly's global maternal and young child nutrition targets for 2025 and has signed up to the international "Scaling up Nutrition" framework. For these reasons, persisting poor maternal newborn health and nutrition outcomes carry significant reputational risk. They are firmly central to the

Government's health focus in the next Medium Term Development Plan and are likely to continue to be amongst the highest health strategic priorities for the Government of Indonesia going forward.

The Government of Indonesia introduced a national health insurance scheme, Jaminan Kesehatan Nasional (JKN), in 2014 and aims to achieve universal health coverage by the end of 2019. This is an important reform that will provide improved access to health care for millions of Indonesians and will fundamentally change the structure and incentives in the health system, including how health providers are paid, relationships between public and private sectors and some recentralisation of funding for health. Together with the opportunities presented by JKN come risks of further exacerbating the imbalance of health financing towards hospitals and curative services, which are concentrated in the major cities, to the neglect of more cost-effective primary health care and preventive and promotive health programs and access for rural remote populations.

In 2015-16, substantial changes to resources flowing from national government to villages will occur through the commencement of arrangements under the new Village Law. The village will have authority over a much larger budget, with attendant expectations on increased accountability and inclusive decision making. This will have significant implications for PERMATA, including both risks and opportunities, which will inform the one-year inception phase of the program.

Other Australian programs: PERMATA is one of the Australian Government's suite of programs that work at improving frontline service delivery at the point of interaction between the user and the provider, with at least four other DFAT programs having reproductive and maternal and/or child health as defined objectives. Frontline programs embrace the principles of local solutions for local problems, flexibility of programming, cross-sector coordination and leveraging and strong monitoring and evaluation to inform scaling up by the Government of Indonesia.

To maximise effectiveness and efficiencies at the local level, PERMATA will work in close coordination with other Australian-funded and GoI programs working on the broader determinants of health, including for example decentralisation, village support, social protection and rural water and sanitation programs. PERMATA will explore the use of financial incentives in the form of district-wide performance based grants and cross-sector bottom-up problem-based planning mechanisms as ways of operationalizing this.

Other donor support: Donor assistance represents only 1.7% of total expenditure on heath in Indonesia. Donor presence has reduced as the country has achieved middle-income status. The largest source of donor funding to the health sector is the Global Fund. However, as the Global Fund only provides finance and no technical assistance, its ability to address complex systemic problems is very limited. Australia is the largest bilateral donor in the health sector. USAID is the other main bilateral donor for maternal and neonatal health. Donor investment in family planning has declined and no bilateral donors support family planning at present. There is increasing donor interest in nutrition. UN agencies are providing technical assistance to the GoI and the Millennium Challenge Corporation (MCC) program aims to reduce stunting by integrating maternal and child health, nutrition, water and sanitation through the GoI Program Nasional Pemberdayaan Masyarakat program (PNPM Rural) program, but there is no donor support for delivery of nutrition interventions through the health sector.

### **PERMATA structure**

**Program goal and outcomes:** The overarching development <u>goal</u> of PERMATA is to: *Contribute to reduction in maternal and newborn mortality and stunting and improved performance of the primary health care system in Indonesia*.

The program's <u>objective</u> is to: Assist the Government of Indonesia to effectively deliver quality essential primary health care services and reduce rates of maternal and newborn death and stunting, particularly in poor and near poor populations in selected provinces and districts.

Australian support will contribute to the following <u>end-of-program outcomes</u> in selected provinces and districts:

- reduced number of maternal deaths, particularly in poor and near poor populations;
- reduced number of newborn deaths, particularly in poor and near poor populations;
- reduced stunting in children under five, particularly in poor and near poor populations;
- a greater proportion of chronic disease being detected and effectively managed by the primary health care system;
- effective new approaches have contributed to policy and are scaled up beyond program focus districts.

To support achievement of the end of program outcomes, by the end of four years the program will:

- Reduce maternal and newborn death and child stunting through empowering women, families
   <u>and communities</u> to make healthier choices on the number and timing of pregnancies in selected
   provinces and districts.
- 2. Reduce the risk of maternal and newborn death and child stunting through comorbidities and particularly through under-nutrition related risk factors in selected provinces and districts.
- 3. Reduce the risk of maternal and newborn death and child stunting through improved coverage and quality of <u>obstetric and neonatal care</u> in selected provinces and districts.
- 4. Strengthen the effectiveness, efficiency and quality of <u>primary health care service delivery</u>, particularly to poor and near poor populations, in selected provinces and districts.

**Delivery approach**: Demonstration and innovation is at the core of PERMATA. The program aims to demonstrate and test with GoI how:

- (i) Proven cost-effective interventions for maternal and newborn health and nutrition can be successfully implemented in the Indonesian context.
- (ii) Promising health systems related policy reforms perform in practice in demonstration sites.
- (iii) Local solutions to primary health care systems and maternal and newborn health and nutrition challenges can be effective and adapted for different health contexts.

This will be supported through a small number of demonstration models implemented in a selection of districts across the program provinces to test relevance and effectiveness in a variety of health settings. The demonstration models will be defined and designed in close coordination with national and provincial policymakers and local governments to set the ground for ownership and future scaling up.

**From implementation to replication and scaling up:** Ultimate impact of the program more broadly for Indonesia will rely on the extent to which the approaches shown to be most effective through PERMATA are scalable and implemented beyond the limited number of PERMATA sites and districts.

Our estimates of direct program beneficiaries and impact assume replication within and between PERMATA provinces, but not beyond this.

Previous health programmes in Indonesia have shown mixed results of government replication and scaling up of successfully piloted interventions. Important lessons have been learned from earlier health programs of the need to work simultaneously at national, provincial and district levels in order to feed district implementation experience into national policy processes and to test out national policy proposals in diverse contexts. PERMATA builds on this learning and will take a multi-pronged strategic approach to policy influencing, dissemination and learning. An independent evaluation agency involving Australian and Indonesian organisations and with strong impact and outcome evaluation expertise will be contracted separately from the managing contractor.

Government buy-in to the models to be piloted and its involvement in the monitoring and learning from the approaches will be fostered from the start. Technical assistance will target sub-national and national policy makers and a "learning platform" (see below) will regularly share lessons and approaches to scaled co-funding by government when appropriate. Though PERMATA will not finance the scaling up of effective models, it will assist GoI with the preparatory and scoping work that will be necessary to roll effective approaches out at scale. That support will be in addition to ongoing funding for the effective models in the PERMATA locations over the life of the program.

An earmarked budget for purpose-driven, flexible ongoing program learning events – ie. a "learning platform" – is included in PERMATA. The learning platform will bring stakeholders together to share experiences and results at various levels and in various types of forums, often from multiple sectors. Activities will include horizontal learning at each level of the health system as well as bottom-up and top-down sharing of evidence, including of operational research and performance data. The learning platform will initially embrace PERMATA and the Australia Indonesia Partnership for Health Systems Strengthening (AIPHSS) and will in due course be extended to include all Australian-funded health programs in Indonesia. This has efficiency benefits in terms of investing in establishing a well-managed knowledge management function and will strengthen the impact of the learning platform itself by expanding participation and deepening synergies and learning across the inter-linked programs.

Generation of evidence that is appropriate, policy-relevant and robust will be a priority. This will include a limited number of rigorous impact evaluations as well as other types of evaluations of the innovations being implemented.

**Geographical coverage:** The program will be implemented in 25 focal districts across the three provinces of NTB, NTT and East Java, where synergies with other Australian-funded programs to improve frontline service delivery can be leveraged. The selected districts generally have poorer performance on a range of primary care and maternal and newborn health indicators. The numbers of districts were chosen to provide approximately 50% coverage of the province (capped at 10 districts), given budget availability, as well as the need to have some areas where activities are not implemented to judge the success of the program. This would be able to be scaled up or down flexibly with budget and performance. A diverse set of provinces and districts have been purposefully selected to assist in developing solutions that are suited to the different health contexts that exist across Indonesia and can provide credible evidence to support ultimate scaling-up by the Government of Indonesia. This means that the program is designed to be flexible with space for innovation tailored to local conditions and opportunities. PERMATA will set aside a small budget to enable other districts in these provinces to participate in learning events, to help facilitate faster replication.

Women's empowerment and inclusive development: Improving women's reproductive and maternal health is key to women's empowerment: impacting women's access to education and economic opportunities and improving their productivity and their families' economic and human development. PERMATA has a strong gender and equity focus as it seeks to reduce the socio-economic and geographical gap in maternal and neonatal health and nutrition outcomes. It has a significant emphasis on improving women's health and is targeted at improving the health outcomes of the poor and near poor, including through its focus on primary health care. Health inequality has been a key factor in the selection of the program's provinces and districts.

**Beneficiaries:** Across PERMATA's 25 districts the partnership will benefit just over 4 million women of reproductive age, cover nearly 3 million births, (which, if current rates persist, would result in over 8,000 maternal deaths, 60,000 newborn deaths and in which over half a million children under five would be stunted between 2015 – 2025).

Governance and management arrangements: Governance arrangements have been purposefully designed to maximise linkage with AIPHSS. Where existing structures and committees can be used to manage and oversee PERMATA by extending their scope of work these will be used for efficiency and sustainability. This includes reframing the national level AIPHSS Program Steering Committee (chaired by the Secretary General of the Ministry of Health) to accommodate PERMATA, and strengthening its functionality. The program will be led at provincial and district levels by Program Coordination Committees; the Governor and Bupati or Vice Bupati will chair these, respectively. The Program Steering Committee and Provincial and District Coordination Committees will include members from key government agencies including Ministry of Finance, Ministry of Home Affairs, Bappenas/Bappeda, and the National Population and Family Planning Board.

PERMATA will be managed by a managing contractor that will have a presence in each of the focal provinces and districts. A separate contractor will undertake high level evaluation and program related research.

Monitoring and evaluation: PERMATA's focus on innovation and solving system bottlenecks for Gol replication requires a significant investment in monitoring and evaluation to produce a reliable and robust evidence base from which Gol can take relatively small-scale successes to scale. PERMATA includes four levels of monitoring and evaluation: 1. Routine program monitoring; 2. Results monitoring; 3.Qualitative monitoring and evaluation of the enabling environment and the key contextual factors that impact on program outcomes; and 4. specific evaluations, both qualitative and quantitative, including rigorous impact evaluations of the cross-province demonstration projects. Monitoring and evaluation investments together with funding of learning platform activities is estimated to require up to 16% of PERMATA's budget over the life of the program, including relevant contractor staffing.

Timeframe, budget and modalities: The eight-year timeframe will be divided into two four-year phases. The proposed funding allocation is AUD\$165 million, with AUD80 million allocated for the first four-year phase and AUD85 million allocated for the second four-year phase. The program will be subject to a full independent review after the first four-year phase, which will provide an opportunity to adjust the design to reflect changes in the policy and operating environment, implementation progress and challenges and emerging needs. DFAT expects to use a combination of modalities to deliver the program, including: channelling funds for performance based financing through Gol systems; implementation through a managing contractor and sub-contractors and evaluation and

program research through an evaluation contractor; and flexible funds. The independent review will also assess the effectiveness of implementation and funding modalities.

# SECTION 1: PROBLEM ANALYSIS AND CONTEXT – TECHNICAL, SOCIAL, POLITICAL, INSTITUTIONAL AND ECONOMIC

Indonesia has the fourth largest population in the world, currently at 238 million (Badan Pusat Statistik, 2012), and the largest economy in South East Asia. Extreme poverty fell from 23.4% in 1999 to 11.4% in 2013 (World Bank IEQ March 2013), but significant challenges remain: continuing strong growth is not guaranteed and a high proportion of the population remains either poor or without income security. The World Bank calculates that more than 40% of Indonesia's population, or around 105 million people, are living on less than US\$2 per day.

Improved health has been, and needs to continue to be, an important part of the economic growth story in Indonesia. Indonesia's population age structure means that it is poised to reap a demographic dividend with fewer dependents per working person. This will require enhanced health investments in maternal and child health, family planning and effective primary care to reduce early deaths and high birth rates and ensure a healthy workforce. Sustained declines in fertility have been estimated to contribute to between 0.1 to 0.6 percentage points in per capita GDP growth per annum (Dalgaard & Hansen, 2010) (Ashraf, Weil, & Wilde, 2011). Health investment has high returns to a country's economy affecting both the quantity (through reduced mortality, absenteeism) and quality (higher productivity at work) of human capital, and in reducing poverty. Maternal and child health, nutrition and family planning are amongst the best health investments that can be made in terms of economic returns for a country. Saving a mother's life is estimated to return between 1.25 and 1.75 times annual per capita GDP of a country (Foster & Bryant, 2013; Stenberg, Axelson, & Sheehan, 2013) and returns to nutrition in Indonesia have been proposed to be as high as around \$40 per \$1 invested (Quershy, Alderman, Rokx, & et al, 2013; Hodinott, Alderman, & Behrman, 2013)

Over the past 20 years, life expectancy in Indonesia has increased from 60 to 67 years; child mortality has more than halved from 97 to 40 per 1,000 live births; and maternal mortality fallen from 600 to about 350 per 100,000 live births. Total expenditure on health per capita has increased from US\$19.8 in 2002 to an estimated US\$108 in 2012 (World Bank, 2012)<sup>1</sup>, but still remains low and inequitably distributed when compared to neighbouring countries. Despite progress, health outcomes have not kept pace with the country's economic growth. Government spending on health at less than 1% of GDP is the fifth lowest in the world (World Bank, 2014). Many of the country's health and nutrition indicators are worse than those of other countries in the region, and are indicative of underlying health systems constraints. Indonesia's Medium Term Development Plan 2010 – 2014 identifies health as one of the eleven national development priorities with the core aim to improve access and quality of services.

# 1.1 MATERNAL MORTALITY

Indonesia's Millennium Development Goal target of a maternal mortality ratio (MMR) of 102 by 2015 will not be met. Indonesia's MMR declined from 390 in 1991 to 228 in 2007 and most recently is estimated to have increased to around 359 (IDHS 2012). This is high for a middle-income country and higher than poorer countries in the region: for example, the Philippines (99), Vietnam (59), and Papua New Guinea (230). Inadequate progress in reducing maternal deaths is particularly worrying given the

<sup>&</sup>lt;sup>1</sup> http://data.worldbank.org/indicator/SH.XPD.PCAP

increasing number of women having facility-based deliveries – rising from 46.1% in 2007 to 63.2% in 2012 (IDHS 2007 and 2012) – and the almost universal take-up of some level of antenatal care, raising concerns about the quality of the care. Averting maternal deaths has human development and economic benefits. Saving a mother's life also increases the survival chances of her existing children.

# 1.2 NEONATAL MORTALITY

Indonesia's infant and under five mortality rates have stagnated over the past decade (IDHS, 2012). The latest data shows that the neonatal mortality rate (NMR – that is, death within the first 28 days of life) has stalled at the 2007 level of 19 deaths per thousand live births. Over half of neonatal mortality in Indonesia occurs in the first week of life. Pre-term birth is estimated to be the leading cause of neonatal mortality and adolescent births have a higher likelihood of pre-term births than others. The risk of neonatal mortality is nearly three times higher in babies born to older and younger mothers, those born as a fourth or higher child and babies born less than 24 months after the previous child (Titaley et al, 2008).

# 1.3 STUNTING

Thirty-seven per cent of children under five are stunted in Indonesia (Riskesdas 2013), with only Cambodia and Laos having higher rates in South East Asia (Bloem, de Pee, & Hop, 2013). Almost all stunting takes place in the first 1,000 days from conception to 2 years (Black et al 2013). Stunting is the result of chronic and often intergenerational under-nutrition, coupled with frequent illness and is the hallmark of endemic poverty. Stunting increases the risk of illness; undermines cognitive development, affecting school attendance and academic performance; and reduces long-term health, development and productivity (UNICEF, 2012). Stunting and lower weight gain during first 1,000 days of life also increases the risk of obesity and other non-communicable disease later in life. Both preterm birth and low birth weight, which occur frequently in Indonesia, triple the risk of stunting (Christian, Lee, Angel, & al, 2013). Poor nutrition is estimated to reduce GDP in Indonesia by 3 to 4 per cent a year (UNICEF 2010)<sup>2</sup>. Interventions to reduce stunting are estimated to have the highest returns to economic growth of all nutrition interventions, including an increase in national income of 11% associated with a 20% reduction in stunting cases (Hodinott et al 2013). Reducing stunting in Indonesia is therefore key for its economic growth. Benefit cost ratios for Indonesia-specific investment to reduce stunting are very high, recently ranging between \$31 to \$48 per dollar invested (Quershy et al 2013; Hodinott et al 2013).

# 1.3.1 MATERNAL UNDER-NUTRITION

Maternal under-nutrition contributes to low birth weight and stunting and increases the risks of maternal and neonatal mortality. Related to this, rates of anaemia are very high in Indonesia, posing a key risk for maternal and newborn deaths. Iron deficiency anaemia is estimated to result in a reduction of between 3% and 8% of GDP per annum (Horton 2003 in Pasricha et al 2013). Maternal under-nutrition is common in Indonesia and is worse among women from the poorest economic quintile with the least education and among those who live in the remotest areas. Nationally over 24 per cent of pregnant women aged 15-49 are suffering from chronic energy deficiency. The highest

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<sup>&</sup>lt;sup>2</sup> UNICEF, Indonesia sets targets to improve child nutrition, http://www.unicef.org/indonesia/media\_12591.html. Jakarta, 25 January, 2010

rate is in *Nusa Tenggara Timur* (NTT) at 45.5% (*Riskesdas*, 2013). Young pregnant women aged 15-19 are particularly at risk of under-nutrition, with levels of 38.5% chronic energy deficiency nationally; this reaches 46.6% for all young women aged 15-19. The vulnerability of young women (15-19) is further gaining policy attention with teenage marriage increasing from 9.2 to 14.4 per cent between 2005 and 2010 (Hull reported in MoH, 2014) with potentially negative implications for women's empowerment as young married women are at greater risk of losing the opportunity to benefit from education and of adolescent pregnancy. In parallel, the number of overweight and obese women in Indonesia has doubled (*Riskesdas* 2007, 2013), contributing to pre-eclampsia / eclampsia deaths and preterm birth.

# 1.4 A PRIMARY HEALTH CARE SYSTEM ILL-EQUIPPED TO DEAL WITH INDONESIA'S PRIORITY HEALTH PROBLEMS

As Indonesia's socioeconomic and demographic profile changes so does its disease burden. Whilst maternal and newborn mortality remain high – as do a number of communicable diseases such as tuberculosis, acute respiratory infections and childhood diarrhoea – non-communicable diseases (NCDs) are rapidly rising. NCDs are now the dominant share of the overall disease burden in the country. In 1990 only about 37% of morbidity and mortality in the country was due to NCDs; by 2010 this number had risen to 58% (Institute of Health Metrics and Evaluation, 2013). Rather than the short-term curative focus that has dominated primary health care in recent years, Indonesia's dual disease burden requires a primary health care system that can respond to these demands: a system that emphasises health promotion, early detection of disease through surveillance and screening programs, and ongoing cost-effective management of primary care to prevent and mitigate higher cost treatment and hospital care.

# 1.5 GEOGRAPHIC AND SOCIAL INEQUALITIES IN HEALTH

The returns to human capital and economic growth from health investments are known to be larger where inequities are greater (Bloom et al 2004). Reducing inequities in health outcomes and service access also improves social cohesion and reduces risk of instability.

For maternal and neonatal health (MNH) there are wide geographic disparities in outcomes and service coverage at the primary health care level, with the worst outcomes tending towards the east of the country in the islands of Papua and West Papua, Nusa Tenggara and Maluku. For example, the facility delivery rate in NTT is 41% and 21% in West Maluku compared to the national average of 63% (IDHS, 2013).

Table 1 Maternal and neonatal health indicators for selected provinces

Province	Poverty (% poor people) <sup>3</sup>	Neonatal mortality (IDHS 2012)	Infant Mortality Rate, (IDHS 2012)	ANC provided by a skilled provider (IDHS 2012)	Facility Based Deliveries % (IDHS 2012)	Stunting % (Riskesdas 2013)	CPR modern % (IDHS 2012)
West Java	9.61	17	30	96	63	35	60
Central Java	14.44	22	32	99	76	37	62
North Sumatra	10.39	26	40	93	48	43	43
Banten	5.89	23	32	96	61	33	61
South Sulawesi	10.32	13	25	95	48	41	48
DKI Jakarta	3.72	15	22	99	96	28	53
South Sumatra	14.06	20	29	97	56	37	64
Lampung	14.39	20	30	97	61	43	66
East Java	12.73	14	30	99	85	36	62
NTB	17.25	33	57	98	75	45	55
NTT	20.24	26	45	92	41	52	38
Indonesia	11.47	20	34	96	63	37	58

At the national level, the social gradient in facility delivery rates and postnatal care remain large with the poorest women and those without education lagging behind<sup>5</sup>. Differences in neonatal mortality also vary by wealth and mother's education: the poorest quintile has a NMR of 29 compared to 10 for the wealthiest quintile, and 37 for women with only some primary education (IDHS, 2012).

Stunting is increasingly concentrated among the poorest. National rates of stunting fell in the wealthiest quintile from 30% in 2007 to 24% in 2010, but increased in the poorest from 40% to 43% (*Riskesdas* 2007 and 2010). At the macro level, such trends fuel political concerns about the growing inequity between income groups with its negative implications for both economic growth and social stability.

In contrast to maternal and newborn health, rates of non-communicable diseases (NCDs) though having a small income gradient, are largely similar across poorer and wealthier quintiles (*Riskesdas*, 2013). A large contributor to this is the high prevalence of smoking across all socioeconomic quintiles and geographic areas in Indonesia. Over 36% of the population above 15 either smoke or chew tobacco (2013), though this is much greater among men than women: 65% of males versus 2% of females (*Riskesdas*, 2013) and this reaches 50% in NTT, which also has the highest prevalence of lung disease in the country (*Riskesdas*, 2013).

# 1.6 POLITICAL AND ECONOMIC CONTEXT: GOVERNMENT OF INDONESIA PRIORITIES

Indonesia's National Long-Term Development Plan seeks to establish a country that is developed and self-reliant, just and democratic, and peaceful and united. Such a prosperous, stable and well-disposed Indonesia is also in Australia's national interest. This favourable scenario can only be achieved if the Indonesian people are healthy and well-nourished and enjoying the benefits that come from an advantageous population dependency ratio.

 $<sup>^3 \, \</sup>text{http://www.bps.go.id/eng/tab\_sub/view.php?kat=1&tabel=1&daftar=1&id\_subyek=23&notab=1, \, downloaded \, June \, 2014. \, 1.00 \, \text{downloaded} \, \text{downloa$ 

<sup>&</sup>lt;sup>4</sup> Riskesdas 2013 dalam Angka, page 391

<sup>&</sup>lt;sup>5</sup> See Social Development Assessment Annex for further details.

Indonesia has experienced rapid economic growth of over 6 per cent per year between 2007 and 2012. This slowed in 2013 and the World Bank expects growth to slow further to 5.3 per cent in 2014. While still high by most standards, such slower growth means Indonesia will not escape middle-income status by 2025. The result will be millions of additional Indonesians still living in poverty at that time than would otherwise have been the case, with implications for health outcomes and demands on the public health system (Sumner & Edwards, 2013). Indonesia has the fiscal space to sharply increase its spending on health. This, along with strengthening of the health system to deliver more effective and pro-poor services is a priority if Indonesia is to improve its health outcomes in line with the country's middle-income status.

Across government, decision makers are very conscious of key lagging health outcome indicators, particularly maternal mortality, contraceptive prevalence and fertility and nutrition, coupled with the growing burden of non-communicable disease. There is now growing policy discussion on the importance of primary care and prevention and promotion for health, but resourcing and implementation have yet to follow these discussions. Over recent years, Indonesia has played a central role in developing the post-MDG agenda, has made commitments to the World Health Assembly's global maternal and young child nutrition targets for 2025 and has signed up to the international "Scaling up Nutrition" framework. For these reasons, persisting poor maternal newborn health and nutrition outcomes carry significant reputational risk. They are firmly central to the Government's health focus in the next Medium Term Development Plan and are likely to continue to be amongst the highest health strategic priorities for the Government of Indonesia going forward.

The Government of Indonesia introduced a national health insurance scheme, *Jaminan Kesehatan Nasional* (JKN), in 2014 and aims to achieve universal health coverage by the end of 2019. This is a primary focus of a range of bodies beyond just the Ministry of Health (including the national administrator of the scheme, BPJS *Kesehatan*; the Ministry of Finance; *Bappenas*; and the Social Security Council (DJSN)). This is fundamentally changing the structure and incentives in the health system, including how health providers are paid, relationships between public and private sectors and a recentralisation of funding for health. There is a major risk that the national health insurance scheme will further exacerbate the already severe imbalance of health financing towards hospitals and curative services, which are concentrated in the major cities, to the neglect of more cost-effective primary health care and preventive and promotive health programs.

It is expected that continued political pressure for better public services and adequate social protection will create pressure to prioritise and improve the efficiency of public spending, increase the revenue effort and improve the performance of the bureaucracy, including reducing corruption and cutting red tape. JKN is likely to increase demand for quality health services and place further pressure on the government to improve health care.

The current National Medium Term Development Plan (RPJMN) comes to an end at the end of 2014. DFAT has provided technical support to the development of the next plan for 2015–19, which includes a firm focus on the achievement of universal health coverage, including managing the risks and reaping the benefits of the introduction of JKN in 2014. This includes cost control and the sustainability of the scheme and concerns regarding rising expenditure on pharmaceuticals as well the health system's readiness to deliver services according to the increased demand and expectations JKN will continue to create. For the first time in Indonesia, primary care centres will begin to have the authority and responsibility to manage a large proportion of their own funding from the national health scheme. Their capacity to do this is a key concern and focus for the Government in the medium term.

In 2015-16, substantial changes to resources flowing from national government to villages will occur through the commencement of arrangements under the new Village Law. The village will have authority over a much larger budget, with attendant expectations on increased accountability and inclusive decision making.

Key resources for the improvement of maternal and newborn health and primary care, such as the integrated health posts (Posyandu), local water and sanitation and village roads are directly under the authority of the village head and council. Authority will be allocated from the district to the village for increasing access to basic services and the maintenance and upkeep of village level buildings, including health facilities such as the Polindes. A number of groupings and institutions exist at village level currently causing fragmentation and disagreement in priorities and strategies for sectors that should work together to improve health (village institutions study) and the village law seeks to address these. The integrated deliberative village forum now mandated in the village law, and which includes citizens, village officials and special group representatives, will be an important forum to ensure that constraints to maternal and newborn health and nutrition services are raised and brought to Puskesmas community health boards at the sub district level.

These changes will be important for PERMATA and will include risks and opportunities, which will inform the inception phase of the program. Village structures and officials have a key role to play in promoting healthier choices in family planning, nutrition and maternal and newborn care. Village planning forums will be key to extending village level services and therefore access for maternal and newborn health. Village budgets are expected to be far larger than grants currently received, including through PNPM. Accountability arrangements and links to performance on key health outcomes such as those currently included by PNPM will be important but decisions on whether these will be included and how are yet to be finalised. PERMATA will try to influence the use of village law funds to address constraints to access to public health activities, such as transport costs to health facilities, provision of posyandu services at the village level and improving sanitation at the community level.

The Ministry of Health is now preparing its next five-year Strategic Plan (*Renstra* – 2015 – 2019) which will follow on from the RPJMN priorities. The current National Action Plan for Maternal Mortality Reduction and National Family Planning Strategy tend to focus on improving national averages (but this may change given the focus on inequity in the current draft of the RPJMN 2015-19). Implementation focus by the Ministry of Health and other key government departments has until now been on the more populous provinces where the largest numbers of maternal deaths occur, underemphasising the inequities that exist in poorer remote areas – particularly Eastern Indonesia – where larger proportions of women die and are not empowered to make better health, family planning and nutrition decisions. DFAT is supporting the development of the Ministry of Health's National Action Plan for Reduction of Maternal and Newborn Death (2015-30).

The winner of the 2014 Presidential election is expected to endorse support for universal health coverage and if Joko Widodo (Jokowi) is elected it is anticipated that health will further rise up the political agenda<sup>6</sup>.

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<sup>&</sup>lt;sup>6</sup> NTT's current Governor is from PDIP the party which nominated Joko Widodo, The governors of both East Java and NTB are from the Democrat Party of the current president Susilo Bambang Yudhoyono, which is not yet affiliated with either presidential candidate.

# **SECTION 2: DIAGNOSING THE PROBLEM**

The determinants of health in Indonesia are multifaceted and interconnected. They encompass underlying issues related to poverty, geography, culture and gender that affect women's empowerment, household living standards and demand for health services as well as supply side and governance issues which impact on the availability and quality of health services, and the enforcement of public health regulations. These factors affect access to proven interventions that reduce maternal and neonatal mortality and stunting (Partnership for Maternal, Newborn and Child Health, 2011) and the provision of public and primary health care that can prevent, detect and treat communicable and non-communicable diseases.

# 2.1 MATERNAL AND NEWBORN HEALTH AND STUNTING

# 2.1.1 LEADING CAUSES OF MATERNAL AND NEWBORN MORTALITY AND IMPLICATIONS FOR STUNTING IN INDONESIA

The main causes of maternal and newborn mortality in Indonesia are interrelated and linked

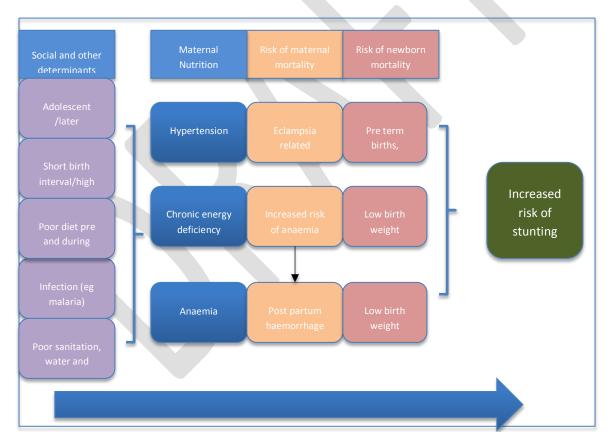


Figure 1 Leading causes of maternal and newborn mortality and implications for stunting in Indonesia

particularly through the nutritional status of the mother. These factors in turn impact on the risk of childhood stunting.

MATERNAL MORTALITY. The 2010 census found pre-eclampsia and eclampsia related conditions and haemorrhage the most common causes of maternal death with sizeable variation by region.

Eclampsia and pre eclampsia related deaths are higher in the more populated islands of Java and Sumatera and post-partum haemorrhage more frequent in Eastern Indonesia where there is poorer access to quality emergency obstetric care.

Hypertension during pregnancy increases the risk of pre-eclampsia. In populations at risk of low calcium intake, this can be reduced by over 50% by calcium supplementation during pregnancy and is part of WHO's recommended package of antenatal care services. Calcium supplementation, though previously included, is not currently part of Indonesia's standard antenatal care package but is part of WHO's recommended package of antenatal care services. Haemorrhage is associated with underlying anaemia, and global evidence shows that consistent iron folate supplementation during pregnancy reduces anaemia at end term by around 70% (Bhutta et al, 2013).

Rates of iron deficiency anaemia in pregnancy have been estimated to be as high as 45% in Indonesia (WHO anaemia database 2005) but lack of regular haemoglobin testing during pregnancy (though policy mandated) means this current risk is largely unknown. Knowledge is also limited about women's compliance with iron supplementation, tested by measuring haemoglobin levels as opposed to reported coverage.

NEWBORN MORTALITY. Under nutrition is estimated to underpin around two-thirds of newborn deaths globally and around 60% in Indonesia. More than 10% of babies are born underweight in Indonesia and have been estimated to have a near three-times greater risk of death over a birth of normal weight (Titaley et al, 2008). NTT has the highest rate of low birth weight babies in the country at 16 % (IDHS 2012).

Preterm births are estimated to cause around one-third of newborn deaths in Indonesia, 10% more than in the rest of the South East Asian region (Black et al 2010; World Bank 2010). Pre-term birth reporting is not routinely separated from low birth weight but is crucial to identifying the most effective interventions. This is due in part to problems in measurement of gestational age. Techniques are policy mandated, but their implementation needs support.

Hypertension during pregnancy as well as short birth intervals are key drivers of preterm birth, and are common causes of maternal and newborn death. Small for gestational age babies have a far higher risk of perinatal mortality (stillbirth or death in the first week of life) due to their increased risk from pregnancy-related hypertension in the mother, and increased breathing problems and death due to asphyxia. The second highest cause of neonatal death is asphyxia, including but not exclusively due to preterm births.

The Indonesia Investment Case for MDGs 4 and 5 points out that the plateauing of neonatal mortality over the past decade may be partly explained by weaknesses in coverage of facility deliveries, lack of good quality antenatal care and poor breast-feeding practices (Laksono et al, 2011).

# 2.1.2 MATERNAL AND NEWBORN HEALTH AND NUTRITION CARE THROUGH THE LIFE CYCLE

Effective packages of interventions during pregnancy, at the time of delivery and post-delivery exist for preventing maternal (Campbell et al 2006; PMNCH 2013) and newborn death globally. Investments in key maternal and child health interventions make good economic sense. Global and regional estimates show that an additional investment of \$5 per capita per year in maternal and child health interventions will return over nine times this amount in economic and social returns. Though

national health policies in Indonesia often include internationally proven good practice, effective implementation is often lacking. Saving the lives of mothers and babies and preventing stunting and its impact on children's growth and development and the resulting lost productivity that this brings for society, requires the functioning of the whole health system.

FAMILY PLANNING. Family planning reduces the lifetime risk of maternal death and high-risk births to young and older women. By helping women to space births, family planning also has a positive impact on infant and child mortality by reducing pregnancies that are too close together, which have a higher risk of low birth weight, pre-term births and child malnutrition including stunting. Family planning is one of the most cost-effective ways to reduce maternal mortality at a cost per DALY<sup>7</sup> saved of US\$30-49.

Indonesia has high rates of unwanted pregnancy and the second highest abortion rate in the region at 37 abortions for every 1,000 women of reproductive age (Sedgh & Ball, 2008). Current laws that restrict the provision of contraceptives at government facilities to married couples are contributing factors. From the pioneering family planning movement of the past, Indonesia has experienced a plateauing of contraceptive use since 2002, reaching a modern contraceptive prevalence rate (CPR) of 58% of currently married women in 2012 (IDHS 2012). The CPR (modern methods) among all women of reproductive age is only 43%. IDHS 2012 found 71% of currently married women in Indonesia who already have 1-2 children want to delay their next birth for at least two years or want to stop having children altogether; however, only 63% of them are using any form of modern contraception. Two-thirds of women in NTT, for example, want to space or cease births, but less than half are using any method of contraception. Whilst around 75% of married women who have three or more children would like to stop childbearing, less than 20% are using a long acting contraceptive method better suited to this purpose.

The plateauing of contraceptive use has been accompanied by an increasing reliance on short-term methods, particularly the injectable, and a reduction in the use of long-acting and permanent methods (LAPM), especially IUDs. Possible explanations for this trend include: lack of skills / knowledge of providers to counsel and present all appropriate methods; that private midwives generally do not keep stock of LAPM but order on request, resulting in women choosing available short-term methods to avoid a return visit; higher upfront cost of LAPM; and beliefs about side effects of LAPM (ICMM baseline survey results 2014). Regulations that until recently prohibited midwives in the public sector from providing IUDs and implants and the lack of qualified doctors to provide male and female sterilisation have been other barriers. For older women who have completed their family size the limited availability of LAPMs increases their risk of an unwanted pregnancy and maternal death.

Private providers – generally midwives in private practice at a local level – are the largest provider of family planning nationally. In East Java around 60% of all modern contraceptives obtained from a private midwife and another 15% at local drug stores<sup>8</sup>. In NTB 30% of all family planning is provided by private local midwives. This is much lower in NTT at only 5% where most women get modern contraceptive methods from *Puskesmas* or *Polindes / Poskesdes* at the more local level.

<sup>&</sup>lt;sup>7</sup> A DALY is a measure of overall disease burden calculated as the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability, WHO (2008).

<sup>&</sup>lt;sup>8</sup> Health seeking behaviour study in East Java and NTT has shown that convenience (short distance and opening hours) is the main reason for use of private midwife practices in these provinces

CARE DURING PREGNANCY. Improved care during pregnancy and the delivery of a package of proven interventions can significantly reduce maternal and newborn mortality and stunting. International evidence shows that delivery of effective maternal nutrition interventions can reduce maternal death by between 6 and 20 percent (Imdad & Bhutta, 2012a, 2012b), and over 80% of maternal deaths from hypertensive diseases could be reduced by greater coverage of key interventions (Ronsmans & Campbell, 2011). Multiple micro- and macronutrients including iron, calcium and energy-protein supplements during pregnancy are critical to reducing stunting (Bhutta et al, 2013).

In Indonesia, family decision-making, gender norms and socio-cultural beliefs affect maternal and early child health and nutrition. Division of labour within the family often leaves women with heavy and physically demanding work burdens through to the end of pregnancy, often reinforced by cultural beliefs. Food restrictions during pregnancy are common and often detrimental to the woman and her baby given their needs for improved energy and protein intake to prevent low birth weight and stunting. This is especially crucial for adolescent mothers. Cultural taboos can contribute to delayed antenatal care<sup>9</sup>. Analysis by the WFP in NTT found that female-headed households had a much higher rate of under-nutrition of both mothers and children than other households (WFP, 2010).

Access to and use of antenatal services is very high. The 2012 IDHS shows that 96% of women receive antenatal care (ANC) from a skilled provider and 88% receive four or more ANC visits during their pregnancy. Disparities exist and women with no education (64%) and those living in very remote areas have much lower ANC coverage (eg. only 58% in Papua). The quality of antenatal care is poor for most; in 2011 only 20% of *Puskesmas* fulfilled all service readiness indicators for ANC. Less than half of all pregnant women receive two tetanus toxoid vaccinations independent of their socioeconomic background and only 53% of women were informed of possible complications during pregnancy. Routine blood and urine tests assist in screening for anaemia and pre-eclampsia and are requirements in the antenatal guidelines but only 41 and 48 percent of pregnant women received them according to the IDHS 2012.

Midwives' counselling skills and their awareness of the importance of nutrition and the consequences of low birth weight is poor. Compliance with iron supplementation is low with only one-third of women taking iron supplements for the recommended 90 days.

SAFE DELIVERY: Two-thirds of complications that occur during pregnancy, delivery and the postpartum period are unpredictable. Most maternal and newborn deaths happen at the time of delivery and underpin the Government's policy shift to facility based deliveries. Government health insurance schemes (*Jampersal*, *Jamkesmas*, *Jamkesda*) have contributed to the rise in facility based deliveries from 46% in 2007 to 63% in 2012<sup>10</sup>. There is wide disparity in the use of facility based deliveries by province, with NTT (41%) for example lagging behind the national average and below the critical 50% level<sup>11</sup>. Some 25% of rural women and 48% of the poorest women are still delivered by a traditional birth attendant (IDHS 2012) generally without access to referral systems and professional back up. Internationally we know that timely access to quality delivery and emergency obstetric care for complications could prevent around two thirds of maternal deaths (Campbell et al 2006). The continued use of traditional birth attendants (TBA) and delivering at home are contributory factors to

<sup>10</sup> Studies show that these schemes have not completely eliminated out of pocket spending on institutional deliveries.

<sup>&</sup>lt;sup>9</sup> See Social Development Assessment Annex for further details.

<sup>&</sup>lt;sup>11</sup> Studies have found that positive effect of institutional delivery on new born mortality could be observed when institutional delivery rate is more than 50%, see Lawn et al (2012) Newborn survival: a multi-country analysis of a decade of change; Health Policy and Planning 2012;27:iii6–iii28.

maternal mortality in Indonesia. Data from verbal autopsies in three districts found that 63 out of the 76 deaths documented occurred in home births that had been assisted by a TBA. In all but five cases, the TBA had worked alone without support from a skilled birth attendant (GoI, DFID, World Bank, 2010).

The decision to have a facility based delivery is mediated through a number of factors, including poor knowledge, cultural beliefs, difficult terrain and the availability of cash and transport. Trusting relationships with traditional birth attendants and the multitude barriers that a woman faces in leaving existing children and mobilising family support for a facility delivery often affect the decision to birth at home. These factors are most intense when a complication arises during a home delivery and delays linked to deciding, reaching and receiving quality care happen. In remote areas the cost of reaching the health facility is often the greatest barrier due to poor road and communication systems, which make transportation expensive and difficult (Unair, UGM, Undana, 2013). In addition, upfront payments related to delivery are often still charged. The availability and perceived quality of care available at health facilities also affects the family decision for facility birth. Staff turnover, high absenteeism rates, unavailability of key equipment and drug stock outs, and health staff that lack local language skills all undermine demand for and timely provision of life-saving care (Unair, UGM, Undana, 2013).

The quality of obstetric care in Indonesia is low. The 2012 Maternal Health Services Quality Assessment undertaken by MoH, WHO, and relevant professional associations found major gaps, including lack of knowledge and skills to manage normal deliveries, recognise obstetric and neonatal complications and perform life-saving procedures, and shortages of equipment and supplies. Midwives in rural and remote areas often do not supervise enough births to keep their skills in delivery and dealing with complications current. The overall quality of health workers' education is low and midwives often graduate without core skills and competencies. It concluded that greater efforts are needed to standardise quality of care throughout the health system, improve supervision and monitoring and strengthen accreditation and regulation of public and private providers.

Availability and quality of basic emergency obstetric and neonatal care (BEmONC) is below standard. The 2011 Health Facility Review showed that 60% of districts in Indonesia have less than the Government's recommended four *Puskesmas* providing BEmONC. Lack of key drugs and supplies at *Puskesmas* level is also common and often of commodities key to addressing the highest causes of maternal death (eg oxytocin for postpartum haemorrhage and magnesium sulphate for eclampsia/preeclampsia) (WHO 2013; World Bank 2014). Basic standards for clean delivery are also not being met raising the risk of maternal and newborn infection (WHO 2013).

Almost 25% of in-patient *Puskesmas*, including BEmONC *Puskesmas*, had no transport for referral in 2011 (Health Facility Review, 2011). Lack of financial incentives for lower-level facilities to stabilise and refer on women requiring higher-level care also results in women not receiving the emergency first aid that could save their lives. Increasing the number of *Puskesmas* capable of providing BEmONC and improving their management of obstetric and neonatal emergencies and referrals is critical to preventing maternal and newborn deaths.

Globally about 15% of deliveries involve complications that require hospital level intervention such as caesarean section or blood transfusion. However, in 2011 only 7.6% of District Hospitals met the criteria for comprehensive emergency obstetric and neonatal care (CEmONC) status (*Riskesdas*, 2011). Lack of obstetricians and inappropriate skills mix of staff as well as shortage of equipment are key factors.

CARE OF THE NEWBORN: Post-natal care from a skilled provider can reduce maternal and neonatal deaths as most post-partum haemorrhage occurs within 48 hours of birth and up to 30% of neonatal deaths occur within the first 24 hours of life. This is why facility delivery is critical to saving the lives of newborns. That said, a high proportion of births in Indonesia still occur at home, and interventions provided by community-based health workers, including home visits, can also have a significant impact on neonatal mortality (Lassi et al 2010; Gogia et al, 2011).

IDHS 2012 found that only 23% of newborns received a postnatal check-up within the first three days, although facility delivery rates were much higher, and 50% of newborns receive a health check-up in the first seven days. Logistical challenges and the demands placed on midwives to juggle clinical, administrative and community outreach tasks means that home visits are at times compromised. This critical window to monitor the health of babies and mothers and support early and exclusive breastfeeding and newborn care is being lost.

Early breastfeeding within the first 24 hours of life reduces newborn mortality. IDHS 2012 found that only 49% of babies were breastfed in the first hour and 66% within one day of birth. Widespread promotion of infant formula, even within government health facilities, undermines early and exclusive breastfeeding and is compounded by the poor quality of midwives' counselling skills and nutrition knowledge. Knowledge of the appropriate caring practices of low birth weight babies is also a major issue given their high prevalence. In some areas, cultural and traditional practices that are harmful to the newborn and mother persist. In NTT many mothers consider colostrum as "dirty milk" and throw it away (WFP 2010), and the practice of putting a woman and her newborn into "smoking huts" for 40 days post-delivery to cleanse the blood continues.

### 2.2 POLITICAL ECONOMY OF THE INDONESIAN HEALTH SYSTEM

Although it is possible to achieve some results in the short to medium term by adopting a vertical approach to some highly cost-effective health interventions, these results are not sustainable without a functioning health system (Lewin et al, 2008); and undermine the efficiencies of integrated service delivery (Lawn et al, 2008). Moreover, maternal mortality reduction requires a continuum of care from primary to emergency hospital care and strengthening the building blocks that make up the health system (service delivery, governance, health financing, health workforce, medical products and technologies, and information). The underlying causes of primary care system and service delivery constraints are generally interlinked but also differentially affect rural remote areas and populations. They affect primary care service delivery overall, not only maternal and newborn health services, and it is therefore most effective and efficient to take an overall primary care systems approach to addressing them.

# 2.2.1 SERVICE DELIVERY – GETTING PRIMARY HEALTH CARE RIGHT

International evidence shows that health systems with a strong primary health care orientation tend to be more pro-poor, equitable and accessible (WHO, 2004)<sup>12</sup>. In fact, the strength of a country's primary health care system is associated with improved population health outcomes delivered at lower cost and with greater patient satisfaction (Starfield, 1992). Delivering primary care services close to where people live and work is cost-effective for the health system as conditions are detected

<sup>&</sup>lt;sup>12</sup> The principles of primary health care include equitable distribution, community participation, an emphasis on prevention, the use of appropriate technology, and inter-sectoral responsibility and the involvement of health and a wide range of other sectoral departments. Primary care also refers to the first contact users have with the health care system.

and managed at lower cost than in higher-level facilities; is cost-efficient for families and users as it saves time and money that would have been spent on accessing higher-level services; is more responsive to the social and cultural factors that affect demand, given linkages to communities; and is where cross-sectoral outcomes can be put into action. In Indonesia, women, the poor and near poor are by far greater users of primary health care than hospital services. Weak primary health care services affect the poor and vulnerable the hardest. Many of those with greater financial and geographic access currently bypass primary care services due to perceived poor quality of care, thereby increasing the overall cost of service delivery in the health system.

Currently there is an over focus on curative services, including in primary care, which does not appropriately address the prevention, early detection and management needs of the burden of communicable chronic disease or the rapidly growing non communicable disease challenge. This only increases the inefficiencies of and costs to the health system as it fails to meet the needs of the population. In 2011, less than 10 per cent of total health spending went to public health promotion and prevention (NHA 2011). The focus of funding under the national health scheme toward curative services may, as in many countries, exacerbate this problem, so it is essential that all types of resourcing for prevention and promotion services is protected and increased and that primary care is reoriented to include more of this focus.

Health system gaps related to human resources, equipment and supplies, financing, and information undermine the quality of care provided at the primary level.

Inadequate numbers of health professionals are attracted to and retained in primary care, particularly in rural remote areas. High turnover in trained staff compromises the ability of health centres to address maternal and newborn complications. A survey of 18 *Puskesmas* in NTT, for example, showed that only two out of five staff trained in basic emergency obstetric care remained in the same *Puskesmas* two years after training (AIPMNH 2013). In addition, health worker absenteeism rates are high, and risks of this and other care-shifting practices arising from dual practice are not effectively monitored or regulated. High turnover of staff and absenteeism discourage people from seeking care. A recent study in NTT and East Java showed a 30% increase in likelihood of accessing care where communities were familiar with the individual health professional (HSB 2014).

Midwives are overburdened with health service delivery and administrative tasks that other staff cadres could and should perform, meaning they lack time to devote to core health service provision and quality. For example, around half of a midwife's time in a *Puskesmas* is spent on administrative tasks (World Bank 2010). Undertaking budgeting and planning activities, inputting data and following up needed supplies were all ranked by midwives in the roles they play above technical midwifery procedures, health promotion or discussing issues with patients and their families (Henessy et al 2006).

There are frequent stock outs of essential drugs and supplies and poor availability and maintenance of equipment. Recent analysis of 2011 facility survey data showed 50% or less availability of key maternal lifesaving drugs in *Puskesmas*, with figures only slightly better in *Puskesmas* designated to provide emergency care for maternal and newborn complications. Nearly one-third of *Puskesmas* in NTT do not have the ability to provide essential services for detection and monitoring of key NCDs (World Bank 2014). Planning systems for these commodities are weak and there is limited flexible finance for primary care services to quickly address these needs.

All of these issues are exacerbated by an overall lack of incentives, financial or otherwise, to improve performance, including weak accountability for performance and service delivery to communities or

through formal reporting structures. Data is not widely used for meaningful monitoring or to improve decision making and there is therefore little motivation to complete with any accuracy the overly burdensome and duplicative health information reports that are currently mandated.

A sensibly-structured and performing primary care system will be essential to underpin the national health scheme's success in achieving universal coverage and improving the health outcomes of the Indonesia population. This requires substantial (but likely gradual) shifts in the way these services are currently structured and delivered. Changes will necessarily include more clearly-defined roles of the district, province and national levels in the health system as well as greater local level capacity, incentives and accountability for local level health service delivery planning and performance.

### 2.2.3 THE ROLE OF THE PRIVATE SECTOR

The private sector plays an increasingly significant role in the provision of health services in Indonesia, including 60% of outpatient visits and 43% of inpatient visits (*Susenas* (2010), but there is scarce data on their service availability and readiness or private sector health facility compliance with minimum service standards. Examples of growing areas of influence for the private sector include in the development of new health-improving commodities and technologies, such as in nutrition and advances in mobile phone and other IT-based technology for improved quality in service delivery, referral mechanisms and information capture and exchange to improve performance. Public-private partnerships are essential mechanisms to ensure the benefits of these reach the poor and that quality and health benefits to the population are protected at the same time that private sector profits are generated, in turn contributing to growth.

Inclusion of the private sector in national strategies for health service delivery can and has increased coverage of essential services in Indonesia, such as in family planning. Indonesians often use private health services due to their closer proximity to the household, more flexible opening hours and a perception of higher quality drug availability (Health Seeking Behaviour Study East Java & NTT 2014). In NTB, for example, expansion in dual practice and emphasis on the private sector in health services has increased coverage of antenatal and post natal care. This increase in coverage, however, has not resulted in improved health outcomes (NTB's neonatal mortality statistics have not significantly improved, for example), which calls into question the quality of care received in the private sector. Midwives from a rapidly-increasing number of private sector training institutions are not assessed as rigorously as those in public training institutions and generally have poorer skill levels. Profit-seeking behaviours by midwives (eg. selling formula-feeding commodities and promoting short-term family planning methods) can be detrimental to the health and empowerment of women and children and require strong government regulation to improve health outcomes whilst also supporting the role of the private sector.

### 2.2.4 OTHER DONORS

Donor assistance represents only 1.7% of total expenditure on heath in Indonesia and the donor presence has reduced in recent years. The largest source of donor funding to the health sector is the Global Fund. However, as the Global Fund only provides finance and no technical assistance, its ability to address complex systemic problems is very limited. The implementation of Indonesia's national health insurance scheme from early 2014 has resulted in renewed interest in the health sector among multilateral donors in particular.

The following provides a brief overview of current donor support for health, particularly in primary health care and maternal and neonatal health, family planning and nutrition. Quality evaluations of other programs are limited. DFAT has undertaken stakeholder consultations during the design process to ensure PERMATA draws on the relevant experiences of other donor programs.

USAID is the other main bilateral donor for maternal and neonatal health. Current USAID support is through the five-year (2011-2016) Expanding Maternal and Neonatal Survival (EMAS) program. This has an ambitious target of reducing the number of maternal and neonatal deaths by 25% nationally through improving the quality of EmONC services and increasing the efficiency and effectiveness of referral systems in 128 districts in six provinces. The program works with government at national, provincial and district levels, civil society organisations, public and private health facilities, professional associations and the private sector. Improving the quality of emergency obstetric and newborn care services in hospitals and *Puskesmas*, equitable access for the poor, accountability, community understanding of social insurance and innovative use of technology are key strategies as well as GoI priorities. DFAT has been working closely with USAID to ensure that future efforts are well coordinated and activities and geographical focus are complementary. USAID will likely continue a similar approach to EMAS post-2016 and, therefore, EMAS and PERMATA will complement each other in East Java. A separate program for Eastern Indonesia will be designed by USAID; however, most likely in different locations from PERMATA.

USAID phased out population assistance to Indonesia in 2006. Multilateral donor investment in family planning has increased following the FP2020 agenda. UNFPA has programmed AUD\$28 million for 2011-2015 to increase access to reproductive health services, address unmet need for family planning and improve adolescent sexual and reproductive health. DFAT, together with USAID and the Bill and Melinda Gates Foundation, is supporting the Advance Family Planning Operational Research for Improving Contraceptive Method Mix (ICMM) project, which is being implemented by the University of Indonesia and Johns Hopkins University. The project aims to support the Gol to reinvigorate the country's family planning program through knowledge exchange, capacity building for advocacy and research. More specifically, it aims to increase the use of LAPMs in six districts of NTB and East Java, develop an evidence-based advocacy training and support package for use in other districts and present evidence-based advocacy plans to government and NGO leaders to encourage them to give higher priority to family planning at district level.

The Gates foundation is currently reviewing the design of a 2.5-year, USD20 Million project in four provinces (DKI Jakarta, Central Java, South Sulawesi, North Sumatra) and a total of 11 districts to increase use of contraceptives, particularly LAPMs, through mass media and targeted communication and family planning counselling, improve the supply chain management of contraceptive supplies and improve data and performance measurement. The program is expected to commence in August 2014 and will be implemented by a consortium of Johns Hopkins University, John Snow International, JHPIEGO; Futures Institute and DKT. The timeframe of this project will allow PERMATA to monitor and learn from their experience and may consider replicating successful proof of concept in PERMATA's provinces.

There is increasing donor interest in nutrition. Until recently, the main source of donor support for nutrition was the US\$50 million ADB-funded Nutrition Improvement through Community Empowerment (NICE) project, which aims to reduce the prevalence of underweight in children under five and pregnant and lactating women through strengthening the capacity of central and local government to improve the management of nutrition services.

The US\$131.5 million Millennium Challenge Corporation (MCC) program started in 2013 and aims to reduce stunting by integrating maternal and child health, nutrition, water and sanitation through the Gol PNPM Rural program. It will work at national level and in six provinces where rates of stunting and low birth weight are higher than average and plans to target 7,000 villages. DFAT is coordinating with the MCC program and PNPM *Generasi Sehat dan Cerdas* (PNPM GSC). UNICEF is providing technical assistance for policy and planning on stunting and training health workers in breastfeeding, complementary feeding and maternal nutrition counselling. The World Bank is assisting the Gol with plans to reduce stunting. Nutrition, including stunting, is also a priority for the World Food Programme, which is working with the private sector to increase the nutritional content of commercial products and implementing activities in NTT.

The World Bank through their Health Professional Education Quality (HPEQ) Project is working on strengthening quality assurance policies governing the education of health professionals in Indonesia.

# 2.3 KEY LEARNING

The Government of Indonesia and donors have had an extensive focus on improving maternal health for at least the last three decades, starting in the late 1980s. Donors have included Australia, the United States, Canada, Japan, Germany and United Kingdom as well as multilateral organisations, such as the World Bank, the Asian Development Bank and the UN organisations. Results within these programs have varied greatly, but some common themes have emerged and there are numerous lessons to draw on for future programming, particularly given that improving frontline service delivery and economic governance are now the cornerstones of Australia's development program in Indonesia. In a context where the maternal mortality ratio in Indonesia has increased (from 228 in 2007 to 359 in 2012), Australia's most recent investment in maternal health in NTT province (AIPMNH) has contributed to a reduction in maternal mortality of approximately 30 per cent since 2009. PERMATA will build on what we have learnt through AIPMNH. The list below extrapolates how those detailed lessons will inform this program, both in terms of things we will do differently and approaches that are worth continuing or building on. These lessons are:

# ON IMPLEMENTATION:

1. Government of Indonesia ownership at both national and subnational levels is critical to a demonstration model approach: AIPMNH delivered good results in NTT province but failed to advocate those results at national level, due in part to the design of the program and skills of the implementing team. PERMATA has broadened the geographic scope of the program, to ensure a critical mass of districts across a range of provinces with appropriately diverse contexts, in order to demonstrate results that are better attuned to the diverse conditions of the country and can be taken to scale by the national government. AIPMNH successfully engaged the districts and fostered innovation, and PERMATA's demonstration approach builds on what we have learned about problem solving at the district level by working to ensure buy in from national and sub-national stakeholders at the outset through their involvement in the definition and design of cross province demonstration projects and locally-defined innovative implementation approaches, with strategic and continuous learning from both. We have also learned of the importance of involving *Bupati* and local parliaments to build their ownership of interventions and so lay the ground work for later replication.

- Longer program timeframe: the program will have an 8-year timeframe, to enable both
  quick wins and longer-term sustainable results, especially in light of implementation in three
  provinces, which require time to fully develop.
- 3. Targeting of Beneficiaries: AIPMNH did not necessarily target the poorest and most vulnerable and tended to treat gender as an isolated issue rather than integrate this across the program. PERMATA has a clear equity focus and has developed a gender and equity strategy to mainstream these objectives throughout the program and its working methodologies.
- 4. Implementation approaches and interventions should be determined at the local level and tailored to local conditions. Where possible, they should be integrated into the cycle, formats and language of the district government planning process (APBD). AIPMNH was designed to support district level problem solving and yielded innovations such as the Sister Hospital and the SMS information system for reminder and referral (2H2) programs as a result. This includes taking account of the political and institutional environment, geographical factors and local culture.
- 5. Bappeda's involvement in district coordination increases the efficiency and effectiveness of district interventions. AIPMNH found that Bappeda coordination reduced double billing for the same activity at the provincial and district level, guarded against duplication of activities and fostered synergies between departments. Bappeda's oversight of district development facilitated the management of cross-sectoral inputs to achieve improvements in the quality of health services and improved the coordination of development partner programs.
- 6. In line with the above, a systematic, rather than ad hoc, cross-program approach both within DFAT and with government of Indonesia bodies is required in recognition that the challenges to primary health care and maternal and newborn health outcomes extend beyond the health sector. A strength of AIPMNH has been its coordination of cross-program Gol partners at the province and district levels. That said, we need to be realistic about the challenges of coordination both within DFAT but particularly across disparate Government of Indonesia bodies at the national and subnational levels and the time it will take to set up sustainable linkages. The program description in Section 3 provides specific examples of how other programs can assist in the delivery of PERMATA's end of program outcomes. These have been developed in alignment with the proposed frontline country level indicators and in consultation with relevant programs.
- 7. We will differentiate between strengthening GoI data for monitoring and evaluation (M&E) purposes and an adequate investment in the program's own M&E data set, to provide a credible basis for replication. AIPMNH (appropriately) focused on strengthening GoI data systems but at the expense of establishing credible data / information on results and sourcing appropriate skills to do so. This has impacted our ability to generate evidence of effectiveness, given no baselines or comparator data. The demonstration model approach of PERMATA will require substantially more and improved M&E (including appropriate budget) and replication strategies and, importantly, dissemination to GoI and other partners.
- 8. Leverage, not displacement: the program will be clearer at the outset than previous investments about boundaries for support and where we expect GoI to cover costs / buy in. This is to ensure we do not displace GoI's budget or substitute for basic service delivery or equipment provision in their place. This needs to be balanced against realistic approaches to take up of demonstrations at the national level and the incentives required to ensure participation of GoI, particularly at the district level. PERMATA will work with other programs in the health portfolio to understand the key factors that promote replication, and factor this into implementation.

- 9. We should continue and strengthen our engagement of the province level to ensure sustainability of the program, given its role as a conduit between the districts and the national government and in improving access to primary health care within the province. It can provide technical assistance, supervision and monitoring across districts as well as facilitate replication.
- 10. The role of local government in enforcing management and clinical standards and practices is critical and we need to understand why that enforcement is not happening and what we can do to support it, in order to improve quality of primary health care services. This will require stronger political and institutional analytical skills than our earlier programs resourced and leveraging the capacity and support of AIPD.
- 11. Opportunities to engage with private sector health providers will increase if we work in East Java and in NTB, but we need to be clear about our aim in doing so and realistic about the significant challenges of working with such a disparate and poorly-regulated sector. To date, our health investments in low population density areas like NTT have resulted in limited opportunities to engage with private sector providers, but this will change with the addition of NTB and East Java, where private practice by midwives is more common.

# ON MATERNAL AND NEWBORN HEALTH AND PRIMARY CARE SYSTEMS STRENGTHENING:

- Increasing facility based births should remain the aim and must include a strong focus on
  access to the appropriate facility at the appropriate time and improving the quality of care at
  those facilities. Particularly important is the ability of the intermediate level of health care,
  the *Puskesmas*, to effectively address basic complications and appropriately and safely
  refer more complicated cases.
- 2. The program will continue its focus on both supply and demand side challenges (together with other DFAT programs and with systems strengthening and reform at a national level trhough AIPHSS), in recognition that this was a strength of AIPMNH, which resulted in greater numbers of women delivering babies in better-equipped facilities.
- 3. **Community approaches** to managing maternal and newborn health, such as the *Desa Siaga*, have proven to be effective at reducing maternal deaths and have been replicated at relatively low cost by local governments. They should be continued, to reduce barriers to access and potential for reasonable expansion to support other MCH-related interventions (e.g. community empowerment and post birth service access be explored).
- 4. Strategies to reduce neonatal mortality in Indonesia need to more effectively address low birth weight and pre-term births by improving maternal nutrition, and reducing high-risk pregnancies.
- 5. Improving the health workforce is critical to strengthening the availability and quality of health services:
  - a. Increased and cross-program focus at the national and subnational level on improving the policies that support rational deployment, training, supervision and task shifting of healthcare professionals is important in program provinces and nationally (through AIPHSS).
  - b. Prioritise mentoring and internships for health workers over one-off training and, crucially, support an enabling environment for new skills to be applied by ensuring adequate attention is paid to post-training evaluation and supportive supervision.
- 6. **Point of service payments remain a significant barrier** to health care use despite implementation of the national health scheme and other strategies for greater health service

- financial protection, remaining charges at facilities are a barrier for poor and vulnerable populations reducing utilisation by up to a third
- 7. Puskesmas lack basic supplies and equipment for quality essential services procurement arrangements and timing, lack of flexible budgets for equipment maintenance and mismatches between equipment needs and supply all limit effective care provided and health worker satisfaction and retention. This includes core needs for dealing with the most common maternal and newborn complications.
- 8. Lack of linkage between budgets received and needs and problem based plans put forward limit the effectiveness of current problem and evidence based planning processes across sub national levels
- 9. Improving data remains critical. Despite improvements in *Puskesmas* reporting and recording systems, information systems are often insufficiently robust to provide comprehensive, accurate data on trends in facility-based delivery and maternal and neonatal deaths and insufficient data is available to assess impact on the poorest. There is also a need to strengthen skills in data analysis and use.

# SECTION 3: RATIONALE FOR AUSTRALIA'S INVESTMENT IN THIS AREA

PERMATA is aligned with both of the development outcomes outlined in the Australian Government's newly-launched policy *Australian aid: promoting prosperity, reducing poverty, enhancing stability'* – particularly by strengthening human development, contributing to economic growth, empowering women and girls and supporting private sector development. Improved health and nutrition in Indonesia translates into economic progress and reduced poverty and, by increasing the equity of these development pathways, will promote greater growth, social stability and cohesion for Australia's closest neighbour.

Women's empowerment is fundamental to reducing maternal mortality and improved reproductive and maternal health is a key development medium for empowering women and girls. Enabling women to access their reproductive health rights and control their own fertility will allow them to participate more fully in economic and social life and help them and their families escape from and remain out of poverty. Investments in the health of mothers protect not only their economic welfare but also that of their children and entire household. This will have high returns for Indonesia's economic progress, affecting both the quantity (through reduced mortality and absenteeism) and quality (higher productivity) of human capital, including for the workforce.

Health and nutrition investments, particularly those that avert maternal deaths, provide high **economic returns** and social benefit. Global and regional estimates show that an additional investment of \$5 per capita per year in maternal and child health interventions will return over nine times this amount in economic and social returns. Poor nutrition is estimated to reduce GDP in Indonesia by 3-4 per cent a year. Rates of return to nutrition investment in Indonesia are estimated to be as high as 48 dollars per dollar spent. The investment case prepared for PERMATA calculates that the program will achieve a rate of return of about \$20 for each \$1 invested.

The economic value of saving a mother's life is estimated to return between 1.25 and 1.75 times the annual per capita GDP, including increasing the survival chances of her existing children. By reducing maternal and neonatal mortality and increasing contraceptive prevalence, the program also directly contributes to Indonesia's achievement of a demographic dividend, which is expected to be a key driver of economic growth in the short to medium term. These opportunities to promote human

development and economic growth will in turn reduce poverty and promote greater social stability and cohesion for Australia's closest neighbour.

The focus of Australia's investments is therefore to support Gol's increased policy attention to and public funding of health programs that benefit the poor, those living in the more remote and underdeveloped islands and to invest in women's and girls' health and wellbeing.

Indonesia is a middle-income country that has a policy of universal health coverage and has the fiscal space to continue to increase its spending on health. Against this backdrop, the Australian Government has an important role in providing know-how in the form of technical assistance and international best practice and innovation to help the GoI ensure that poor people benefit from public funding and that national resources are used efficiently.

A further phase of Australian investment to maternal and newborn health also provides an opportunity to **strengthen the bilateral relationship** between Australia and Indonesia, which welcomes our support in this subsector. Australia has significant experience and expertise in tackling key areas that Indonesia is interested in benefiting from. This includes addressing challenges in rural remote health care service delivery, prevention and promotion policies to address non-communicable disease and ways to pay providers and introduce quality assurance and cost control mechanisms under the national health scheme (areas in which Australia is a recognised world leader). PERMATA will build on learning from many years of Australia's investment in health in Indonesia and the region and will continue to promote Australia's expertise in this field and the strong relationships with Gol that have been nurtured through our previous investments. Australia's considerable experience of working with the private sector will be drawn upon to leverage private sector support of program goals.

Globally, many significant innovations for health improvement and access to services have been developed and scaled up in partnership with **private sector**. Working to improve primary health care and maternal and newborn health and nutrition in Indonesia includes opportunities to work with the private sector in a variety of ways and in accordance with the Australian Government's priorities (Section 4 of the Program Description refers)

PERMATA also aligns with the Australian Government's new performance framework *Making Performance Count: enhancing the accountability and effectiveness of Australian aid.* Health interventions provide measurable results that can be robustly monitored and evaluated. Strong performance monitoring and evaluation of investments are being built into the program.

# 3.1 PRINCIPLES GUIDING OUR INVESTMENT

The program design fulfils the Australian Government's aid investment tests as outlined in the policy **Australian aid: promoting prosperity, reducing poverty, enhancing stability**. PERMATA will:

1. Pursue Australia's national interest and extend Australia's influence by supporting our closest neighbour in improving its population's health. By reducing inequities in health and improving health service delivery, the program will promote social stability and state legitimacy by reducing the socio-economic health inequalities that drive people apart and can lead to social exclusion. The program will extend linkages with Australia's experience and expertise in shared health sector challenges, such as rural remote health service delivery, through provision of high-quality technical assistance and promoting exchange opportunities.

- 2. Significantly contribute to Indonesia's priorities to increase economic growth and reduce poverty. Investments in maternal and newborn health, nutrition and primary care have large returns to economic growth through improvements in population structure and human capital. Economic returns to health investment are greatest when preventing deaths and disease in early ages, where starting levels of health indicators are low and where equity gaps exist that can be bridged. PERMATA's investment aligns with each of these and will promote direct economic gains from reducing deaths, increasing productivity and assisting Indonesia to maximise growth opportunities from demographic changes that reduce its dependency ratio. Given the poor tend to access primary care more readily than hospital services, increasing quality and reducing out-of-pocket costs for these services will improve livelihoods and reduce poverty. PERMATA will also work with Indonesia's private sector in the development of health-related commodities and technologies to appropriate standards and promote public private partnership to ensure benefits both to business and to poorer populations.
- 3. Leverage Indonesia's own resources in public and private sectors by promoting Government of Indonesia scale up of proven activities, by requiring increasing co-funding to PERMATA grants and activities over the life of the program and through ensuring quality technical assistance helps Indonesia to increase effectiveness in its resource allocation and use for health.
- 4. **Utilise Australia's value add** in the provision of technical assistance and evaluation expertise and by providing opportunities for Indonesian counterparts to see first hand approaches that Australia has used to tackle shared health challenges.
- 5. Utilise a clear strategy to measure program performance through a well-defined and actively-managed performance framework, robust independent impact evaluation of key investments and by trialling performance based financing in selected districts. These link a variety of DFAT frontline programs that will provide enabling and contributing support to the achievement of PERMATA outcomes and Australia's overarching key performance indicators.

In addition to the Australian Government's guiding principles for aid investments outlined above, PERMATA is also consistent with other guiding principles for Australian investment in Indonesia's health sector, including:

- 1. An emphasis on addressing inequity, including gender inequity, and strengthening the services that most benefit the poor and disadvantaged (namely, preventative and primary health care services).
- A health systems focus (as opposed to a vertical program focused only on maternal and newborn health) for sustainability and efficient resource allocation. Weak health systems undermine the implementation of any intervention, cost effective or not.
- 3. Cost effectiveness, including prioritising investment in primary health care and in preventive care, because curative care especially at the secondary or tertiary care level is more expensive and typically disadvantages the poor and vulnerable. An investment case setting out the cost effectiveness of proposed interventions is at Annex 01.
- 4. **Demonstration of effective frontline service delivery** to support local solutions to address local problems, to ensure that national policies and strategies are grounded in the reality of what works in the provinces and districts and, vice versa, that local service delivery is enabled by appropriate national policy, regulatory and resource allocation decisions. Otherwise it will not be possible to sustain successes or to scale them up nationwide.

- 5. **Working across sectors to support health outcomes**, including through co-location and joint programming, analysis and performance frameworks at the local level.
- A comprehensive approach to demand and supply in recognition that better population
  health and nutrition requires both improved behaviours by individuals, families and
  communities and improved services.
- 7. **Continuous learning and improvement** to maximise the generation, local adaptation and application of knowledge and best practice.
- 8. **Realistic timeframes** to achieve both quick wins for national level influence and longer-term, sustainable results for replicable institutional, social and cultural change. Key interventions will include exit strategies to ensure no creation of aid dependency.

## **SECTION 4: PROGRAM DESCRIPTION**

## 4.1 PROGRAM STRUCTURE

## 4.1.1 A PARTNERSHIP WITH DUAL FOCUS

PERMATA is a primary health care strengthening and maternal and newborn health and nutrition program that aims to work in partnership with the Government of Indonesia at the national and subnational level.

PERMATA will contribute to the Government of Indonesia's efforts to:

- 1) <u>Strengthen primary care systems</u> to deliver health services essential to address the current and emerging health challenges of the Indonesian population. This includes addressing the high rates of maternal and newborn death, the remaining burden of communicable disease as well as the growing burden of non-communicable disease. A functioning primary care system is core to the Government of Indonesia's universal health coverage aims and can improve a range of health outcomes closer to communities and at lower cost. Effective primary health care services improve livelihoods and reduce avoidable more expensive hospital care. Key constraints in availability, quality and effective use of human, physical and financial resourcing for primary care will be identified with local governments and providers and possible ways to address them proposed and tried.
- 2) <u>Reduce maternal and newborn deaths and childhood stunting</u> through addressing constraints to improving their more immediate determinants, such as family planning, nutrition and quality essential maternal and newborn health services to support safe pregnancy and delivery, including addressing complications when they arise. The maternal and newborn focus will address the life cycle of mother and baby from conception to the newborn period.

The dual focus is important and maximises benefits for the program by:

- 1. Securing returns to maternal and newborn health in the shorter term through a focus on a few targeted interventions.
- Maintaining goodwill towards the program through progress on less sensitive maternal and newborn health outcomes whilst addressing the longer-term and more political health systems constraints.

## Whilst also:

- Maximising and ensuring the sustainability of gains in maternal and newborn health and nutrition through addressing key broader primary health care system constraints that impact these and other health outcomes (distribution, retention and quality of human resources, availability and quality of essential supplies and equipment, effective payment of provider for services and efficient referral systems).
- 2. Avoiding duplications in development of systems due to a focus on one particular health issue (such as having separate supply distribution systems or referral processes developed for maternal health alone without addressing these across the spectrum of health issues they impact).
- Redressing distortions in primary health care service development through too much focus
  on one set of outcomes (maternal and child health) to effectively address other growing
  challenges in preventable and potentially costly non communicable and communicable
  disease.

There is significant international evidence and guidance on the benefits of this dual but integrated approach and avoiding having one type of health outcome focus on a broader systems strengthening initiative (Travis et al, 2004).

# 4.1.2 THE IMPORTANCE OF A FRONTLINE APPROACH

PERMATA is one of the Australian Government's suite of programs that work at improving maternal and newborn health and nutrition and frontline service delivery. Frontline programs embrace the principles of local solutions for local problems, flexibility of programming, cross-sector coordination and leveraging and strong monitoring and evaluation to inform scaling up by the Government of Indonesia. DFAT is supporting the Government of Indonesia's efforts to improve frontline service delivery in its own programs.

At least four other DFAT programs have reproductive and maternal and/or child health as defined objectives or program outcomes. Due to the sequencing of other DFAT programs, cross-program cooperation will be iterative. Accountability for DFAT's key performance indicators related to health will be borne across a number of Frontline programs additional to PERMATA that have a recognised contribution to make to success, including health systems strengthening; decentralisation; water and sanitation; social protection and women's empowerment programs. With support from DFAT senior management, PERMATA will seek to influence other sectoral programs and /or GOI to address constraints to health outcomes beyond the health sector. We will develop indicators that reflect the extent to which we have been able to achieve that, which will in turn hold the PERMATA managing contractor accountable for demonstrating efforts to coordinate and influence other program inputs. The accountability for other sectoral programs to deliver those inputs to PERMATA's End of Program Outcomes rests with those sectors and, ultimately, with DFAT management. Mechanisms for crosssector coordination, joint performance frameworks and programming are under development. As part of Frontline, PERMATA will deliberately align geographically with the future decentralisation program albeit in a greater number of districts, is closely connected to the Australia Indonesia Partnership for Health Systems Strengthening (AIPHSS) and national health systems development, and will complement the community development and advocacy interventions of DFAT's social protection and women's empowerment programs. More detail on how PERMATA will work with other programs is in the Program Description.

PERMATA will consolidate existing Australian Government support to Indonesia for maternal and neonatal health and for primary health care strengthening at the sub-national level. It will align and complement the revised structure and focus of AIPHSS, which will concentrate on health reform at the national policy level, particularly health financing, health workforce planning, leadership and governance, and service delivery at the primary health care level. PERMATA will test out approaches in each of these areas in its focal districts alongside technical interventions for maternal and newborn health and nutrition and feed experience and results to AIPHSS to include in policy dialogue and development around health systems strengthening. PERMATA will engage in national policy dialogue on maternal and newborn health and stunting. PERMATA and AIPHSS will work closely together and be linked via integrated governance structures, shared learning platforms and supported by contractual arrangements and appropriate human and financial resources.

Activities will be focused on the *Puskesmas* as the frontline provider, addressing constraints to their service provision, use and empowering communities to better access services and hold them accountable. *Puskesmas* are the central point of the health system, important for maternal and newborn health and primary care more broadly. They supervise staffing of lower level community based services in *Pustu*, *Polindes*, *Poskesdes*, *Posyandu* etc as well as judge the need for and enact timely referral including stabilisation of the patient. Recent analysis of readiness of these services to address a range of primary care needs, including providing essential maternal and newborn care, was alarming (World Bank & NIHRD 2014). Less than one-third of *Puskesmas* across Indonesia have the minimum staffing, basic equipment and drugs and supplies required to address basic maternal and newborn complications. Only 5% and 13% in NTT and NTB respectively could address the most common cause of maternal death (post-partum haemorrhage). Less than half could address the most common non-communicable diseases.

International best practice highlights the importance of strengthening the intermediate level of the health system (the highest primary care level) to improve maternal health (eg Campbell & Graham 2006). However, constraints to this are not always inside a narrowly-defined health sector role. Clean water supply to Puskesmas is essential for protecting mothers and newborns from infection during delivery but is not determined solely by health officers but largely by public works. Staff allocation and turnover is more influenced by human resource planning boards (BKD) in District secretariats (SEKDA) and (particularly) by the Bupati, requiring district-wide governance action. Preventable deaths are caused by delays in seeking care, which are exacerbated by finding family members to accompany women to facilities and geographical barriers (transport, poor roads). This means that it is often too late to manage complications once the woman arrives at the facility. A frontline way of working, identifying constraints across sectors from the frontline provider and its networks is therefore essential to address the biggest barriers to improved primary care services and reduction in maternal and newborn death. PERMATA will work both with the Government of Indonesia and with other DFAT programs to jointly address these cross-sector constraints as well as explore the use of financial incentives in the form of district-wide performance based grants and cross-sector bottom-up problem-based planning mechanisms as ways of operationalizing this.

## 4.1.3 SUPPORTING LOCAL SOLUTIONS TO LOCAL PROBLEMS

Though **what** services can reduce maternal and newborn death and stunting are generally widely known and accepted, **how** to achieve better coverage and quality of these and primary care services more broadly remains the largest challenge. Identifying the most important constraints to this in the

context of the local providers and supporting new ways of addressing them is at the core of PERMATA. There are three complementary ways PERMATA will support GoI in doing this:

- 1. Supporting a local-level cross-sector problem-based planning process underpinned by a menu of possible approaches and facilitating technical assistance beginning from the community and community-based providers, to *Puskesmas* to district.
- Developing, demonstrating and evaluating with local and national Government of Indonesia
  partners (through the managing contractor in partnership with DFAT and GoI), specific new
  approaches that may return large gains in primary care service delivery and maternal and
  newborn health and nutrition that would be implemented across a number of PERMATA
  districts and provinces.
- Providing performance-based financing to incentivise and resource locally-developed approaches to achieving greater coverage and quality of interventions known to effectively reduce maternal and newborn death.

These three approaches work together to support local and national decision makers to explore the key problems and constraints they face, trial the solutions they think will have impact, evaluate whether they do and implement those most effective on a broader scale.

# 4.1.4 INFLUENCING NATIONAL POLICY REFORM

PERMATA will work both nationally and sub-nationally on maternal and newborn health policy and implementation. PERMATA will support national policy reforms and strategies aimed at a scaling up nutrition, accelerating maternal and newborn death reduction and increasing contraceptive use. At a national level, this may include direct inputs such as technical assistance, facilitative meetings and support to national level taskforces. DFAT enjoys good engagement with the maternal and child health and nutrition directorates within the Ministry of Health; with the Health Directorate in the National Planning Ministry Bappenas; with the National Family Planning Agency BKKBN; and, through DFAT's decentralisation program, the Ministry of Home Affairs. This will enable us to continue this policy dialogue and assistance.

For primary care systems strengthening, national level engagement and policy reform, support is led by the Australia Indonesia Partnership for Health Systems Strengthening, including current support to health financing reform, national health insurance roll out (JKN), health provider payment arrangements, health workforce planning and skills policy and implementation and monitoring and evaluation of health system performance. AIPHSS has ongoing engagement with Ministry of Health's Secretariat General and health workforce and service delivery directorates, Bappenas and BPJS Kesehatan. PERMATA's sub-national primary care systems activities will both align with and inform these developments.

In both the MNH and primary health care pillars, PERMATA's sub-national activities and lessons will inform and be influenced by national policy reforms. In some cases, national reforms need trialling in a limited number of areas and evaluation lessons learnt prior to scale up (piloting). This can include alternative approaches to attracting and retaining rural health workforce, recent interest in performance based financing for health and the introduction of new nutrition supplementation for undernourished pregnant women. In consultation with districts, PERMATA can support trial implementation of such reforms within its focal areas. On the other hand, innovation can occur at local levels among frontline providers and districts, which can and should lead national policy reform,

including approaches to community accountability, roles of midwife coordinators and local approaches to gaining greater coverage of effective services.

To facilitate these linkages, technical assistance will be shared where appropriate across national and sub-national levels, an overarching monitoring and evaluation framework will exist and six-monthly meetings (as part of learning platform events) will bring national and sub-national levels together to review progress and agree on some overarching joint priorities and changes needed (whilst protecting separation of specific activity planning so each level feels they have control and ownership of their activities. Importantly, DFAT will need to play a role in policy advocacy, which would include experiences and evidence from PERMATA district and province level work.

## 4.1.5 GEOGRAPHICAL FOCUS

The selection of program provinces and districts was based on the learning from past programs (see section 2.3 Key Learning above), and on four key principles:

- 1. To reduce geographic and socio-economic disparities in maternal and newborn health outcomes
- 2. To maximise synergies between DFAT frontline programs and support from other development partners for greatest impact
- 3. To build on the successes and learning of AIPMNH and expand this to new provinces,
- 4. To develop models and approaches that are effective in diverse Indonesian contexts and enable the GoI to take learning and evidence from program areas to provincial and national scale.

The three provinces of NTT, NTB and East Java have been selected in consultation with Gol. (See section 4.1.5 Geographical focus for further details). These represent different challenges to primary care delivery and maternal and newborn death reduction, which is important to determine what works in different settings and thereby better contribute to improved policy decision making locally and nationally. In East Java coverage of some basic interventions protecting mother and baby can be poor (for example, tetanus injection during pregnancy and early initiation of breastfeeding) and private service provision is more widespread. In NTT and NTB there can be greater coverage of some of these basics but access to and quality in facilities and addressing complications is a greater challenge.

The program will be implemented in 25 focal districts across the three provinces where synergies with other Australian-funded programs to improve frontline service delivery can be leveraged. The selected districts generally have poorer performance on a range of primary care and maternal and newborn health indicators. The number of districts has been determined by having approximately 50% coverage of provinces (capped at 10 districts) and in line with budget availability and the need to have comparison areas in the same provinces to judge success of the program and specific interventions. A diverse set of provinces and districts have been purposefully selected to assist in developing solutions that are suited to the different health contexts that exist across Indonesia and can provide credible evidence to support ultimate scaling-up by the Government of Indonesia. This means that the program is designed to be flexible with space for innovation tailored to local conditions and opportunities and gives room to the managing contractor to work with government partners on developing context-specific solutions to systems and implementation bottlenecks. Districts supported and the number of activities in each have been explored and costed in a way that is scalable up or down according to funding availability.

PERMATA will include a small set of cross-province and district interventions purposely designed and implemented to explore their value for further scale up. A selected number of these will be accompanied by independent rigorous impact evaluation. This will be complemented by innovations and adaptations of good practice at the district and sub-district level that result from bottom-up, problem solving analysis with district and sub-district stakeholders. Evaluation strategies of the demonstration projects and local innovations will balance rigour with purpose. This will be accompanied by policy dialogue with national and sub-national stakeholders and targeted high-level technical assistance to support the translation of learning into GoI policy and practice. A learning platform that will embrace both PERMATA and AIPHSS (and DFAT's wider health portfolio over time) will focus on disseminating experience and results at district, provincial and national level and engaging a wide group of policy makers from across sectors, as well as academics, researchers and civil society to debate and apply results.

At the national level, PERMATA will work side-by-side with AIPHSS, which leads national policy dialogue between Australia and Indonesia on health systems reforms, and provide complementary national level support in maternal and newborn health and nutrition. National policy development processes and best practices from Frontline programs will inform each other, facilitating scale-up of successful approaches across Indonesia using Indonesia's own domestic resources.

The theory of change underpinning PERMATA is presented in Figure 2 below.

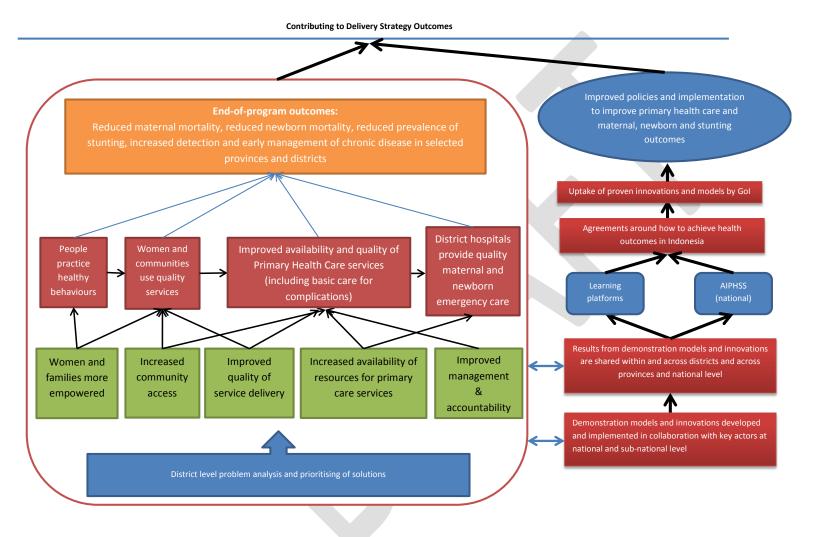


Figure 2 PERMATA Theory of Change

## 4.2 PROGRAM GOAL, OBJECTIVE AND OUTCOMES

PERMATA aims to impact economic growth and reduce poverty in Indonesia by reducing maternal and newborn mortality and stunting at the national level and improving the performance of the primary health care system.

## The **goal** of PERMATA is:

Contribution to reduction in maternal and newborn mortality and stunting and improved performance of the primary health care system in Indonesia.

The program will support the GoI to achieve this goal through the program's **objective**, which is to:

Assist the Government of Indonesia to effectively deliver quality essential primary health care services and reduce rates of maternal and newborn death and stunting, particularly in poor and near poor populations in selected provinces and districts.

By the end of the proposed eight-year program PERMATA will contribute to the following **end-of-program outcomes**:

- 1. reduced number of maternal deaths, particularly in poor and near poor populations, in selected provinces and districts.
- 2. reduced number of newborn deaths, particularly in poor and near poor populations, in selected provinces and districts.
- 3. reduced stunting in children under five, particularly in poor and near poor populations, in selected provinces and districts.
- 4. a greater proportion of chronic disease being detected and effectively managed by the primary health care system in selected provinces and districts.
- 5. Effective new approaches have contributed to policy and are scaled up beyond program focus districts.

End of program outcomes 1-3 and 5 will be achieved through PERMATA's demonstration of interventions and innovative approaches and the subsequent leveraging of GoI resources to adapt and scale up those that are proven to be cost effective.

The end-of-program outcome related to chronic disease (4) will measure a different dimension of primary health care strengthening than would be captured by maternal and newborn health outcomes alone. Due to resource limitations and the complexity of the PERMATA program, it is not proposed that any chronic disease specific interventions be supported through PERMATA. Tracer conditions of tuberculosis and high blood pressure will be used to measure success on this outcome as they represent the highest burden of communicable and non-communicable disease in Indonesia, require longer-term outreach and active management at the primary care level and affect maternal and newborn outcomes.

To achieve the end of program outcomes, PERMATA will be guided by four intermediate outcome areas that support the inter-linkages between the underlying causes of maternal and newborn mortality and stunting. See the Results Framework in Annex 02 for a more detailed description of the program's objectives, outcomes and their measurement.

The intermediate outcomes (end of year 4) are:

- 1. To reduce maternal and newborn death and child stunting through empowering women, families and communities to make healthier choices on the number and timing of pregnancies in selected provinces and districts. PERMATA will aim to achieve:
  - a) Reduction in unintended and high-risk pregnancies, including pregnancies in 15–19 and over 35 year olds, with short birth intervals and of fourth or more child.
  - b) Increased contraceptive prevalence rate, including increased proportion of long acting reversible and permanent methods.
- 2. To reduce the risk of maternal and newborn death and child stunting through comorbidities and particularly through under-nutrition related risk factors in selected provinces and districts. PERMATA will aim to achieve:
  - a) Reduced proportion of pre-term and other low birth-weight newborns disaggregated by age of mother and socio-economic status.
  - b) Reduced rates of anaemia in women of reproductive age and pregnant women at term, disaggregated by socio-economic status.
  - c) Reduced risk and rates of pre-eclampsia and eclampsia in pregnant women disaggregated by socio-economic status.
  - d) Increase in percentage of newborns breastfed within 1 hour of delivery disaggregated by socio-economic status.
  - e) Reduced rates of protein-energy malnutrition in women of reproductive age and pregnant women, disaggregated by age group and socio-economic status.
- 3. To reduce the risk of maternal and newborn death and child stunting through improved coverage and quality of obstetric and neonatal care in selected provinces and districts. PERMATA will aim to achieve:
  - a) Increased provision and use of quality ANC as per GoI policies.
  - b) Increased proportion of quality deliveries in facilities at an appropriate level of service, including particularly timely access and effective treatment for basic complications.
  - c) Increased coverage and quality post-natal care for the mother and newborn at an appropriate level of service, particularly in the first 48 hours.
  - d) Increased access to timely and culturally acceptable referral to and delivery of quality CEmONC services.
- 4. To strengthen the effectiveness, efficiency and quality of primary health care service delivery, particularly to poor and near poor populations, in selected provinces and districts. PERMATA aims to achieve:
  - a) Reduced per capita out of pocket expenditure for health disaggregated by socio economic status.
  - b) Increased availability and continuity of trained doctors, midwives and essential allied health workers in rural remote *Puskesmas*.
  - c) Increased timely availability of financial and physical resources, medical supplies and equipment for *Puskesmas* to deliver quality essential primary health care services.

These outcomes will be measured in the selected districts where PERMATA will be operational through a mix of data sources. These include an independent program baseline and evaluation survey and ongoing facility data and tools supported through PERMATA, such as facility audits and secondary data sources (including PERMATA investment in adjustments to existing national surveys to better capture changes in program areas - eg oversampling and more regular specific modules additions). Section 5.4 Monitoring and evaluation contains more details. As PERMATA aims to demonstrate effective models of implementation that are scaled up by Government of Indonesia, these outcomes will also be measured at the provincial level in NTT, NTB and East Java by extending data collection

into a sample of non-focal program districts (which also ensures comparisons available in earlier years).

## 4.2.1 PATHWAYS TO IMPROVED HEALTH OUTCOMES

Demand and supply side factors affect maternal and newborn health outcomes, stunting, and the prevention, detection and management of communicable and non-communicable disease. PERMATA seeks to demonstrate how health outcomes can be improved by working through pathways that stretch across the demand-supply spectrum and the primary health care system. These five pathways together lead to four major program outputs (see pathways diagram in Figure 3):

- Empowered women, families and communities making healthier decisions
- Increased community utilisation of quality primary health care services
- Improved availability and quality of primary health care services
- Improved accountability and functioning of the primary health care system

For sustainability, PERMATA will work through existing structures and organisations and seek to build capacity rather than create parallel structures or substitute resources.

FRONTLINE COORDINATION. As described, a strong focus of PERMATA is on improving frontline health service delivery and the point of interaction between the user and the provider. To maximise effectiveness and efficiencies at the local level, PERMATA will work in close coordination with other Australian-funded Frontline programs working on the social determinants of health, including for example decentralisation, village support, social protection and rural water and sanitation programs. The extent of co-dependence between programs will vary by district depending on the extent of co-location, the political and institutional context and the priorities for action chosen by district governments. PERMATA and Frontline more broadly will work to achieve the program's outcomes through five pathways (described below), though the presence of Frontline programs will vary across the focal districts.

While local solutions to bottlenecks in the pathways will be encouraged through district and subdistrict planning, a menu of interventions and approaches will help guide local planning processes and keep solutions focused and doable and facilitative technical assistance will be provided. This section sets out indicative areas of work that PERMATA will support across each of the pathways but does not deter alternative bottom-up solutions. It also presents enabling support to be provided by other Frontline programs (where operational) and other known interventions that are likely to contribute to improvements.

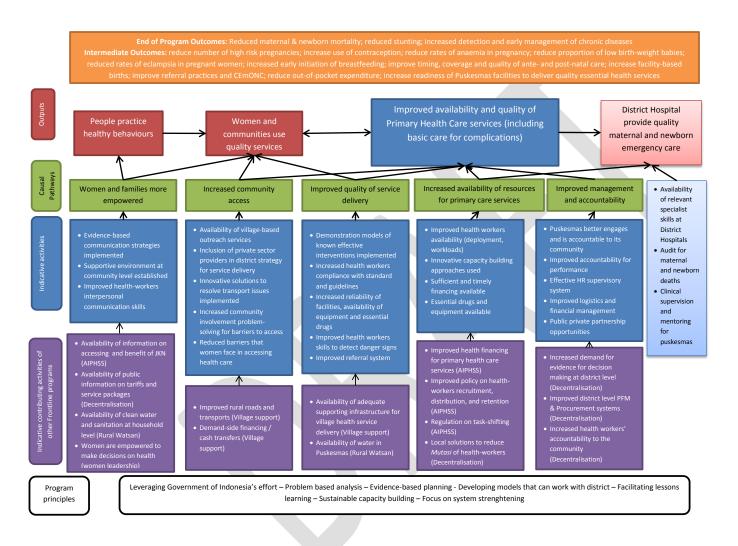


Figure 3 Pathways to improve health outcomes

## PATHWAY 1: WOMEN, FAMILIES AND COMMUNITIES EMPOWERED TO MAKE HEALTHIER

DECISIONS on issues related to family planning, nutrition, and maternal and newborn health. This includes understanding WHY certain actions in the family and community are beneficial not only WHAT to do (a key constraint noted in the Village Health Institutions and Health Seeking Behaviour studies supported by DFAT). This is essential to improving family health behaviours, such as household care of pregnant women and newborns and knowing when and how to seek care from health providers. In view of enabling support to be provided by Frontline and other development programs, PERMATA will focus on interventions in three key areas. First, it will support innovative and well-formed social and behavioural change communication approaches and channels most likely to have impact in the local context. Entertainment education approaches in reproductive and maternal health will be explored. This will include work with and complement other national campaigns such as *BKKBN* / Bill and Melinda Gates Foundations' planned behaviour change communication program.

Secondly, community health initiatives such as *Desa Siaga* and *Posyandu* have shown great potential for mobilising community support for maternal and child health in existing programs. In NTT, for example, AIPMNH support to *Desa Siaga* has increased facility birth by over 10%. PERMATA will further explore how community institutions and social capital can be leveraged for community health and for tackling harmful practices related to care of the mother and newborn, such as delayed and non-exclusive breastfeeding, and will include involvement of husbands and families (known to improve results) through use of existing forums such as the *Desa Siaga* contributors forum.

A third area of attention will be improving the low standard of health workers' interpersonal communication and counselling skills at village and *Puskesmas* level to support their key behaviour change role, including exploring non medicalization of counselling where appropriate.

Other Frontline programs will provide important complementary support to PERMATA to raise awareness and improve household behaviours. The MCC-supported village level stunting reduction program and UNICEF / MoH nutrition-counselling materials involving community forums ("Kelas Ibu" and "Kelas Balita"), provide a platform for increasing women and household nutrition awareness. The Millennium Challenge Corporation is developing a national communication for behaviour change strategy for nutrition that will further add value. The DFAT-supported Water and Sanitation program aims to increase rural and peri-urban access to sustainable clean drinking water and sanitation, improve hand-washing and reduce open defecation, and will play a key role in reducing environmental health-related illnesses and improving hygiene behaviours. In areas where DFATsupported women's leadership programs are operational, women's empowerment for reproductive health through women's group advocacy will contribute to improved maternal and newborn health knowledge and practice and assist in reducing the socio-cultural and home based barriers that women and girls face in accessing health services. DFAT decentralisation support to local government to increase transparency and public dissemination of budget and service information <sup>13</sup> will feed across into better public dissemination of information on tariffs and service packages at public health facilities. Similarly, plans to strengthen dissemination of information on the National Health Insurance Scheme, Jaminan Kesehatan Nasional, by AIPHSS will contribute to improved awareness of how to access and benefit from JKN.

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 $<sup>\</sup>frac{13}{\text{http://www.aipd.or.id/wp-content/uploads/2013/08/Informasi-Singkat-mengenai-AIPD.pdf}} \text{ accessed on 15 April 2014}$ 

PATHWAY 2: INCREASED COMMUNITY ACCESS TO ESSENTIAL HEALTH SERVICES, including emergency obstetric and newborn care, is key to increased use. This means reducing the barriers that poor and near poor people, particularly women, face in initial access to care as well timely referral for access to emergency care when needed.

On the demand side, remaining costs of care and availability and cost of transport are two substantial barriers to accessing services (Health seeking behaviour study 2014). Point of service charges in excess of Rp20,000 (around AUD1.8) are still charged for a variety of reasons, even in the time of financial protection for health care. Improved community information and accountability, monitoring and extended coverage of financial protection for health will assist to address this. Where legitimate charges remain a barrier, innovative demand and supply side financing interventions may be explored. This could include approaches to equalizing costs across long and short term methods of contraception to both users and providers in order to provide equal access and choice across short and long term methods, (ICMM baseline survey results 2014). Improved transport availability for first access to and improved emergency referral within health services will be a particular focus, as many maternal and newborn deaths are occurring due to arrival at services too late to effectively address complications. Enhanced community and women's involvement in solving local barriers to accessing health services through existing local forums such as *Desa Siaga*, *Puskesmas* Community Board, and PNPM community meetings will leverage and strengthen social capital with the potential to feed across into broader community development.

From the supply side, more accessible provision of quality village and home-based outreach services will reduce the time and costs families spend on accessing primary health care, and increase use. It is expected that this will improve low rates of post natal care check-ups. In areas where private sector providers are an important source of primary health provision, such as East Java, approaches will be piloted, particularly around family planning, to increase the coverage and quality of community based services, including through addressing financial barriers and incentives for reduced access to important interventions, such as long acting contraceptive methods and key components of antenatal care. Where appropriate, public private partnerships to address such barriers will be explored.

Other Frontline programs will further enable access to health services. PNPM Mandiri is improving rural roads and transport, one of the main barriers to accessing health care particularly in emergency situations. Greater DFAT involvement in the area of road communication may also be forthcoming through its infrastructure program<sup>14</sup>. Demand-side financing for health to households and communities, through PNPM and PKH respectively, provides often scarce money for poor families to pay for transport and other opportunity costs of accessing health care, and increases demand.

The Village Law that was recently enacted by GoI will provide another opportunity for increased village spending on improving access to health services, for example by providing more funds to replicate *desa siaga* and for the operation of maternity waiting houses.

PATHWAY 3: IMPROVED COVERAGE AND QUALITY OF ESSENTIAL MATERNAL AND NEWBORN HEALTH AND NUTRITION SERVICES. PERMATA will work in three ways: 1) to improve coverage of existing policy mandated and known effective maternal and newborn health and nutrition interventions where coverage is currently below optimum; 2) to support the trialling of potentially effective interventions not currently national policy but where large returns to maternal and newborn death and stunting reduction could be achieved and GoI have expressed interest in considering for policy implementation; and 3) to improve the quality of core maternal and newborn health service

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<sup>&</sup>lt;sup>14</sup> The current DFAT infrastructure program is focussed on urban infrastructure.

delivery with a particular focus on safe delivery, care for complications and the immediate post natal period (the areas in which most maternal and newborn deaths occur).

Improving coverage of known effective interventions: How to get greater coverage of key interventions already included in Indonesia guidelines and known to be effective can be challenging at sub national levels. This includes key interventions in antenatal care such as consistent iron supplementation, tetanus injections and performing key diagnostics as well as post natal care visits. With increased demand hopefully promoted through pathway 1 in conjunction with other Australia and GoI supported programs, supply coverage needs to meet this. In selected districts PERMATA will trial the use of performance based grants with coverage outcome conditions that have been successful both previously in Indonesia (two districts in NTT) (Schoffelen et al 2011) and internationally in achieving coverage and quality improvements in MCH (Peabody et al 2010; Basinga et al 2011). This has even larger potential where demand side conditional financing such as exists already in PNPM and PKH are in play and so co-location of PERMATA supply side PBF would aim to produce better results overall (see more detail of proposed performance based grants in section 4.3.2 Performance-based grants for quality and coverage of maternal, newborn and primary care). Although when the Village Law is implemented in 2016, this will means every village will have the funds that they can in theory allocate for improving health. However, this will depend on the extent of conditionality that will be adopted into village law implementation from the PNPM and PKH experience.

Exploring new approaches for policy inclusion: PERMATA will also support other Gol-DFAT agreed demonstrations of potential new policy initiatives that could have large impacts on maternal and newborn health in the Indonesian context. Initial proposals for these are outlined in box 4.1 below but others can arise from further discussion with GoI and through province and district problem-based planning processes (see section 4.3.3 Problem-based planning and solution development for local innovation). Reduction in low birth-weight and stunting of the child may result from balanced protein energy supplementation in appropriately-identified undernourished pregnant women. Though this is not yet in GoI policy, the Ministry of Health nutrition unit is interested to explore its possibilities. With iron deficiency anaemia remaining high in Indonesian pregnant women despite iron supplementation, improved monitoring of haemoglobin is essential. A recent assessment found that only 40% of Puskesmas were conducting Hb testing in ANC often due to lack of relevant supplies and / or skills (WHO et al 2012). Use of hand-held devices that are easier to use and application targeting for more intensive supplementation follow up and referral could reduce risk of maternal and newborn death. Multiple micronutrient supplementation may have even larger benefits over and above improved iron folate supplementation. Extending some beneficial interventions to adolescent girls, such as reduction in anaemia, where this has benefit for their own health and later for their maternal and newborn health, may also be explored in the early years of PERMATA.

These approaches have great potential for partnership with the private sector. Currently Indonesian companies do not produce micronutrient or balanced protein energy supplements to international standards, resulting in some donors importing from overseas. In addition local production of ICT-based screening tools (eg for appropriate targeting of undernourished women or women at high risk of a preterm birth), monitoring tools and diagnostics is limited. PERMATA will take opportunities to work with Indonesian private sector companies to produce needed technologies to recognised quality standards and provide initial support to public private partnerships to ensure these reach communities who need them most (see section 4.4 Private sector for more information on how PERMATA will work with private sector).

# Box 4.1 Potential examples of maternal and newborn health, nutrition and primary systems strengthening cross-province demonstration projects:

- 1. Balanced protein energy supplementation for pregnant women in NTT and NTB who are chronically energy deficient to reduce low birth weight and pre-term births.
- 2. Community monitoring of haemoglobin testing during ANC to improve the detection of anaemia risk and targeting for more intensive supplementation approaches.
- 3. Equalising financing of long acting contraceptive methods for the user and provider (see Pathway 2 access).
- Performance based financing to improve coverage and quality of key effective MNH and PHC services
- 5. Approaches to monitor remaining point of service charges and their effects on reducing financial access barriers
- 6. Alternative investments to encourage attraction and retention of key health workers in rural remote areas

Improving quality of core maternal and newborn health and nutrition services: Most importantly, whilst coverage of a number of essential maternal and newborn health services, including ANC and facility-based birth, has improved in recent years, maternal deaths have not declined due to the poor quality with which they are often delivered.

Increased health workers' compliance with quality standards and clinical guidelines would improve the quality of health care provision. This includes clinical tests during antenatal care for identifying risk of anaemia, pre-eclampsia and other potential complication precursors (IDHS 2012), but low quality of care in delivery and in dealing with basic complications is particularly important. Low provider skill, limited monitoring and accountability and lack of essential supplies to enable standard of care to be given are all key constraints to quality.

Skills of doctors, midwives and other key health workers will be a focus, including enhancing the value and role of the midwife coordinator. Improved supportive supervision, mentorship and monitoring (including on the spot drills) and health worker rotation and internships will be promoted that allow the hands-on supervision of a greater number of births (a key constraint to skills improvement in rural remote areas). This will complement in-service training that is provided by GoI and which has been shown to have a limited effect in translating new skills into practice when provided alone. The program will also support innovative tools to enhance compliance to standards, such as through the use of information and communication technology (eg mobile phone) platforms and greater use of maternal and newborn death and near miss audits (including potential for community based social audits). Such information and monitoring tools have been suggested to be core to quality improvement in low and middle income country maternal and newborn care (Hofmeyer et al 2009; Pattison et al 2009; Gabrysch et al 2012); it is hoped that this will be complemented by improved community knowledge and expectations of services to be received (Pathway 1).

Program support to strengthen planning, procurement and logistics systems at the district and *Puskesmas* level and the use of regular facility audit in planning and monitoring to ensure the availability of essential equipment, drugs and products at each of the tiers of the primary care system will benefit maternal and newborn health and the broader package of primary care services (see pathway 4).

Quality of services provided will be specifically incentivised in the performance based grants to selected districts and *Puskesmas* and evaluated for its impact (which has been positive in other

settings previously in Indonesia and in other countries) as well as providing flexible budget supportive of addressing key needs for improved service quality (such as equipment maintenance, drugs) as they arise (see section4.3.2 Performance-based grants for quality and coverage of maternal, newborn and primary care).

These and other innovative approaches (or adaptations from elsewhere in the district or province) to improving *coverage and quality* of essential services, particularly of underserved populations, will be explored and identified through local problem analysis and solutions - an approach which is at the heart of Frontline (see section 4.3.3 Problem-based planning and solution development for local innovation).

*Other Frontline programs:* At the operational level, the frontline rural water and sanitation program will support improved quality of care through piloting the prioritisation of water connections to *Puskesmas* facilities in selected districts where the programs are co-located.

Other programs: The Gol's quality of care tools and skill development programs provide essential contributing support to PERMATA activities. Gol's clinical and management standards and guidelines, which are being upgraded with support from WHO and USAID, are important foundations. Likewise is the accreditation of hospitals by Komisi Akreditasi Rumah Sakit (KARS) and development of a system for accrediting Puskesmas by the Primary Health Care Department of MoH. The continued provision of national and local government funding of in-service training will be important for PERMATA; although some districts with low fiscal capacity may be constrained in providing this. PERMATA will not replace government funding of this mainstream activity. Improved quality in health professional education, including improved pre-service training, which is poor in Indonesia, is an important area for improving quality of care.

PATHWAY 4: INCREASED AVAILABILITY OF ESSENTIAL PRIMARY CARE RESOURCES. In 2011 less than one-third of *Puskesmas* in NTT are able to provide basic primary care services for key non communicable disease and less than 10% for basic maternal and newborn complications due to a basic lack in minimum staffing, medical equipment and drugs and supplies standards (World Bank & NIHRD 2014). Sufficient and flexible financing to address issues such as equipment maintenance and mid-year purchase of needed drugs influences availability of these.

Problems differently impact supply of services in remote rural *Puskesmas*, particularly for staffing. Low attraction and retention rates of key health workers, high absenteeism and time spent by health workers on administrative tasks rather than delivering care are fundamental problems faced by the health system that affect demand for services, the quality of care available and health outcomes. Human resources for health and workforce planning are key areas of policy dialogue and support provided to GoI by AIPHSS. PERMATA will complement national policy initiatives led by AIPHSS in two ways. First it will pilot a promising policy intervention to improve the availability of health staff in a selection of diverse districts across the three provinces. The design of this pilot will be determined by GoI in partnership with AIPHSS and in coordination with PERMATA and will likely be defined as the policy reform agenda becomes clearer in 2015 post the presidential election. Secondly, PERMATA will feed innovative and adaptive solutions and experiences around human resources from the focal districts to AIPHSS to support national policy debate. PERMATA will work with district governments on more efficient deployment of human resources and distribution of workloads.

A critical gap in saving maternal and newborn lives is the absence of specialist obstetric, paediatric and anaesthesiology skills at district hospitals. Lessons from the Sister Hospital Initiative supported by AIPMNH in NTT will be used to develop sustainable approaches to filling this human resource gap in a number of PERMATA's districts. Continuous availability of key equipment and availability of diagnostic

and treatment medical supplies and drugs was a key constraint to quality care provision noted in the 2011 National Health Facilities Survey (MoH 2011). The use of facility audits to underpin planning for medical equipment and supply needs and, in particular, to monitor performance on availability of minimum essential commodities will be introduced in selected *Puskesmas* and evaluated for its influence on ongoing capacity and capability to provide essential services to at least minimum quality standards. This will include key BEmONC drugs and equipment, diagnostics and treatments for high-burden communicable and non-communicable diseases. Such audits that ensure simplicity in use and are linked to accountabilities (see pathway 5) have been shown to improve service readiness and quality in a number of low and middle income country primary health systems (see eg Colbourn et al 2013).

Nationally AIPHSS will work on financing for primary care, including improvements to the new capitation payment policy and process for *Puskesmas*. PERMATA will complement this at the subnational level by assessing the sufficiency of this finance for minimum delivery requirements and explore through the performance based grants demonstration the potential for part of these payments to include a performance element in future (an interest of the Ministries of Health and Finance nationally).

Other Frontline programs: By working together PERMATA and AIPHSS aim to support Gol to strengthen policy on the financing of primary health care services. This is particularly relevant given the strong policy focus on JKN and its emphasis on hospital level care. Improved primary care policies that incentivise health worker performance and the adequate resourcing of supplies, maintenance and outreach services will provide a stronger framework for achieving primary care coverage and quality objectives. AIPHSS provides the national level entry point for feeding district experiences with improving health worker availability into policy debate. AIPHSS's policy influence and assistance at the national level with health worker recruitment, distribution and retention will similarly inform district experimentation and the policy environment for improved workforce management. Regulation on task-shifting<sup>15</sup> is another policy arena led by AIPHSS that will support district problem solving to fill human resource gaps. Local policy solutions to reduce frequent *mutasi* (rotation) of health and other government workers will be supported by DFAT's decentralisation program.

PATHWAY 5: IMPROVED PRIMARY HEALTH CARE SYSTEMS ACCOUNTABILITY AND FUNCTIONING. Accountability for service provision and improvement is currently weak in Indonesia through both formal accountability lines as well as back to communities. Some of this is due to the relatively early stages of decentralisation Indonesia is in, some due to divided responsibilities for health care delivery between different government departments (eg MoH and MoHA) and district authorities (such as for hospital versus primary care). PERMATA will work with district authorities to strengthen accountability for improved health service performance through community and formal government reporting lines. This will complement AIPHSS work at the national level on responsibilities and accountabilities for health at different levels of government as well as accountability and reporting mechanisms under the national health scheme JKN.

PERMATA will build on AIPMNH's work on *Puskesmas Reformasi* and linkages with communities through the *Puskesmas* Management Board to increase responsiveness to community needs and accountability for service delivery. Facilitative supervision processes will be expanded to include

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<sup>&</sup>lt;sup>15</sup> "a process whereby specific tasks are moved, where appropriate, to health workers with shorter training and fewer qualifications" (WHO, ).

health workers providing primary health care provision in addition to MNH services. Such supervision will be strengthened to include monitoring of feedback from these visits to the *Puskesmas* and the extent to which and timing of recommendations have been addressed by the *Puskesmas*. This is an approach that has been recommended by the *Gadjah Mada* University (UGM) as part of their monitoring work under AIPMNH, and also for use in maternal death audit follow up.

There is little incentive, however, for improved performance through the health system at present. In fact a number of financial disincentives exist where attainment of minimum standard performance can reduce payments received (eg under DAK). More direct links between performance in service delivery and financing incentives will be supported through the provision and evaluation of performance-based financing (PBF) to selected districts and *Pukesmas* (see section 4.3.2 Performance-based grants for quality and coverage of maternal, newborn and primary care) which has shown large potential for service and system improvements in other countries (Basinga et al 2011). PBF works to improve accountability for service performance from a number of angles: it includes the need for better collection of performance information that is independently verified and shared amongst stakeholders; it encourages the use of information for planning; and it links this with financing.

Planning and management capacity at district and *Puskesmas* level will be strengthened in various ways in the focal districts. The planned district problem solving and planning process will support more systematic use of information to determine priorities and actions. This will involve improving the reliability of local data for planning and monitoring purposes in ways that are compatible with government information systems and owned by government partners. Improved financial management of the *Puskesmas* will build on lessons from AIPMNH in NTT and will be particularly important as *Puskesmas* will be directly responsible for funds received under JKN under new legislation. Where a large proportion of key health worker, particularly midwife, time is spent in administrative tasks, particularly financial management, PERMATA will work with AIPHSS to explore opportunities to shift such tasks to alternative existing or new category of staff in *Puskesmas* and districts. Other operational approaches to strengthen management of the primary care network to more efficiently distribute workload and use resources and so ensure better coverage of target groups will be explored and evaluated.

**Contributions from other Frontline programs**, particularly DFAT's decentralisation program's strengthening of district governance systems will provide enabling support for PERMATA's health focused systems strengthening. Support to improve district level public financial management, procurement systems and human resource planning and management as well as generating demand for evidence for district level policy and financial decision-making will read across into health.

Increasing public demand for social accountability of health services is expected as communities receive greater control over resources through, for example, the Village Law and as a result of social mobilisation programs and demand side financing. Social accountability pressure on primary health care has the potential to further improve the transparency of health service management and the more efficient use of resources.

# 4.3 DELIVERY APPROACH

# 4.3.1 CROSS-PROVINCE DEMONSTRATION MODELS

A small number of cross-province demonstration models will be supported by PERMATA and implemented in a selection of districts across the program provinces in order to test relevance and

effectiveness in a variety of health settings. The demonstration models will be defined and designed in close coordination with national and provincial policymakers and local governments to set the ground for ownership and future scaling up. This will in some cases necessarily include discussion of funding commitments for scale up if shown to be effective, to ensure that initial investment in rigorously implementing and evaluating potential benefits from the approaches in improving health outcomes is worth it. Up to three models demonstrating maternal and newborn health and nutrition interventions and up to three models testing primary health systems reforms are planned. The final selection will depend on government commitment at sub-national and national levels, cost versus potential benefits from implementation and evaluation and the capacity of the program to manage a number of rigorous impact evaluations. Government support for some of the models has already been articulated, such as for balanced protein-energy supplementation and performance based financing, but firm buy-in will be sought during inception.

Suitably-qualified Indonesian and international research agencies with the expertise and experience of designing and undertaking robust impact evaluations of health systems and maternal and newborn health and nutrition interventions will independently evaluate the demonstration models and provide cost estimations and models for scale up to facilitate takeover of approaches by Government of Indonesia. A transition implementation phase in PERMATA provinces may be co-funded by DFAT and GoI to support scale up where this fits within the time frame of the program.

# 4.3.2 PERFORMANCE-BASED GRANTS FOR QUALITY AND COVERAGE OF MATERNAL, NEWBORN AND PRIMARY CARE

Performance-based financing has been successfully used in a number of countries to improve coverage and/or quality in health service delivery particularly in maternal and newborn health (Peabody et al 2011; Basinga et al 2011; Zeng et al 2013) and preliminary results from a previous Cordaid pilot in two NTT districts in Indonesia were encouraging (Schoffelen et al 2012). Results come from both increasing flexible finance available to the health system as well as through providing an incentive to allocate resources to particular high priority and effective activities.

Starting with a small number of pilot districts, it is proposed that Australia will channel funds through the Ministry of Finance direct to districts through the Gol's regional grants ("Hibah Daerah") mechanism, recommended by Ministry of Finance and Australia's economic governance and decentralisation programs. This mechanism ensures channelling is done through Ministry of Finance with Ministry of Health inputting on the technical side of health performance requirements only, a model preferred by both Ministries. This mechanism is used by DFAT successfully as part of it water infrastructure program through the "Water Hibah" and lessons have been and will be learnt from this.

Grants would be made annually with performance progress monitored six monthly. Each subsequent grant would be made on the basis of independently verified performance against key service delivery outcomes. The Ministry of Finance has expressed interest in replicating this at national scale with domestic resources if the modality proves successful and Ministry of Health is interested in lessons that may be applied to the incorporation of a performance component in capitation funding for primary care under JKN. With recent regulations on Puskesmas ability to manage some of its own finances, possibilities to compare performance grants direct to Puskesmas with cross sector district level grants to improve maternal and newborn health and primary care will be explored.

Effectively PNPM and PKH have already been providing performance based grants on the demand side in the form of conditional cash transfers and village grants. It is not yet known whether the village law that will replace PNPM's conditional cash transfers in 2016 will also be conditional. Where

supply and demand side performance financing can work together outcomes can be even greater. Districts for initial grants will therefore purposely include some that have had PNPM and PKH operating and some that have not. A cross program working group in DFAT has and will continue to oversee the development, implementation and evaluation of the performance-based financing under PERMATA, including the economic governance and decentralisation sections, which are working more broadly on reforming financing mechanisms nationally and for sub-national levels, including considerations of performance or output based financing.

A steering committee for both the initial development of the performance based grant guidelines and mechanisms during PERMATA's inception phase as well as for their ongoing review will comprise cross Ministerial partners including Ministry of Finance, Home Affairs, Health and Bappenas as well as DFAT programs, including economic governance, decentralisation and health. A number of consultations have already been held with Ministry of Finance, Ministry of Health and Bappenas on these potential performance based grants and a Working in Partner Systems (WiPS) Assessment conducted, which suggested that the benefits of such grants would outweigh the risks and that there were a number of actions that could be taken to mitigate risk. See annex 03 for further background and details of the performance based grants planned and Annex 04 for a summary of the WiPS assessment recommendations.

# 4.3.3 PROBLEM-BASED PLANNING AND SOLUTION DEVELOPMENT FOR LOCAL INNOVATION

Communities, *Puskesmas* and their network of providers and district governments will be facilitated to undertake a bottom-up problem solving approach to identify strategies and activities that address bottlenecks in the primary health care system and constraints to maternal and newborn health and nutrition. PERMATA will explore and learn from past and current village to district level planning experiences in Indonesia, which have generally functioned poorly. Several factors have contributed to the limited innovation that government planning processes have stimulated, including weak accountability and lack of external motivation, lack of appropriate skills in what has historically been a top-down management culture, absence of reliable and relevant data, and lack of flexible funding and infrastructure.

PERMATA will provide facilitative technical assistance to support the problem analysis and planning process from village to *Puskesmas* to district level. Wherever possible existing forums will be used and strengthened rather than establishing parallel mechanisms; for example PNPM village forums and mini workshops with *Puskesmas* Community Boards. The program will draw on the capacity, structures and support of other Frontline programs working at both the community level (eg. Village support program, women's leadership program) and with district government (Decentralisation Program) to assist with the problem solving process. Stakeholders from *Bappeda*, other line agencies, the private sector and civil society and representatives from villages and *Puskesmas* will be involved in the district-level process. The planning process will contribute to and be aligned with government's district planning and budgeting process so that innovations and activities can be included in district annual plans and budgets.

A menu of potential solutions linked to known district data will be developed to support the planning process to maintain a focus on doable and evidence based solutions, although this will not limit the solutions considered for funding. Diagram in Figure 4 below shows the decision tree that will guide eligibility for PERMATA support at the district level. One of the key principles is that PERMATA will not displace government funding to run the health system, but concentrate its limited resources on demonstration and innovation of how to strengthen the system and improve access to and the

coverage and quality of services and the leveraging of government funds. Bearing this in mind, PERMATA will locally support through its managing contractor:

- i. Funding of new approaches to addressing implementation bottlenecks and maternal and newborn health and nutrition interventions for evaluation and possible scale up;
- ii. Evaluation of existing approaches that show promise for scaling up, such as Desa Siaga;
- iii. Technical assistance to support districts in implementing existing technical guidelines and approaches, such as maternal death audits.

Given that government budget shortages are not the major bottleneck in most districts, with the possible exception of NTT where the fiscal space is more constrained, PERMATA will not as a matter of course provide funding to fill standard service delivery coverage or implementation gaps of government mainstream activities; although a limited amount of grants will be available to facilitate relationship and trust building with key district stakeholders.

The package of support that will be provided to each of the focal districts both through PERMATA and other Frontline programs will assist in overcoming the weaknesses that have hindered district planning in the past (see figure Figure 4 below). This includes good quality independent technical assistance that can facilitate participatory planning processes. With the support of the DFAT decentralisation program, it is expected that this facilitation role will gradually be taken over by *Bappeda* or other relevant district staff during the life of PERMATA. Similarly, strengthening of information and evidence and links to the Learning Platform (see Section 4.5.4 Learning platform) will support the dissemination of results and advocacy for replication of effective approaches, will create a firmer basis for planning and monitoring of progress. PERMATA's additional resources and strengthening of financial management systems both directly and with AIPD will also create greater incentive and flexibility for district and *Puskesmas* managers to raise performance levels.

As the problem solving approach and identification of locally-owned innovations is central to the program, its development and testing will take place during the inception phase in coordination with other Frontline programs and close monitoring by DFAT staff.

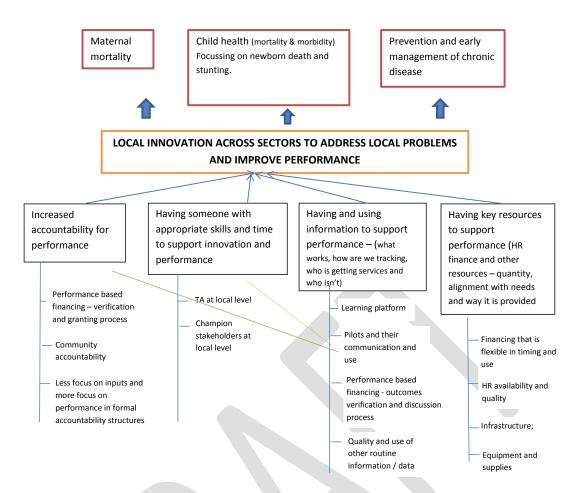


Figure 4 Frontline type of support for health outcomes

## Information from data, evaluation, program implementation

implementation

key constraint

expectation

approach to address

Unknown effectiveness but good basis for

Better allocation of local government Known effective Village budget toward approach level Existing policy coverage District level effective problem Existing financing scope facilitated interventions based problem based planning **Puskesmas** planning process facilitated Supportive process Known effective problem technical approach based assistance only to Including New policy / guidelines planning district activity government needed Village process implementation stakeholders level and all problem Known effective frontline health Performance based approach related DFAT based grants use planning Sub optimal coverage programs and Puskesmas (selected districts) process Outside existing stakeholders facilitated financing scope AIPD, problem PERMATA, based Evaluation of PNPM etc planning Large activity already existing activities process being implemented • Unknown effectiveness Robust Policy dialogue demonstration of New intervention or including on

demonstration

proposals and

Inc AIPHSS

local innovations

#### POSSIBLE EXAMPLES

- Antenatal care coverage
- Post natal care

## POSSIBLE EXAMPLES

- Maternal death audit improvement
- Local PERDA on HR turnover
- Referral guidelines for beyond MNH

#### POSSIBLE EXAMPLES

- Incentives for post natal home visits
- In community family planning counselling
- Prioritised water supply to key health facilities

#### **POSSIBLE EXAMPLES**

- Desa Siaga
- Facilitated supervision

## POSSIBLE EXAMPLES

interventions or

local innovative

approaches

- Balanced protein energy supplementation in pregnancy
- Transport solutions for remote rural communities

### 4.4 PRIVATE SECTOR

PERMATA's focus in three quite different provincial operating environments offers potential to work with the private sector in a variety of ways. In all three provinces, PERMATA will work with private providers to improve the quality of primary health care services, particularly family planning and maternal and newborn health and nutrition care.

PERMATA will engage with the private sector in Indonesia in two main ways: firstly, with private firms in Indonesia which are key developers and suppliers of health-related commodities, diagnostics and Information Communication Technology (ICT) tools. Secondly – and much more challengingly – PERMATA will work with private providers of health care, including private practices of midwives and doctors who also work in the public sector, as well as separate private sector clinics and health facilities. These have played an important role in extending access to key reproductive and maternal and child health services, including family planning, antenatal and delivery care, but the poor quality and weak regulation of private providers means engaging with them will be challenging for PERMATA.

PERMATA will potentially access a range of maternal, newborn and primary health care supporting commodities and tools supplied by the private sector in Indonesia and potentially in Australia. This includes nutrition supplements, new diagnostic or treatment tools (such as for haemoglobin testing). Where currently Indonesian companies may not manufacture according to international or required clinical standards, PERMATA will work with Indonesian companies in developing or improving such health related commodities, potentially in partnership with Australian industry. Approaches to public private partnership will be facilitated if necessary to ensure all Indonesians that need these products could benefit equally from them.

The food industry is already involved in the fortification of some food products and their marketing to target groups, including, for example, fortified noodles targeted at children. The planned macronutrient supplement demonstration model will leverage this commercial interest and work in partnership with the private sector to produce and market balanced protein-energy supplements for pregnant women. Other potential nutrition products of mutual interest will also be explored and could include protein-energy supplements for adolescent girls.

The widespread coverage of mobile telephone services provides scope for a variety of information technology innovations targeting both the public and health care providers. ICT tools can improve compliance to clinical standards, be a means of quickly capturing and/or sharing health-related information and be used as a screening tool for health interventions. Promising results on their use in a number of low and middle income countries have prompted a rapid rise in their use and evaluation.

PERMATA will work with Indonesian mobile phone and other ICT companies in the development and use of such tools as appropriate, including screening for nutrition support and preterm birth risk, for counselling prompts and for the capture of real time monitoring and evaluation information. This could include messaging reminders of postnatal care check-ups to recently delivered women and husbands and more advanced applications to support health providers with counselling, tracking patient history and recall of technical information. Mobile technology may also be a means of collecting health information and monitoring data and can be especially helpful during outreach and household visits. Applications that track the location of health workers during their duty hours may also assist with reducing absenteeism. There exists great potential to leverage the infrastructure and services of private mobile phone companies to support several of the program pathways discussed earlier. PERMATA will explore partnering with USAID and the Bill and Melinda Gates Foundation on this as appropriate.

Reliance on private providers for family planning has increased over the past five years in Indonesia, with women obtaining their contraceptives nearly 75% of the time from private providers (though this is lower

in NTB at 40% and much lower still in NTT at less than 10%) (IDHS 2012). Nearly 70% of women in East Java had antenatal care and delivered with a private provider (though again this was less than 20% in NTB and NTT). Ensuring access to and improving quality of care for essential MNH services for those using private providers is therefore important.

PERMATA will explore ways to address the financial incentives that promote provision of short-term contraceptives over longer-acting ones as well as clinical skill development and improved counselling. New ways of working to improve private providers' compliance with technical guidelines covering the pregnancy to postnatal period will be pursued, though it needs to be recognised that this will be a challenging and new area of work for DFAT in Indonesia. In East Java where the private sector has a strong presence at the secondary hospital level, partnerships to improve quality of care in private and public primary health care facilities may be an option.

Poor breastfeeding practices in Indonesia are exacerbated by the promotion of infant formula in public and private health facilities by health workers themselves, who receive a small financial amount for providing starter packs. PERMATA will support national and sub-national governments to strengthen their regulation and monitoring of infant formula marketing strategies and supervision of health worker practices. Better public education of the benefits of early breastfeeding will need to work in parallel. The exact role that PERMATA will play will be developed during the program once more detailed assessments and analysis of the political economy underpinning current practice is better understood and entry points for change identified.

PERMATA will also work with the private sector on the demand side areas of the program. This could include social marketing and behaviour change communication campaigns and activities where the private sector has strong comparative advantage, as well as community transport arrangements for accessing emergency services.

# 4.5 SUPPORTING LEARNING, REPLICATION AND SCALE UP

PERMATA is purposefully designed to focus on supporting new approaches that might accelerate maternal and newborn death and childhood stunting reductions and strengthen the primary care system to better deliver essential health services rather than being an easy source of financing to supplement budgets for routine activities. As described, the program will support these in two ways

- I. Cross-province demonstration models that will be rigorously evaluated to measure impact and implemented in a variety of district and provincial contexts to demonstrate effectiveness for Indonesia and inform national policy. For example, the effectiveness of balanced protein energy supplementation for pregnant women to reduce low birth weight babies.
- II. District innovations that originate from local problem solving analysis and planning. These may be new concepts or new approaches or adaptations of known good practices followed in other geographical areas. While each innovation or adaptation will be evaluated, this will be less rigorous than for the cross-province pilots and will generally not involve impact evaluations.

Ultimate impact of the program more broadly for Indonesia will therefore rely on the extent to which the approaches shown to be most effective are scalable and implemented beyond the limited number of PERMATA sites and districts. Our calculations of benefit outlined in the investment case (see section 4.8

Program beneficiaries and returns to DFAT investment) assume replication *within* and *between* PERMATA provinces, but not beyond this.

Previous donor-funded programs in Indonesia have shown mixed results of government replication and scaling up of successfully piloted interventions. This PERMATA design has included lessons from earlier

health programs as well as DFAT-funded programs in other sectors and developed specific strategies at the outset to intentionally maximise potential for scale up. These include:

- Implementation in a sufficient number of areas and contexts to be more convincing to government of the usefulness of an approach
- Working simultaneously to provide technical assistance and engage in policy dialogue across a range of Government of Indonesia and other stakeholders at national, provincial and district levels
- Better investment in good evidence and stronger monitoring and evaluation including investment in good baseline information from the start of the program
- An earmarked budget and flexible approach for supporting cross area and stakeholder learning, exchange, monitoring and evaluation and some healthy competition (a "learning platform")
- Requiring up front agreement and commitments to scale up funding for key larger demonstrations if proven effective, to justify DFAT investment and risk bearing in its trialling
- Specifying a period post innovation and evaluation period where in time frame of PERMATA for
  initial translation and scale up that will be partially supported by DFAT but require Gol cofunding.

# 4.5.1 POLICY DIALOGUE AND TECHNICAL ASSISTANCE

PERMATA will lead policy dialogue on maternal, newborn health and nutrition on behalf of DFAT's health portfolio. PERMATA technical assistance will engage at the national level as well as with provincial and district governments in due recognition of both the decentralised nature of health, as well as to support replication and scaling up.

PERMATA will work closely with the national level technical assistance supporting the Ministry of Health on health systems strengthening under AIPHSS. This will include feeding district experience into AIPHSS policy influencing forums and PERMATA working together with AIPHSS on the piloting of performance based financing and one other nationally defined demonstration model related to health systems strengthening. At the sub-national level, PERMATA technical assistance will lead policy level dialogue on health systems issues through their support to the focal districts and provinces. This is likely to have a broader remit than AIPHSS which focuses on health financing, primary care and human resources for health, as it will be responsive to other district priorities and gaps.

## 4.5.2 LEVERAGING GOVERNMENT COMMITMENT AND FINANCING

Where new approaches are developed under PERMATA, commitment by local governments (and national government where appropriate) to ongoing funding of innovations will be negotiated at the time that activities are included in partnership work plans.

For demonstration models, a three-phased approach is likely:

- i) PERMATA funds Phase 1 initial implementation, but with potential for government in-kind contributions of staffing, supplies and financing if desired;
- ii) PERMATA contributes to Phase 2 an initial transition to scale up phase where operational arrangements to facilitate replication and scale up might need support (eg public private partnership financing etc); and
- iii) Gol and other stakeholders (ie. private sector) implement what was proven to be effective from the demonstrations on an ongoing basis Phase 3.

For performance based grants, contracts between DFAT and the Ministry of Finance and between the Ministry of Finance and districts / Puskesmas will include commitments that other financing for health will not be reduced as these grants are introduced. They will also include an increasing scale of government co-contribution to the grants over later years of their implementation. This will ensure government involvement during the initial implementation and promote take-up of ongoing implementation if the PBGs are proved successful in promoting coverage and quality of effective interventions.

## 4.5.3 EVIDENCE

Though there remains a gap in demand for evidence for decision making in Indonesia it is being increasingly requested and creates valuable debate and discussion when presented in ways that can facilitate take up of new approaches. PERMATA will invest in good fit for purpose evidence alongside programming. This will include at the highest level a limited number of rigorous multi-district impact evaluations alongside models of new interventions or approaches where the result on improving outcomes is less known in the Indonesian context but has high potential. Other action research and evaluation will also support knowing what works, what doesn't and why in different settings, as well as underpin the choice and design of specific interventions where needed (such as formative research for social and behaviour change communication).

A credible mix of experienced Indonesian and international applied research for policy organisations will be contracted for evaluations. Much of this will be contracted in a separate overarching research and evaluation contract. This will build synergies in evidence and evaluation across health programs and protect independence of research and evaluation from the contractor responsible for implementing the program.

Process and implementation monitoring data will be systematically collected by the contractor to enable results to be explained bearing in mind the multitude of contextual factors that affect implementation in diverse settings. Human interest stories, video and photo stories will also be captured for policy influencing and public dissemination.

Importantly to show differences that the program and new approaches have made, a good investment in baseline information and monitoring and evaluation will be made (see section 5.4 Monitoring and evaluation). One barrier to data use is that often discussions about correct data sources, where more than one party has different data, overshadows good discussion on performance, remaining challenges and potential solutions. During its inception year PERMATA will invest in early workshops with stakeholders at district, provincial and national level to agree data sources that would be strengthened and used across village, *Puskesmas*, district and provincial levels and across PERMATA and non-PERMATA districts as well as how information can be consolidated and used to support decision making (something the NTT provincial health office wanted strengthened under AIPMNH).

Ongoing communication and discussion on where improvements have and have not occurred as a result of data and lessons learned will be key to performance and maximising the likelihood of scale-up of new approaches (including costs).

# 4.5.4 LEARNING PLATFORM

Learning from past programming shows that formalised communication strategies alone are unlikely to facilitate effective information exchange, learning and program improvement. The "learning platform" has a dedicated budget to support flexible ongoing program learning and feedback to improve performance. It will facilitate the development and exchange of the information needed by stakeholders to determine

which activities supported under PERMATA could be implemented at wider scale using government and other Indonesian resources, and how this can be done most effectively.

The learning platform will not be an institutional unit but a fluid set of activities each with a format developed to be most appropriate for a given learning purpose. It is a vehicle for regular consolidation and use of information and the hosting of presentation and discussion forums. These will aim to bring stakeholders together to share experiences and results at various levels in various types of forums with the intention of influencing policy and practice. Stakeholders from multiple sectors will often be included and it may also include exchange visits within and beyond Indonesia.

The learning platform will provide timely evidence to people who need the information, so that they can make timely decisions and change systems and processes to improve primary care delivery and maternal and newborn health and nutrition outcomes. This evidence will come from practical implementation within PERMATA, from monitoring and independent evaluation, from operational research programs, etc. Leaders of learning platform strategies and events will carefully identify champions across sectors and spheres of influence who are best positioned to facilitate greater influence of the information presented and discussed.

The learning platform component will work jointly with the DFAT-supported knowledge sector, drawing on their resources and expertise to generate demand for evidence and to foster channels and approaches for communicating it so that it achieves the maximum influence on policy and implementation. It will work with knowledge sector supply side partners (including those already members of the health policy network – see below) and will link with and learn from networks and forums they support such as the eastern Indonesia Knowledge Sharing Forum (BakTI).

Though we will aim for at least one learning event per quarter, timing and type of activity and therefore participation will be flexible to respond to opportunities of immediately arising policy needs as well as new information on results or improvements certain districts or *Puskesmas* have been able to make. It will support a six monthly meeting across national and sub national levels on primary care and maternal and newborn health as part of program review and priorities for activities. This will facilitate links between national reforms and sub national activities whilst protecting each levels sense of focus and ownership on their own activities and priorities.

# There are at least three core functions of the learning platform

- 1. To facilitate lesson learning from and between components of the program and with other programs working towards the same outcomes. This has two dimensions: horizontally within and between districts and provinces and vertically across national, province and district levels.
- 2. To ensure operational learning through the analysis of ongoing implementation what has worked and why and ongoing policy analysis of actors, processes and institutions (linked to the program's monitoring processes).
- 3. To support an applied operational research and evaluation agenda alongside programming, including impact evaluation of cross district new programming interventions. This will draw on partnerships with recognised international applied research organisations and supporting and using good local expertise. This will include support to and links with the Indonesian health policy network.

Under the first function of horizontal and vertical learning, the platform will be opportunistic in bringing together relevant stakeholders on a particular issue. Topics could range from sharing of lessons and challenges between midwife coordinators across sub districts and districts to a high level gathering of Governors and Bupatis together with Ministry of Health and Ministry of Home Affairs nationally around politics and performance in maternal health. It will promote the inclusion of important stakeholders that

have hitherto been minimally involved in policy dialogue, including the private sector. For example a forum on early initiation of breastfeeding may bring together private sector suppliers of infant formula, non-government organisations supporting women's and children's health, local and national level health officials and the midwives professional association, which supports the interests of its members while also promoting good professional practice. This would also include cross district discussion and the fostering of positive competition among districts and Puskesmas receiving performance based financing grants. Lesson sharing across PERMATA and non PERMATA sites and districts can be supported to facilitate scale up. It will also be important to hold discussions to reach consensus on dropping approaches that are shown not to be effective. This goes to the heart of getting more effective allocation of both DFAT's and the Government of Indonesia's resources to activities that will have greatest impact on outcomes. With many current ways of working well established over time, this will require robust evaluation information that is accepted and owned by stakeholders, followed by sensitive and politically astute discussion over time that considers the options for more effective approaches that could replace less effective ones.

The second function will support an adaptive learning approach through the regular gathering and sharing of ongoing program monitoring information, ensuring its feedback to those involved in the partnership. It will be important to develop and implement recommendations for improvements to ongoing program implementation. This would then be followed up in later forums to assess whether and how this approach has led to positive changes in ways of doing things within PERMATA processes and activities. Resources will need to be allocated to ongoing situation analysis, policy and political economy assessments to better inform programming. Outputs would also include production of shared case studies from the partnership that can be communicated more widely. This will require the inputs of a specialist communications officer. Case studies should not only cover aspects of PERMATA that have worked well, but also things that have not succeeded, with reasons (with the latter approached sensitively).

The third function will comprise more formal operational research and evaluation studies conducted by independent research institutions. It will be independently contracted and will include DFAT health team support to the Indonesian Health Policy Network, a network of over 12 Indonesian university based health research institutes, including universities within PERMATA provinces. The aim is to ensure that Indonesian research expertise is built up and utilised and evidence-to-policy linkages promoted, including especially at the sub-national level in eastern Indonesia. It will support the rigorous impact evaluation of the purpose designed cross district interventions and other studies by internationally recognised institutions in partnership with credible Indonesian institutions (including but not limited to the health policy network). Learning platform forums and online mechanisms, links with media and other intermediaries and informal communication and engagement will all be used to maximise the impact of this work.

The learning platform will replace a more formal structured technical working group by rather being opportunistic and flexible in its approach to respond to needs and bring together smaller coalitions of relevant stakeholders and influencers with the most useful information and evidence at times that are most likely to influence decision making. It will form a coalition of people that stay communicating through formal and informal meetings, online discussions and emails across DFAT, the health policy network and implementing partners.

Structurally the learning platform will require a team resourced within the implementing managing contractor to be responsible for the first two functions, including coordinating events, drawing out lessons and evidence from the program as it progresses and developing case studies. The third function will be supported under a separate overarching operational research and evaluation contract. This will be sourced simultaneously with the PERMATA contract, using financial resources approved for PERMATA, and will initially support both AIPHSS and PERMATA. It is envisaged that this would eventually work across all DFAT's health programs, probably from 2016.

Lessons from previous health and other DFAT programs that will influence learning platform strategy and functioning include:

It is necessary to ensure sufficient resourcing of learning and exchange activities — which was the motivation for the allocation of a specific budget and role for a learning platform.

Greater learning and replication occurs within districts and between districts more than from local to national level and vice versa. However effective policy implementation needs to be supported by interlevel learning and an opportunity to be "heard" so that district activities can be supported by clear national level policies that have taken the realities and needs of districts into account. Early experience from AIPHSS was that this opportunity for district and national exchange in planning processes was initially what was appreciated most.

**Practical information is needed to inform how effective models can be scaled up**, including specific details of both benefits and costs, is needed by decision makers, ensuring that this is realistic for their needs, policy goals and budgets. For example, this has been information desired recently for considering replication by government of the Sister Hospital Program of AIPMNH.

Integrating evaluation and planning improves practical use of data and evidence rather than having evaluation information and discussion on its own. This can include presentation on effective models to key stakeholders one day leading immediately (the next day) to work planning processes that consider which of the approaches they have heard they might now like to integrate into their plans. This process can draw in villages, sub districts and districts. This approach has been used by successful BakTi forums for example.

DFAT will play an important role in the learning platform as a participant, and in the early stages will support the technical agencies in establishing a collaborative and mutually beneficial style of working. However, it is DFAT's intention to keep our role in facilitating the learning platform to be light touch.

## 4.6 WOMEN'S EMPOWERMENT AND INCLUSIVE DEVELOPMENT

Improving women's reproductive and maternal health is key to women's empowerment, impacting women's access to education and economic opportunities and improving their productivity and their family's economic and human development.

Health outcomes in Indonesia are inequitable and vary by socio-economic and geographic factors. Women and girls are particularly disadvantaged due to the poor performance of reproductive and maternal health services and socio-cultural norms that inhibit access to services and affect their well-being. Issues related to gender and equity are woven into the functioning of the health system. They range from barriers faced in the family and community, along the journey to a health facility, within the health service and the systems that support it, through to policies and regulations.

PERMATA has a strong gender and equity focus that will be integrated into each of the program pathways and in supporting sub-national and national government to integrate gender and social inclusion into health systems.

The program is targeted at improving the health outcomes of the poor and near poor, and has a significant focus on improving women's health, and primary health care, which itself most benefits the poor. Health inequality has been a key factor in the selection of the program's provinces and districts. NTT and NTB were selected as focal provinces given their poorer health outcomes than the rest of the country. While at the provincial level East Java is performing better, the districts where PERMATA will work are not, and PERMATA's East Java districts offer a context of poor health outcomes within a more developed

health system context. Such diversity is important for demonstrating workable solutions in differing health and socio-economic contexts, and contributing to national policy.

The program will ensure that interventions are designed to include and benefit vulnerable groups, such as young unmarried pregnant women, the very remote, and people living with disability. Improving the capacity and functioning of primary health care services will be of particular benefit to people living with disability and their families who depend on local health services due to physical and financial difficulties. Through the focus on local solutions, PERMATA includes the flexibility for targeted interventions designed according to the local context and needs. So for example, 'teenage pregnancy' is likely to be an area of focus in East Java, while geographical inaccessibility may be a priority in NTT.

Inclusive development will be integrated into policy dialogue, and technical assistance on gender and social inclusion provided by the managing contractor at national and sub-national levels. Each of the levels of monitoring and evaluation and process documentation will capture inclusiveness. Program led data collection tools will ensure data is disaggregated to enable sex, poverty, geographical location and remoteness analysis, and collection of data on access to and use of primary care and maternal and newborn health services by people living with disability.

A gender and social inclusion analysis has informed the design of the program (see annex 05). A gender and equity strategy for PERMATA has been prepared to guide implementation (see annex 06). Through this strategy, starting from planning, through to implementation and monitoring and evaluation, political commitment will be built, technical know-how developed among program partners, and programmatic solutions to ensuring gender and social inclusion demonstrated to national and sub-national governments. Implementation of the gender and equity strategy will contribute to closing the gap in health outcomes in focal program areas, and to more gender and socially inclusive health policies.

## 4.7 GEOGRAPHIC SELECTION

As discussed in section 4.1.5 Geographical focus above, the three provinces of NTT, NTB and East Java have been selected in consultation with GoI based on four principles. Papua and East Papua were considered for inclusion given their low health outcomes and weak health systems but have not been included given DFAT's plan to develop a separate health and development program for the Papuas.

**Table 2 Selected Provinces for PERMATA Support** 

	Rationale for selection	Comment	Other DFAT programs	Planned No. of districts
NTT	Highest prevalence of stunting and high neonatal mortality.  Second highest incidence of malaria in the country.  Follow-on and consolidation of support under AIPMNH.  Natural fit with AIPHSS.  Quick wins to be gained	While maternal mortality rates have improved with DFAT program support over many years, newborn mortality remains high and over 50% of children under 5 are stunted. Previous investments have not addressed stunting or family planning.  NTT has high poverty levels and a largely rural population with large geographical barriers to accessing health services. Approaches that	AIPD; PNPM Generasi; PKH; Access; PAMSIMAS; previously AIPHSS	10

	Rationale for selection	Comment	Other DFAT programs	Planned No. of districts
	through dissemination of successful MNH approaches developed under AIPMNH.	work in NTT are likely to be relevant to NTB, underperforming areas of Sulawesi, and the Papuas.		
NTB	High neonatal and infant mortality rates, and high levels of stunting.  Natural fit as extension of NTT interventions.  Other DFAT programs are	One of the highest neonatal and infant mortality rates in the country.  Originally planned as an extension province in AIPMNH.  High poverty levels.	AIPD; PNPM Generasi; PKH; Access; PAMSIMAS	5
	active here.			
East Java	Large population.  Significant inequity.  Large absolute numbers of very poor.  DFAT programs active.	While overall provincial maternal and neonatal health indicators are fair, there is considerable and significant inequity within the East Java population and across districts.  Given the very large population (particularly compared to some eastern Provinces) this results in a VERY LARGE number of very poor and disadvantaged people.  Opportunity to test models and approaches in a better resourced more populated region with a view to helping Gol scale up nationwide.  Successful approaches in East Java	AIPHSS; PNPM Generasi; PKH; Access; PAMSIMAS; MAMPU; previously AIPHSS	10
		are likely to be relevant to more urban and densely populated areas of the country.  East Java's high political profile will facilitate translation of costeffective models into national policy.		

# 4.7.1 DISTRICT SELECTION

A set of criteria was developed for selecting the focal districts **in NTT** (see Annex 07). After extensive consultation with the Provincial Government, including the Governor, *Bappeda* and the Health Departments, and District Administrations, 10 districts were selected. It is not anticipated that the program will have activities in all sub-districts of each of these districts. PERMATA will follow the model

established in AIPMNH of agreeing a work plan with the district authorities in advance of any activities. This work plan will identify the activities and sub-districts where PERMATA activities will be implemented.

**In NTB** selection of districts will be undertaken during the inception phase in consultation with the Government. Selection criteria used for NTT may be modified for NTB but will include colocation with other DFAT frontline health impacting programs such as the decentralisation program, village support program and social protection programs. Given that the decentralisation program has established relationships in four districts of North Lombok, West Lombok, Bima and Dompu it is likely, with national and local government agreement, that PERMATA will collocate in these districts and hence only one additional district will be chosen.

**In East Java** an initial analysis of districts and preliminary selection has been started. Five of the ten districts have been identified, but these will need to be agreed and the process completed with Government during inception.

**Table 3 District Selected** 

Province	NTT (total 10 districts)	NTB (total 5 districts)	East Java (total 10 districts)
District selection	Selected and agreed with Provincial Government:  1. Flores Timur 2. TTU 3. Ngada	To be undertaken in inception year	Selection process begun but needs to be agreed and completed with Provincial Government:  1. Malang
	<ul> <li>4. Sumba Barat Daya</li> <li>5. Manggarai Barat</li> <li>6. Manggarai</li> <li>7. Lembata</li> <li>8. TTS</li> <li>9. Sumba Timur</li> <li>10. Sumba Barat</li> </ul>		<ol> <li>Situbondo</li> <li>Bondowoso</li> <li>Sampang</li> <li>Bangkalan</li> </ol>

As a general rule PERMATA will seek to work in the same districts and sub-districts where other DFAT frontline programs are located to benefit from synergies, even if additional districts and/or sub-districts are supported by PERMATA. As discussed earlier, PERMATA will facilitate replication of successful models across sub-districts, districts and provinces, and technical assistance may well be used to support Gol with replication at all levels. A small budget for non-supported districts in the three provinces has been allocated to facilitate their involvement in learning activities, such as workshops, seminars and domestic study tours.

## 4.7.2 DISTRICT GRADUATION

Districts will be gradually introduced into PERMATA. In the inception year this will include 10 districts in NTT and five districts in East Java. A model for graduating districts will be developed during the inception year by the managing contractor in consultation with DFAT and GoI. This will include clear criteria for graduation and the likely pace of graduation given current levels of performance and evidence. The rationale behind graduation is for sustainability and as a measure of the GoI's commitment to taking carriage over the objectives of the program. Graduation of districts will be complex where there is cross-district and/or phased implementation of key interventions and to allow sufficient time for evaluation. A

tentative trajectory of graduation has been built into the proposed budget and is presented below; this is based on 10 districts graduating out of the program before completion. That said, PERMATA will need to be flexible about graduation, given the potential delays in getting the demonstrations up and running and the long timeframes required to see outcomes. PERMATA will also explore the possibility of taking on new districts to replace graduated ones, pending resources.

**Table 4 Assumed District Expansion** 

	Assumed District Expansion							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
NTT	10	10	10	10	10	10	5	5
NTB	0	5	5	5	5	5	5	5
Jawa Timur	5	7	10	10	10	10	7	5
Total	15	22	25	25	25	25	17	15

## 4.8 PROGRAM BENEFICIARIES AND RETURNS TO DFAT INVESTMENT

# 4.8.1 PROGRAM BENEFICIARIES

The primary beneficiaries will be poor and near poor women and children who are the main users of primary health care. While the focal program districts in NTT, NTB and East Java will receive greatest benefit, given the program's focus on demonstration and replication, it is expected that proven interventions and approaches will be scaled up within the three provinces, and hoped nationally over a longer time frame.

Across PERMATA's 25 districts the partnership will benefit just over 4 million women of reproductive age (through family planning investments, for example), cover nearly 3 million births, (which, if current rates persist, would result in over 8,000 maternal deaths, 60,000 newborn deaths and in which over half a million children under five would be stunted between 2015 – 2025. Table 5 below shows the breakdown by province.

Table 5 PERMATA beneficiaries by province and target population (PERMATA districts only) 2015-2025

	East Java	NTT	NTB	Total
Districts	10 / 38	10 / 23	5 / 10	25 / 71 (35%)

	East Java	NTT	NTB	Total
Average population per district	1.05 million	264,000	484,000	
Average Puskesmas per district	25	16	15	
Reproductive age women (15-49) across PERMATA areas	2.7 million	0.67 million	0.71 million	4.1 million
Births	1.6 million	0.74 million	0.56 million	2.9 million
Children < 5 in which stunting could be prevented (those under 2 and reaching 5 years in life of PERMATA)	736 thousand	311 thousand	246 thousand	1.29 million
Maternal death (if current rates persist)	3,580	2,800	2,140	8,520
Newborn deaths	22,790	19,130	18,580	65,000
Cases stunting	263,590	161,620	111,400	536,610

Different PERMATA activities would benefit different groups and proportions within these figures whether working across the district or in particular *Puskesmas*, for example. However as noted above PERMATA's aim is to affect scale up of effective approaches also outside PERMATA areas so these PERMATA district figures are seen as a useful mid-point of the range of women, children and Indonesian population more broadly that PERMATA would seek to benefit.

## 4.8.2 ECONOMIC APPRAISAL AND RETURNS TO DFAT INVESTMENT

Potential areas for investment explored under the Pathways in Section 4.2.1 Pathways to improved health outcomes were arrived at through detailed problem analysis, including across DFAT programs as well as using Indonesian and international evidence. These were then assessed for their potential cost effectiveness using key health statistics present in PERMATA areas, bottom up estimation of costs needed for their implementation and local and international evidence on their effectiveness. The economic rate of return on investment uses internationally accepted approaches to quantify the economic evaluation of returns to maternal and newborn death and stunting reduction and includes health system savings from primary care strengthening. This detailed economic appraisal including assumptions and calculations is provided as Annex 01.

The total cost for the implementation of a core package of activities in focus areas for PERMATA is estimated at just over \$125 million over 8 years of the program. This <u>excludes</u> contractor costs (including ongoing technical assistance positions), monitoring and evaluation, operational research and learning platform costs (the last two of which will have elements in a separate contract from the PERMATA Head Contractor contract but does include short-term TA needs).

Assuming effectiveness to 2025 (three years beyond PERMATA end) and using the Indonesia central bank discount rate of 6.37%, each Australian dollar invested in PERMATA would return approximately \$20 in economic value of reduced maternal and newborn death and stunting and in savings to the primary health care system.

The cost per maternal death averted averages at just under \$40,000 and the cost per newborn death at just over \$6,500. The cost per stunting case prevented (adjusting for PERMATA's effect largely being in utero stunting prevention) averages just under \$2,500. These are all in the cost effective ranges though

potential cost effectiveness of different interventions in different settings should be taken into account when prioritising activities for implementation to make best use of both DFAT and Government of Indonesia budgets (recognising that this will not and should not be the only deciding factor). Table 6 below details impacts and return on investment by PERMATA area of focus.

Table 6 Overall economic appraisal of potential PERMATA investment

	Cost (\$AUD millions)	Contribution to maternal deaths averted	Contribution to neonatal deaths averted	Contribution to stunting cases averted	Rate of return on investment
Family planning – total	9.8	823	3,047	33,730	41
Family planning - % contribution	8%	20%	12%	29%	
Nutrition – total	13.6	2,168	12,728	77,628	95*
Nutrition - % contribution	11%	47%	48%	65%	
Maternal & Newborn services – total	54.3	865	7,379	N/A	9
Maternal & Newborn services - % contribution	47%	19%	28%	N/A	
Performance based financing	12.2	363	1,192	N/A	8
PBF - % contribution	10%	8%	7%	N/A	
Primary health systems**	30.2	253	1,865	6,919	6
Primary health systems - % contribution **	23%	6%	5%	6%	
TOTAL PERMATA	126.2	4472	26,210	118,277	20

<sup>\*</sup>Due to the hoped impact of re-inclusion of Ca supplementation into antenatal package with only short term TA input from PERMATA. Without this the rate of return of nutrition investments drops to \$38.30

This investment case shows where some of DFAT's "better buys" are in reducing maternal and newborn death and stunting. It shows that, given increases in facility delivery, more emphasis needs now to be placed on quality in maternal and newborn services when they are used. Family planning and nutrition are potentially extremely important areas for investment, reducing maternal and newborn death as well as stunting. Ensuring reintroduction and effective distribution and compliance for calcium supplementation (a WHO recommended intervention) could potentially have high returns to reducing maternal and newborn death, particularly with rates of hypertension in pregnancy increasing, and for a relatively low investment. Investment in BEmONC availability in *Puskesmas* is key to addressing common complications resulting in maternal and newborn death but requires more intensive follow-up and ongoing activity in *Puskesmas* and general systems strengthening, coming at higher cost to the partnership. It is worth noting that, although the rate of return on investing in primary health care systems appears quite low, this is at least partly due to the returns only being calculated to 2025. The point of investing in HSS is for sustainability and much longer-term returns, not shorter-term results. Performance based financing has the potential to significantly improve maternal and newborn health services and quality as well as influence policy for health financing more broadly.

# 4.9 FORM OF AID PROPOSED:

<sup>\*\*</sup>Note that benefits accrue beyond maternal and newborn health to other health outcomes therefore rate of return on investment based only on MNH and savings to the health care system would still significantly underestimate the economic returns to health systems investments and hence they have not been represented here. Also note that for some of the interventions as they play a supporting role to MNH services above – benefits have already been captured (eg facility audit to improve BEONC in *Puskesmas*).

The design proposes to provide aid in the form of technical assistance delivered by (i) a managing contractor (preferably including a consortium of organisations bringing complementary areas of expertise) and (ii) a consortium of evaluation agencies. Aid will also be provided from DFAT to Gol's Ministry of Finance to test performance based financing in selected districts.

# 4.10 ESTIMATED PROGRAM BUDGET AND TIMING

DELETED.





## **SECTION 5: IMPLEMENTATION ARRANGEMENTS**

### 5.1 MANAGEMENT AND GOVERNANCE ARRANGEMENTS

The governance and management arrangements proposed for PERMATA build on DFAT's experience and lessons learned from AIPMNH in NTT and AIPHSS in NTT, East Java and at the national level. Governance arrangements have been purposefully designed to maximise linkage with AIPHSS with which PERMATA is closely interconnected. Where existing structures and committees can be used to manage and oversee PERMATA by extending their scope of work these will be used for efficiency and sustainability. This includes reframing the national level AIPHSS Program Steering Committee to accommodate PERMATA and strengthening its functionality.

### 5.1.1 GOVERNANCE AND MANAGEMENT STRUCTURE AND ROLES

PERMATA's governance and management structure involves government stakeholders and partners from key sectors and agencies that have a role in strengthening primary health care and improving maternal and newborn health and taking proven ways of working to scale through GoI systems and resources.

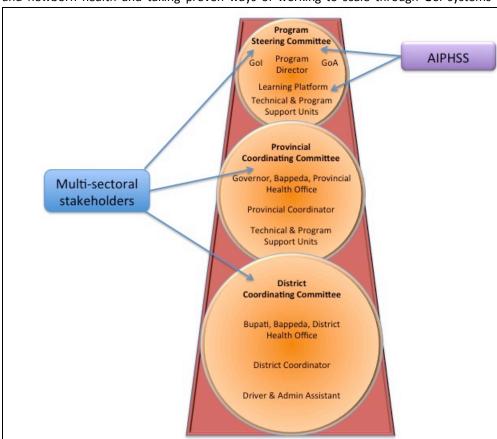


Figure 5 Governance and management Structure

## (A) CENTRAL LEVEL

MINISTRY OF HEALTH (MOH). Two Directorate Generals of the MoH will provide technical oversight, supervision and support to PERMATA. The Directorate General of Maternal, Child Health and Nutrition (DG GIKIA) will lead on maternal and newborn health and nutrition while the Directorate General of Medical Services will lead on primary health care strengthening. PERMATA will take the lead on DFAT relationships with the former and AIPHSS will take the lead with the latter. The overlapping and interconnected nature of these two programmatic areas of work will require ongoing collaborative working between the two Directorate Generals; the respective Managing Contractors of PERMATA and AIPHSS will facilitate this. The Secretariat General will be engaged through an expanded Program Steering Committee mechanism established by the AIPHSS program. An AIPHSS supported Policy Unit reporting directly to the Secretary General and to the Minister will provide another avenue through which PERMATA can engage with the MoH at the highest levels. PERMATA will follow the model being developed by AIPHSS of having thematic technical taskforces at national level with the MoH. These will provide a forum for working discussion on policy related issues and support coordination at national and sub-national levels, but will not have formal decision making authority over the program, which will rest with the Program Steering Committee. The Secretary General of MoH has already directed (June 2014) that a DFAT-MoH working group, to be led by the Director General of Maternal, Child Health and Nutrition, starts work on integrating the PERMATA oversight function into the broader health policy work being supported by AIPHSS.

MINISTRY OF FINANCE (MOF). As required by Indonesian regulations, funds provided and expended will be reported to the Ministry of Finance at central level. The Ministry of Finance will also be involved in disbursing and accounting for the performance-based financing grants provided to district level. MoF is a key actor for the national social health insurance program, influences the allocation of the national health budget, has and their support for scaling up proven approaches will be critical. MoF will be a member of the Program Steering Committee (PSC).

STATE MINISTRY OF NATIONAL DEVELOPMENT PLANNING (BAPPENAS). Bappenas will also be engaged in the provision of oversight and technical guidance and can use their convening role across Ministries. Their involvement will be particularly important in performance based financing, nutrition (on which they lead the national response), and engaging in cross-sector frontline coordination by Gol. Bappenas will therefore by a key member of the PSC.

MINISTRY OF HOME AFFAIRS (MOHA). The Ministry of Home Affairs has oversight of sub-national levels of government in Indonesia and is therefore a key stakeholder in any program that engages with provincial and district governments. MoHA will also be a member of the PSC.

PROGRAM STEERING COMMITTEE (PSC). The AIPHSS PSC, which is chaired by the Secretary General of the MoH, will be expanded to include PERMATA. Improved working practices and focus of the PSC will be supported by AIPHSS and DFAT and reinforced by the involvement of PERMATA's technical assistance. The National Population and Family Planning Board (BKKBN) will be a member of the PSC, along with MoF, *Bappenas* and MoHA, which are already members of the AIPHSS PSC. Provincial representatives will be exofficio members. The aim is for the PSC to meet quarterly to provide overall strategic direction to the program and to AIPHSS. This will for example include selection of provinces and districts and whether to

continue support based on their performance against agreed targets, program monitoring, and the scaling up of successes. Additional meetings may also be tabled to address program specific issues, and the PSC will have the scope to invite provincial and district stakeholders, as well as representatives from other sectors and agencies, according to the meeting agenda.

The program's monitoring and evaluation mechanisms and related learning platform activities with the support of PERMATA and AIPHSS technical assistance will contribute evidence to support the PSC in monitoring and evaluation of the program. PERMATA will provide evidence from demonstration projects and innovations, and both programs will provide technical guidance to the PSC in interpreting evidence for policy consideration through the Head of the Health Policy Unit under the Secretariat General, whose responsibility it will be to bring this forward to the PSC. During the life of AIPHSS, the AIPHSS managing contractor will support the functioning of the PSC, including secretariat type support.

DFAT JAKARTA. The DFAT Jakarta office will be responsible for overall administration and management of PERMATA and will lead high-level engagement with GoI and other development partners working in the sector. DFAT will be responsible for setting up structures and contractual arrangements to ensure coordination and joint working between PERMATA and AIPHSS and other DFAT frontline programs. DFAT will also enable coordination between PERMATA and other donor funded health programs, such as USAID's Expanding Maternal and Newborn Survival program (EMAS) in East Java.

# (B) PROVINCIAL LEVEL

PROVINCIAL COORDINATION COMMITTEE. In each of the three provinces, a Provincial Coordination Committee will be established or an existing committee used such as the 'Extending the Life Span, and Protecting Mothers and Children Committee' in NTT. The Chair will be the Governor. Membership will include representatives of the Provincial Health Office (PHO), *Bappeda*, *SEKDA*, BKKBN (national population and family planning board), BPMD (community empowerment office) and other participating provincial government agencies; the *Bupati*, *Bappeda* and District Health Office from each of the program' districts; representatives from DFAT and AIPHSS; representatives from other provincial or district agencies as decided by the committee.

The Provincial Coordination Committee will meet four times a year. Its role and responsibilities will include:

- Confirmation of selected districts;
- Review and agree the performance outcomes expected;
- Review progress on achievement of the performance outcomes and recommendations on any steps necessary to achieve those outcomes; and
- Identify any issues related to coordination with other donor or GoI programs; or with national level policy, and recommendations on dealing with these issues.

PROVINCIAL GOVERNMENT AND AGENCIES. The Governor and Provincial Parliament (DPRD *provinsi*) will be the key counterpart agencies. Participation in PERMATA will require commitment to:

Achieve performance standards;

- Maintain if not increase funds allocated to health and supporting sectors, such as water and sanitation;
- Address fiduciary risks and system constraints identified by the program;
- Support performance agreements with implementing units within the Provincial Government (such as the Health Office, Family Planning Office and Community Empowerment Office) that provide technical and financial support to the districts in support of PERMATA outcomes.

An existing provincial government and donor coordination secretariat (usually within *Bappeda*) will assist in coordination and communication. *Bappeda* will:

- Coordinate planning with PHO and relevant units;
- Compile workplan (*Renja*) of the relevant government offices/agencies (SKPD) and Workplan and Budget (RKA) and submit to Parliament (DPRD)
- Manage receipt of program funds to provincial government, transfer these to the relevant SKPD and receive and submit reports and travel acquittal;
- Develop guidelines and provide support to district Bappeda in planning and budgeting;
- Coordinate development of Government's provincial medium term primary health care and MNH action plan and expenditure framework (EF) as part of the provincial government's medium term plan, and health strategic plan;
- Lead provincial coordination.

#### The Provincial Health Office will:

- Develop provincial Renja and RKA SKPD and submit to Bappeda;
- Provide supervision, monitoring and support for District Health Offices;

Primary health care, and maternal and neonatal health technical teams will be formed at province level and in each district to provide technical oversight and assist decision-making on program implementation. The technical teams will consist of representatives from the relevant PHO or DHO, other local technical experts (e.g. obstetric and gynaecology specialists, professional group representatives), TA provided by the program, and provincial or district coordinators. The managing contractor will appoint provincial and district coordinators. The role of the technical team will be to review allocation of funds and performance outcomes; review priorities for implementation; review TA requirements for health system strengthening and evaluation.

### (C) DISTRICT LEVEL

DISTRICT COORDINATING COMMITTEE (DCC). A District Coordinating Committee (DCC) will be set up in each of the program districts unless the district already has a similar mechanism that can accommodate PERMATA. The DCC will be chaired by *Bupati* or Vice *Bupati* and membership will consist of the *Bappeda*, District Health Office, Community Empowerment Office, district parliamentarians (DPRD) and other relevant stakeholders. The DCC will oversee program activities within the district and address issues as they arise. The DCC will also act as a forum for the sharing of information and will take primary responsibility in ensuring that coordination and harmonization with Gol, DFAT frontline, and other donor programs takes place. It will meet quarterly.

DISTRICT GOVERNMENT AND AGENCIES. The *Bupati*, representatives of the DPRD, and other relevant local government representatives will lead the program. A formal agreement to the conditions and requirements of participating in the program will be signed with *Bupati* and DPRD representatives.

The agreement will set out the overall aims, both in terms of working towards achieving PERMATA outcomes, and improvements in performance and accountability of public service provision; the assistance to be provided; and the links between the assistance and achievement of performance and fiscal accountability targets.

### The *Bupati* will be requested to:

- Agree to participate in the program and commit to achieving performance standards;
- Maintain if not increase current allocations to health and supporting sectors;
- Address fiduciary risks and system constraints identified by the program;
- Support performance agreements with the district government.

#### The Bappeda will:

- Coordinate planning with DHO, other departments (such as public works) that are contributing support to achieving PERMATA's pathways of change (such as water and sanitation, roads) and relevant units;
- Compile Renja SKPD and RKA and submit them to DPRD;
- Manage receipt of district support funds, transfer them to relevant SKPD, receive and submit reports and travel acquittal.
- Coordinate development of the district medium term action plan and expenditure framework for primary health care and maternal and newborn health as a part of the district government's medium term development plan and expenditure framework, and health strategy;
- Lead district coordination.

### The District Health Office will be requested to:

- Develop Dinkes district *Renja* and RKA SKPD and submit to *Bappeda* reflecting PERMATA, Gol, and other program support that will contribute to achieving PERMATA's primary health care, and maternal and newborn health outcomes and pathways of change;
- Compile plans from *Puskesmas* and prioritize support;
- Undertake supervision, monitoring and technical support of *Puskesmas*;
- Provide inputs into development of the medium term primary health care and maternal and newborn health action plan and expenditure framework;

District Program Coordinators appointed by the managing contractor will work within district governments participating in the program. They will support the DHO, *Bappeda* and other units of government that are supporting achievement of PERMATA outcomes. The District Program Coordinators will report to the Provincial Coordinator in collaboration with the *Bappeda* and DHO. District Program Coordinators may work with more than one district government.

#### 5.2 IMPLEMENTATION PLAN

Program implementation will begin in 2015 and continue for 8 years until 2023. There will be a full review of the program at the end of year 4. Two separate contractors will be engaged, one the overarching managing contractor for PERMATA implementation, and secondly a contractor for the independent evaluation and program research function. Both contractors will support delivery of learning platform activities and for the first year the managing contractor for implementation will take responsibility for coordination of these activities and ways of working (see section 4.5.4 Learning platform). The coordination role will be reviewed at the end of the first year by DFAT, Gol sub-national and national partners and the two contractors, and a decision taken on how to proceed.

An inception period will run for up to 12 months from the date that the contract is signed with the appointed managing contractor for program implementation. The independent evaluation and program research agency will be contracted at a similar time; it is anticipated that a consortium of research agencies will join together including national, Australian and potentially other international bodies. DFAT will enter into a contract with the lead agency of the respective consortia for managing implementation and evaluation. The outline implementation plan is at Annex 09. The inception period will include critical activities to get the project operational as soon as possible, and to ensure a smooth continuum of activity in NTT. The principal activities of the inception period will be to:

- Continue activities and momentum of AIPMNH in NTT (in 10 districts).
- Sustain support to successful and promising district level initiatives implemented under Phase 1 of AIPHSS in East Java that are consistent with the objectives of PERMATA (in 4 districts).
- Support one district in East Java with planning and budgeting.
- Develop the underlying guidance and systems for the performance based financing grants through MoF.
- Rapidly establish operational capacity in Jakarta and the management hub (this may or not be in Jakarta).
- Establish three provincial offices and working relationships with provincial governments and recruit teams (especially District Program Coordinators) to support the first group of supported districts.
- Develop and agree the initial important cross province innovations for impact evaluation.
- Agree the results framework.
- Design and undertake the program baseline survey including qualitative situation, capacity and political economy analysis in each district.

An early Jakarta and provincial presence will be important for engagement on maternal and newborn health and nutrition policy, establishing evaluation frameworks and undertaking baseline surveys, and for forming the Learning Platform. The program management hub will manage establishment of operations in the three provinces and internal and external program coordination particularly with AIPHSS and other DFAT-supported frontline programs. When selecting the managing contractor the ability to establish the management hub, and operational capacity in Jakarta and in all provinces in the inception period will be a critical selection issue.

The inception period will also see the establishment and convening of the governance and management committee(s) (see above), and confirmation of provinces and selection of districts. Activities will also include any additional fiduciary risk assessment including any required to implement the performance based financing grants; recruiting staff; revising and agreeing indicators, baselines, milestones and targets for the M&E framework; and collection of necessary baseline data.

Once districts have been selected for support, annual TA workplans will be prepared in the three provinces and selected districts drawing on the problem solving and district planning process discussed in section 4.3.3 Problem-based planning and solution development for local innovationabove. It is expected that the government's district planning and budgeting process will be informed by the problem solving and prioritisation facilitated by PERMATA and other frontline programs. The results of this process will feed into the workplan (Renja) of each government agency at the district level. Bappeda will then consolidate the workplan/Renja produced by all SKPD into the District Development Workplan (RKPD). The PERMATA TA workplan will be developed for approval by the District Coordination Committee. In parallel, the District Secretary will follow GoI procedures of submitting the KUA-PPAS which are derived from RKPD to the District Parliament against which GoI resources will be allocated. It is expected that PERMATA TA activities will be reflected in government district plans and budgets and that supporting GoI resources will be allocated to them. Over time we expect that GoI will allocate resources to the scaling up of effective interventions and activities. Based on learning from AIPMNH, the PERMATA managing contractor will be able to develop off-district plan activities with the district as needed, including review and implementation through the TA pool in order to give the program flexibility to support innovation that may not be possible through district planning and budgeting.

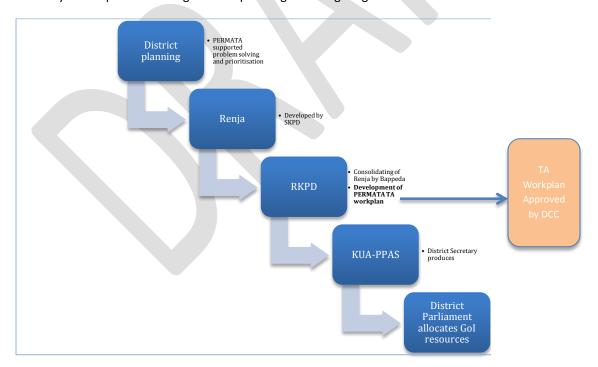


Figure 6 Government district planning and budgeting process and PERMATA Technical Assistance workplan

As the Indonesian financial year runs from January to December and the Australian financial year from July to June, PERMATA workplans approved by the DCC at the beginning of the Indonesian financial year have the opportunity to be reviewed and revised with the start of the Australian financial year. This will help correct for gaps or unforeseen developments from Gol's side, such as non-approval of elements of the RKPD and renja, while remaining consistent with the principle of leveraging not replacing Gol resources.

Annual TA workplans will also be prepared for the cross province demonstration projects. These will be developed by PERMATA's relevant technical adviser in consultation with provincial and district stakeholders and technical leads in the MoH. Provincial and district ownership and support of the demonstration models will be essential for ensuring that activities are included in PERMATA's district workplans and government workplans and budgets (RKPD) where the models will be implemented. Separate workplans will be developed for evaluation of the cross province demonstration projects and external monitoring of the program.

PERMATA's workplans will be endorsed on an annual basis in the Program Steering Committee.

#### **5.3 PROCUREMENT ARRANGEMENTS**

PERMATA will not involve large-scale procurement by Government of Indonesia. Procurement will mostly be of services, including technical advice and research, which will adhere to standard GoI and GoA procurement processes and be undertaken by the management contractor and the evaluation agency leading the separate evaluation contract. A separate WiPs assessment has been conducted and is summarised at Annex 04.

### 5.4 MONITORING AND EVALUATION

PERMATA's focus on innovation and solving system bottlenecks for GoI replication requires a significant investment in monitoring and evaluation, to produce a reliable and robust evidence base from which GoI can take relatively small-scale successes to scale. One of the weaknesses of earlier programming has been insufficient investment in data and information to appropriately assess success and provide decision makers with reliable and useful information to inform replication. Evidence must be fit for the purpose of informing policy and program development and incorporate rigorous evaluation where appropriate.

A Results Framework, which includes impact, end-of-program and intermediate outcomes is included in Annex 02. Based on a more thorough understanding of the operating environment and in consultation with government partners, the management contractor will develop and review the lower levels of the results framework (up to intermediate outcomes) during inception, including agreement on one set of data sources to be used, and finalise this with DFAT.

### 5.4.1 STRUCTURE OF MONITORING AND EVALUATION

PERMATA includes four levels of monitoring and evaluation:

- 1. *Routine program monitoring* including activity progress, and monitoring of expenditure realised against plans.
- 2. Results monitoring: on-going collection of a set of key results indicators across program districts and in a small set of comparison districts. Results monitoring will utilise where possible existing secondary data sources in Indonesia such as Susesnas and Riskesdas. It will also require the collection of routine data from public and private providers. Currently such data is of poor quality or, as in the case of private providers, is not collected. Investment to improve the coverage and quality of routine data collection will be necessary. Where comparison areas are used (whether at district or sub district level) investment in routine data collection in comparison areas will also be required to reduce the risk of invalid results and underestimates of effectiveness simply due to better reporting in PERMATA areas.
- 3. Qualitative monitoring and evaluation of the enabling environment and the key contextual factors that impact on primary and maternal and newborn health outcomes will be essential to help explain improvements and changes measured by quantitative evaluation methods. Such assessments and studies, including for example political economy analysis, barriers to access studies, and management change tracking studies will shed light on the factors that affect demand for services, the quality and coverage of frontline service delivery, and the interaction between users and providers. Qualitative evaluations will help test the theory of change, and the assumptions and pathways that underpin PERMATA. This includes for example the extent and impact of coordinated inputs under DFAT's frontline programs, unforeseen consequences, and operational bottlenecks.
- 4. *Specific evaluations* both qualitative and quantitative. These would include rigorous impact evaluations of the few cross-province demonstration projects where quality accurate evaluation information is needed to guide further policy decision-making. For other innovations and pilots, outcome and process evaluations will likely be of sufficient rigour and appropriateness.

In addition to the four levels of monitoring and evaluation, PERMATA will include systematic process documentation that uses a range of technologies and is targeted to a variety of policy, public and professional audiences. Through regular process documentation, the program will communicate the progress and achievements of the program to various audiences, stimulate interest and present headline messages to both the Indonesian and Australian public. By using interactive and engaging media, process documentation can play an important advocacy role, and will be one of the vehicles for informing local parliamentarians and national political actors of program developments.

PERMATA's managing contractor will undertake the first three levels of monitoring and evaluation described above, plus the process documentation role.

The separate independent evaluation contractor will be engaged to undertake evaluation of the small number of cross-province demonstration models planned, other evaluations, program related research, as well as the overarching end of program evaluation. This contractor will provide independent evaluation services across DFAT's portfolio of health programs. They will be responsible for contracting other research and evaluation partners to deliver on the evaluation program; this may include the Indonesian Health Policy Network, and other agencies used by DFAT such as through the Knowledge Sector Support Program. The evaluation contractor will lead learning platform activities related to their scope of work in coordination with PERMATA's management contractor (see section 4.5.4 Learning platform).

### 5.4.2 BASELINE INVESTMENT

In the inception year, baseline information will be gathered across the second and third types of monitoring and evaluation information above. Where possible, this will use existing data systems and secondary surveys, including plans for their improvement over the course of PERMATA program. This includes improvement of routine health service data as well as the expansion of national surveys to make them more regular, oversampled in priority geographic locations and include or change items to make them more fit for purpose. The independent evaluation contractor will have an important role to play this. In addition, the independent evaluation contractor will begin the design of impact evaluations that will accompany agreed cross province demonstration projects. This is expected to be a significant proportion of PERMATA's expenditure in year 1.

### 5.4.3 STRENGTHENING OF DATA ACCURACY AND AVAILABILITY

The limitations of the availability and accuracy of health data at sub national level is well known. This can jeopardize evaluation of what works and good decision-making. A significant problem is that collection of routine data from private providers is only available very occasionally through surveys such as the Indonesian Demographic and Health Survey.

PERMATA will therefore invest in the development and consolidation of a key dataset for primary care and maternal and newborn health in PERMATA provinces and districts that will include private providers. This will where possible not duplicate but rather use and improve survey and other datasets available but could be usefully complemented by a regular sentinel site survey in PERMATA areas. This data set will form the evidence base of the district problem solving and planning process and will combine the information needs of communities, providers and local government. Confidence in the data across all stakeholders will be important so that discussion can be focused on the content of the information and its implications rather than arguments over whose data is most valid. AIPMNH's efforts to strengthen data are getting recognition from Ministry of Health as a potentially better approach to collection than their own top-down approach. It will be challenging for DFAT and the contractor to extend this to the private sector.

Consideration will also be given to strengthening the reliability of national maternal and newborn health surveys in conjunction with GoI and other development partners in order to improve the quality of national estimates of impact outcomes, particularly maternal mortality.

Monitoring and evaluation investments together with funding of learning platform activities will include all four levels mentioned in section 5.4.1 Structure of monitoring and evaluation above and is estimated to require up to 16% of PERMATA budget over the life of the program, including relevant contractor staffing. The Direct M&E Costs for PERMATA that will cover level 1 and 2 will be around 6.5% and the remaining 9.5% will be separately contracted.

#### 5.5 SUSTAINABILITY

PERMATA aims to achieve sustainable results by:

- How it works in partnership with GoI at national and sub-national level
- Ensuring what it supports interventions and models are feasible and doable for the Indonesian context
- Using evidence to inform, influence and guide policy makers
- Leveraging government and private sector resources.

DFAT experience in Indonesia shows the importance of building government ownership of interventions and research if they are to have traction.

PERMATA's governance and management structure knits together key government stakeholders at national and sub-national levels bearing in mind who drives policy, programming and financing at those respective levels and their interlinkages, and whose support will be key to designing and sustaining effective approaches that contribute to health gains.

PERMATA's innovations and demonstration models will be strictly designed in partnership with GoI to work through government systems, to ensure buy-in and the potential for scalability. Aligned with the Australian Government's emphasis on mutual obligation, PERMATA will include co-funding commitments on the part of GoI for the performance based financing so that funding for this is split 50/50 by the end the program.

The six cross province demonstration projects will be designed with a focus on what is doable and affordable in the various health system contexts that exist across the country. Transition periods for each demonstration have been built into budgets, to ensure the GoI has the support it needs to take them over. Partnership with, and leveraging of private sector interests will be pursued particularly in the areas of nutrition products and information technology solutions, which will further promote sustainability after the life of the program.

District led innovations and interventions will be developed through a participatory and bottom-up problem solving approach that provides the space for local people to bring together technical, social and political economy solutions to local problems largely using domestic resources. The involvement of Bupatis and Bappeda will be key to developing local solutions that have political and government buy-in and are likely to be sustained beyond the program.

PERMATA's learning platform intends to manage evidence dissemination to inform, influence and guide policy makers at national and sub-national levels. By targeting multiple interest groups that have a bearing on health policy and the health system, including political leaders, government policy makers, technical experts, professional bodies, research institutes, and civil society, the program seeks to engage effectively in health policy influencing through multiple streams. This will be accompanied by technical assistance from PERMATA and AIPHSS, as well as DFAT staff, to engage in policy dialogue, and support government champions and coalitions around policy agendas. Policy dialogue with the Indonesian Government at both national and sub-national levels is essential for technical assistance, capacity building

and demonstration models to achieve lasting improvements and to be scaled up beyond supported districts and provinces.

#### 5.6 SCOPE OF SERVICES

The forthcoming Scope of Services will adequately articulate how the contractor will support a cross-sectoral approach to improving frontline service delivery, complement a separate M&E contract and ensure flexibility for DFAT to modify the program as required in future. The Scope of Services is also intended to reflect the flexibility to be afforded to Tenderers to personalise the delivery approach for this Program. In responding to the Request for Tender, Tenderers will be able to propose:

- alterations to the Program Logic;
- the approach to M&E;
- the approach to stakeholder communications and the Learning Platform;
- the number and structure of all personnel required (from technical to administrative); and
- the budget for the entire cost of the Program, including Management Fees, all Personnel Costs, Operational Costs and Program Costs.

The final Scope of Services will reflect the preferred Tenderer's proposal as much as practicable.

#### 5.7 RISK ASSESSMENT AND MANAGEMENT

PERMATA is an ambitious and complex program. There are various risks inherent in our proposed approach, mainly relating to:

- 1. DFAT's limited experience working with the complex and unregulated private sector
- 2. Changing policy environment in Indonesia, including unknown impact of introduction of village law and roll out of JKN
- 3. Diminished DFAT departmental resources and loss of technical expertise to manage program effectively
- 4. Difficulty securing buy in and replication of demonstration approaches by Gol
- 5. Other DFAT / Gol programs unable to support PERMATA outcomes

Please refer to the risk matrix at Annex 10 for more detail on risks and proposed treatment of them.

### 5.8 DFAT MANAGEMENT RESOURCES

The DFAT Health section will be primarily responsible to manage and monitor this investment. The staffing profile will include:

- 15% time of one EL-2 Director
- 30% time of one Senior Adviser
- 30% time of one EL-1 Unit Manager
- 40% time of one LE-6 Senior Program Manager
- 60% time of one LE-5 Program Manager

## **BIBLIOGRAHPHY**

- Ashraf, Q., Weil, D., & Wilde, J. (2011). *The effect of interventions to reduce fertility on economic growth.*Cambridge, MA: NBER Working Paper 17377.
- Atun, R. (2014). What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services? Copenhagen: WHO, Regional Office for Europe (Health Evidence Network Report) http://www.euro.who.int/document/e82997.pdf.
- Badan Pusat Statistik . (2012). Indonesia.
- Badan Pusat Statistik, BKKBN, Kementrian Kesehatan, ICF International. (2012). *Indonesia Demographic and Health Survey*. Badan Pusat Statistik Indonesia.
- Bhutta, Z. A., Das, J. K., Rizvi, A., Gaffey, M. F., Walker, N., Horton, S., et al. (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *The Lancet*, 382:452-77.
- Black, R., Cousens, S., & Johnson, H. (2010). Global, regional and national causes of child mortality in 2008: a systematic analysis. *The Lancet*, Published online DOI:10.1016/S0140-6736(10)60549-1.
- Black, R., Victoria, C., Walker, S., & al, e. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet*, Published online DOI:10.1016/S0140-6736(13)60937-X.
- Bloem, M., de Pee, S., & Hop, T. (2013). Key strategies to further reduce stunting in Southeast Asia: lessons from the ASEAN countries workshop. *Food & Nutrition Bulletin*, pp. Vol 34 ppS8-S16.
- Bloom, D., Canning, D., & Jamison, D. (2004). Health, Wealth & Welfare. In Clift Ed. In *Health and Development: Why investing in health is critical for achieving economic development goals.*Washington DC: IMF.
- Campbell, & et al. (2006).
- Christian, P., Lee, S., Angel, M., & al, e. (2013). Risk of childhood undernutrition related to small-for gestational age and preterm birth in low and middle income countries. *International Journal of Epidemiology*, 42(5).
- Dalgaard , C., & Hansen, H. (2010). Evaluating Aid Effectiveness in the Aggregate: A critical assessment of the evidence. Danida Evalution Department. Ministry of Foreign Affairs. Denmark.
- Debes, A., Kohli, A., Walker, N., & et al. (2013). Time to initiation of breastfeeding and neonatal mortality and morbidity: a systematic review. *BMC Public Health*, Vol 12 pp S19.
- Foster, S., & Bryant, M. (2013). A Framework for Estimating Benefits of Investing in Maternal, Newborn and Child Health. Boston University for Partnership for Maternal, Newborn and Child Health. Geneva.

- Gogia et al. (2011). Community based new born care: A systematic review and meta-analysis of evidence. UNIVEF-PHFI series on new born and child health, India.
- Harimurti, P., Pambudi, E., Pigazzini, A., & Tandon, A. (2013). *The Nuts & Bolts of Jamkesmas, Indonesia's Government-Financed Health Coverage Program for the Poor and Near-Poor.* Washington DC: World Bank.
- Hennessy, D., Hiks, C., & Koesno, H. (2006). The training and development needs of midwives in Indonesia: paper 2 of 3. *Human Resources for Health*, Vol 4 doi:10.1186/1478-4491-4-9.
- Hodinott, J., Alderman, H., & Behrman, J. (2013). *The Economic Rationale for Investing in Stunting Reduction*. GCC WOrking Paper Series, GCC 13-08.
- Hull, T. (2014). forthcoming reported in MoH draft Health Sector Review.
- Imdad, A., & Bhutta, Z. (2012). Maternal nutrition and birth outcomes: effect of balanced protein-energy supplementation. *Paediatric and Perinatal Epidemiology*, 26 Suppl 1:178-190.
- Imdad, A., & Bhutta, Z. (2012). Routine Iron/Folate Supplementation during Pregnancy: effect on Maternal Anaemia and Birth Outcomes. *Paediatric and Perinatal Epidemiology*, 26 Suppl 1:168-177.
- Institute of Health Metrics and Evaluation. (2013). Global Burden of Disease Country Profiles Indonesia.
- Lassi, Z. S., Haider, B. A., & Bhutta, Z. A. (2010). Community-based intervention packages for reducing maternal and neonatal morbidity and mortality and improving neonatal outcomes. *Cochrane Database of Systematic Reviews*.
- Lawn, J. E., Kinney, M. V., Black, R. E., Pitt, C., Cousens, S., Kerber, K., et al. (2012). Newborn survival: a multi-country analysis of a decade of change. *Health Policy Plan*, 27:iii6-iii28.
- Lawn, J., Rhode, J., Rifkin, S., Were, M., Paul, V., & Chopra, M. (2008). Alma-Ata 30 years on: revolutionary, relevant, and time to revitalise. *The Lancet*, 372:917-27.
- Lewin, S., & et al. (2008). Supporting the delivery of cost-effective interventions in primary health care systems in low-income and middle-income countries: an overview of systematic reviews. *The Lancet*, 372:928-39.
- Ministry of Health & BPS. (2013). Riset Kesehatan Dasar (Riskesdas). Indonesia.
- Mize, L. (2012). The Paradox of the Posyandu: Challenges for community health services in Indonesia.

  Jakarta: AusAID.
- Mize, L., Pambudi, E., Koblinsky, M., Stout, S., Marzoeki, P., Harimurti, P., et al. (2010). ....and then she died. Indonesia Maternal Health Assessment. Government of Indonesia, DFID, World Bank.
- Pasricha, S., Drakesmith, H., & Black, J. (2013, Vol 4). Control of iron deficiency anaemia in low- and middle-income countries. *Blood*, Vol 4 pp2607-2617.

- Quershy, L., Alderman, H., Rokx, C., & et al. (2013). Positive returns: Cost benefit analysis of a stunting intervention in Indonesia. *Journal of Development Effectiveness*, Vol 5 pp 447-465.
- Ronsmans, C., & Campbell, O. (2011). Quantifying the fall in mortality associated with interventions related to hypertensive diseases of pregnancy. *BMC Public Health*, Vol 11 S8.
- Sedgh, G., & Ball, H. (2008). Abortion in Indonesia. Guttmacher Institute.
- Shrimpton, R., & Rokx, C. (2013). The double burden of malnutrition in Indonesia. Jakarta: World Bank.
- Sihombing. (2012). Indonesia Country Report, Reported in INTREC.
- Soto, E., & et al. (2013). Investment case for improving maternal and child health: results from four countries. *BMC Public Health*, 13:601.
- Sparrow, & Vothknecht. (2011). PODES Infrastructure Census: Report on Infrastructure Supply Readiness in Indonesia Achievements and Remaining Gaps.
- Starfield, B. (1992). Primary care. Concept, evaluation and policy. New York: Oxford University Press.
- Stenberg, K., Axelson, H., & Sheehan, P. e. (2013). Advancing Social and Economic Development by Investing in Women's and Children's Health: a New Global Investment Framework. *The Lancet*.
- Sternberg, & etal. (2013). Advancing Social and Economic Development by Investing in Women's and Children's Health: a New Global Investment Framework. *The Lancet*.
- Sumner, A., & Edward, P. (June 2013). From Low Income, High Poverty to High-Income, No Poverty? An Optimistic View of the Long-Run Evolution of Poverty in Indonesia By International Poverty Lines, 1984-2030. Indonesia: Smeru.
- The Partnership for Maternal, Newborn and Child Health . (2011). Essential Interventions, Commodities and Guidelines for Reproductive, Maternal, Newborn and Child Health. A Global Review of the Key Interventions Related to Reproductive, Maternal, Newborn and Child Health (RMNCH).
- Thomas, D. G., & Yusran, S. (2013). Social Development Analysis to Support the Design of a Future Maternal and Newborn Health Program in Indonesia, PERMATA. AusAID.
- Titaley, C. R., Dibley, M. J., Agho, K., Roberts, C. L., & Hall, J. (2008). Determinants of neonatal mortality in Indonesia. *BMC Public Health*, 232.
- Travis, P., Bennet, S., & Haines, A. (2004). Overcoming health systems constraints to achieve the millenium development goals. *The Lancet*, 364: 900-906.
- Trisnantoro, L. (2014). Scenarios for Achieving Universal Health Coverage in Indonesia in the National Health Insurance Era. *Health Decentralisation*.
- Trisnantoro, L. (December 2011). Developing an investment case for financing equitable progress towards MDGs 4 and 5 in the Asia Pacific Region. Scale-up Report.

Unair, UGM, Undana. (2013). Draft Report Health Seeking Behaviour Study in East Java and NTT.

UNICEF. (2012). Brief on Maternal and Child Nutrition.

World Bank . (2006). Making the New Indonesia Work for the Poor. Jakarta: World Bank.

World Bank. (2007). Public Expenditure Review. World Bank.

World Bank. (2007). *Spending for Development: Making the Most of Indonesia's New Opportunities.*Indonesia: World Bank.

World Bank. (2008). *Investing in Indonesia's Health: Challenges and Opportunities for Future Public Spending*. World Bank.

Yavuz, E., & Rokx, C. (2008). *Investing in Indonesia's Health: Challenges and Opportunities for Future Public Spending - Health Public Expenditure Review.* Washington DC: World Bank.

