

COUNTRY CASE STUDY

END LINE EVALUATION OF THE H4+ JOINT PROGRAMME CANADA AND SWEDEN (SIDA) 2011-2016

ZAMBIA

EVALUATION OFFICE

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End line evaluation of the H4+ Joint Programme Canada and Sweden (Sida) 2011-2016

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ABBREVIATIONS AND ACRONYMS

ANC	Antenatal Care
ART	Antiretroviral Therapy
ASRH	Adolescent Sexual and Reproductive Health
BEmONC	Basic Emergency Maternal, Obstetric and Neonatal Care
CBA	Community Based Advocates
CBD	Community Based Distributor (of family planning methods)
CDC	Centers for Disease Control
CDE	Classified Daily Employee (a cleaner/ caretaker at a health facility)
CEmONC	Comprehensive Emergency Maternal, Obstetric and Neonatal Care
CHV	Community Health Volunteer
CHW	Community-based Health Worker
CP	Cooperating Partner
CSE	Comprehensive Sexuality Education
CSO	Civil Society Organisations
DHIS2	District Health Information System Two
DHS	Demographic and Health Survey
EM	Enrolled Midwife
EMG	Evaluation Management Group
EmONC	Emergency Obstetric and Newborn Care
EN	Enrolled Nurse
ERG	Evaluation Reference Group
FANC	Focused Antenatal Care
FGD	Focus Group Discussion
GAVI	The Global Vaccine Alliance
GBV	Gender Based Violence
GDP	Gross Domestic Product
GFATM	Global Fund for the fight against AIDS, TB and Malaria
GFF	Global Financing Facility
Global Strategy	The Global Strategy for Women's Children's and Adolescents' Health
GRZ	Government of the Republic of Zambia
H4+ JPCS	H4+ Joint Programme Canada and Sweden
HMIS	Health Management Information System
IMCI	Integrated Management of Childhood Illness
INESOR	Institute for Economic and Social Research
IYCF	Infant and Young Child Feeding
JASZ	Joint Assistance Strategy for Zambia
KMC	Kangaroo Mother Care

LARC	Long Acting Reversible Contraception
M&E	Monitoring and Evaluation
MCDMCH	Ministry of Community Development and Maternal and Child Health
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MNCH	Maternal Neonatal and Child Health
MNDSR	Maternal and Neonatal Death Surveillance and Response
MNH	Maternal and Neonatal Health
MoH	Ministry of Health
NGO	Non-Governmental Organisation
NHC	Neighbourhood Health Committee
PEP	Post-Exposure Prophylaxis
PHC	Primary Health Care
PMTCT	Prevention of Mother To Child Transmission (of HIV)
RBF	Results-Based Financing
RHC	Rural Health Centre
RMNCAH	Reproductive Maternal Neonatal Child and Adolescent Health
RMNCH Trust Fund	Reproductive, Maternal, Neonatal and Child Health Trust Fund
SAG	Sector Advisory Group
SDG	Sustainable Development Goal
SMAG	Safe Motherhood Action Group
SWAp	Sector-Wide Approach
TBA	Traditional Birth Attendant
ToC	Theory of Change
TWG	Technical Working Group
UHC	Urban Health Centre
ZDHS	Zambia Demographic and Health Survey

GLOSSARY OF TERMS USED

H4+ partnership: the broad designation/ term used to describe the coordinated efforts of the six member agencies working together.

H4+ members: the six UN agencies that are part of the H4+ partnership (sometimes also referred to in the text as 'H4+ partners').

H4+ country team: the group of specific people from among the H4+ members who are tasked with the responsibility to plan, oversee the implementation of and account for the H4+ programme delivery.

H4+ programme delivery: any RMNCAH activities implemented under the coordination of the H4+ partnership regardless of funding source.

H4+ coordination mechanism: the designated processes, procedures and structures through which the H4+ country team fulfils its mandate.

1 INTRODUCTION

This note presents the results of the field country case study of Zambia, undertaken for the End Line Evaluation of the H4+ Joint Programme Canada and Sweden (H4+ JPCS). It is one of four field country case studies carried out during the evaluation (with the Democratic Republic of the Congo, Liberia, and Zimbabwe). The remaining six countries supported by the H4+ JPCS were Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Guinea Bissau and Sierra Leone. Each of these six countries is reviewed through a desk-based case study using evidence available from documents and telephone interviews. Nine of the ten programme countries were supported either by the Canada grant to the H4+ or by a grant from Sweden; Zimbabwe received funding from both.

Table 1: Canada and Sweden Grant Funding for H4+ JPCS Programme Countries

Supporting Grant Funding	Eligible Countries
Canada	Burkina Faso, Democratic Republic of the Congo (DRC), Sierra Leone, Zambia, Zimbabwe
Sweden (Sida)	Cameroon, Côte d'Ivoire, Ethiopia, Guinea Bissau, Liberia, Zimbabwe

1.1 Objectives of the field country case studies

As with all the data collection, analysis and reporting methods used for the evaluation, the purpose of the field country case studies is to provide essential input useful to addressing all six of the evaluation questions as they apply at country level.[1]

Box 1: Evaluation questions

1. To what extent have H4+ JPCS investments effectively contributed to strengthening health systems for Reproductive Maternal Neonatal Child and Adolescent Health (RMNCAH), especially by supporting the eight building blocks of health systems?
2. To what extent have H4+ JPCS investments and activities contributed to expanding access to quality integrated services across the continuum of care for RMNCAH, including for marginalised groups and in support of gender equality?
3. To what extent has the H4+ JPCS been able to respond to emerging and evolving needs of national health authorities and other stakeholders at national and sub-national levels?
4. To what extent has the programme contributed to the identification, testing and scale up of innovative approaches in RMNCAH (including practices in planning, management, human resources development, use of equipment and technology, demand promotion, community mobilisation and effective supervision, monitoring and accountability)?
5. To what extent has the H4+ JPCS enabled partners to arrive at a division of labour which optimises their individual advantages and collective strengths in support of country needs and global priorities?
6. To what extent has the H4+ JPCS contributed to accelerating the implementation and operationalisation of the Secretary General's Global Strategy for Women's and Children's Health (the Global Strategy) and the "Every Woman Every Child" movement?

The field and desk country case studies are the core of the overall evaluation of H4+ JPCS. Together, they cover all ten programme countries, which account, in most years, for more than 80 percent of programme expenditures. The remaining 20 percent spent at global level is, in turn, intended to provide essential support to the work of H4+ JPCS at country level. By helping to answering the six evaluation

[1] (UNFPA 2016c: 33-34)

questions, the field country case studies allow for testing the most important causal assumptions which underlie the programme theory of change. This in turn contributes to credibly verifying the programme contribution to results in RMNCAH.

1.2 Approach and Methodology

In keeping with the overall approach and methodology of the evaluation, each field country case study adopts a theory based evaluation approach which begins with the identification and subsequent refinement of an explicit theory of change (ToC) for the programme at country level. This country-specific ToC is a modified version of the overall country-level ToC for H4+ JPCS developed during the inception phase of the evaluation.[2] The ToC for the programme in Zambia is presented in section 3.

The country level ToC developed during the inception phase allowed the evaluation to identify key causal assumptions essential to the achievement of results at each level of the chain of effects supported by the programme. The country level ToC, developed during the inception phase, allowed the evaluation to identify key causal assumptions essential to the achievement of results at each level of the chain of effects supported by the programme. These assumptions themselves can then be systematically tested for their validity, clarity and strength. The resulting assessment of the validity of key causal assumptions then forms the basis for identifying the contribution made by H4+ JPCS to outcomes in RMNCAH in Zambia.[3]

The main data collection methods used in each field country case study are:

- Identification and review of core documents at country level including: annual workplans; results frameworks and results reports; minutes of H4+ planning, review and steering committees; programme review and evaluation documents; monitoring mission reports; national plans and programmes in RMNCAH; reports and documents produced by other bilateral and multilateral agencies supporting RMNCAH
- Review and profiling of quantitative data, including financial data, on programme investments at country level and on results in RMNCAH indicators at national, provincial and district levels
- Key informant interviews with a wide range of stakeholders at national level (see Annex 4)
- Site visits at provincial and district levels including: interviews and discussions with provincial and district health teams; group interviews with staff of district hospitals, rural health centres, health clinics and maternity waiting shelters; and focus group discussions and group interviews with community members being served by health facilities supported by the programme. Group interviews included: specific groups of in-school and out of school adolescents and youth (male and female); mother support groups; adult and youth (male and female) consultative forums; village heath workers (VHA) and community based advocates (CBA); and, traditional leaders, among others
- Debriefings of key informants at district, provincial and national levels in order to present preliminary findings and receive feedback on any gaps in the data used, and on factual errors or misinterpretation of the available data.

In each field country case study, a national evaluation reference group (ERG) was formed and charged with an advisory role in support of the study. The draft field country case study note was submitted to the national ERG for review and comments prior to submission to the evaluation management group (EMG).

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[2] Inception Report, (UNFPA 2016b: 11).

[3] For a full discussion of the analytical approach and methodology used in End Line Evaluation see the *Inception Report,* Chapters Three and Four (UNFPA 2016b).

1.3 Nature of the field country case studies

It is important to recognise that each field country case study is not an evaluation of the H4+ JPCS in the country under review. It is, rather, a case study in the service of the larger evaluation of the programme as a whole and seeks to build insight into how the H4+ mechanism operates in practice at country level. Country case studies complement other data sources collected for the global evaluation as well. The implications of the Zambia case study presented at the end of this note (section 5.2) are not directed specifically to the H4+ country team in Zambia or to national authorities.

1.4 Carrying out the Field Country Case Study in Zambia

The Zambia field mission took place from 6 to 21 July 2016. The team was comprised of three evaluators, two international and one national. An evaluation review group was convened by the H4+ partnership in Zambia to oversee the process. The group was comprised of representatives from each of the H4+ agencies and national technical counterparts. The group was chaired by the Deputy Director, Maternal and Child Health Directorate at the Ministry of Health (MoH).

The country case study of the H4+ JPCS programme in Zambia began with a review of key programme documents including H4+ work-plans, results frameworks and reports, annual reports, minutes of the H4+ national steering committee and reports on quarterly provincial and district planning and review meetings.[4]

A review of trends in quantitative indicators of outcomes in RMNCAH at national level (Annex 3) was carried out prior to the field mission. This was supplemented with a review of indicators gathered from District Health Information System Two (DHIS2) data on the five target H4+ districts in Zambia. The DHIS2 data was provided by the Health Information unit of the MoH.

The team spent sixteen days in Zambia meeting with the H4+ team, government, implementing partners and major bilateral donor agencies, including two of the coordinating partners (CP) troika[5] (USAID and DFID). Two district field visits were undertaken: the first to Lukulu district in Western Province from July 10-13; the second to Chadiza district in Eastern Province from 16-18 July (see map in Figure 1).[6] The evaluation team visited five health facilities altogether, including three rural health facilities and two district hospitals, and met with the provincial and district health authorities in both locations as well as the District Commissioner. In both the district visits, the team collected data through a range of methods, including focus group discussions, key informant interviews, and collection of additional relevant documents.

Prior to leaving Zambia, preliminary findings and emerging themes were communicated to the ERG and arrangements were made for continuing ERG engagement during the preparation and finalisation of the report. A list of persons taking part in interviews and group discussions at all levels is provided in Annex 4.

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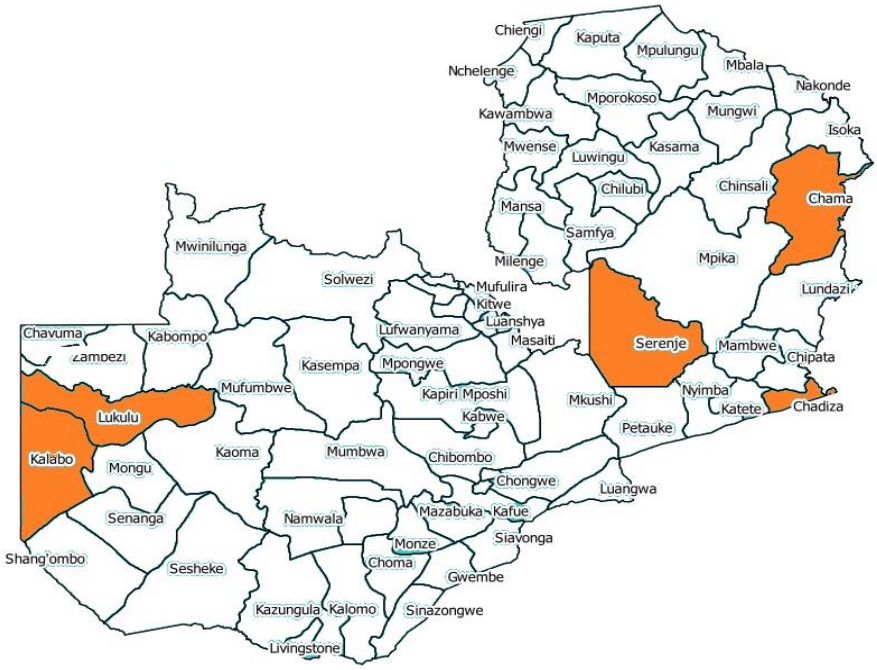
4 It became apparent in interviews and focus group discussion in Zambia that the H4+JPCS has become synonymous with the work of the H4+ partnership over the past four years of active programming. The programme is also branded in stickers on equipment, logos on publications, and posters in offices and health facilities as the H4+ programme. For that reason, in this note, the term H4+ is often used when referring to the H4+ JPCS programme. Non-programme activities of the partnership are identified separately.

5 Cooperating partners in Zambia were represented by three partners ("the troika") elected at set intervals. One of the three was waiting to be the chair of the group, one was the chair of the group and one had already been chair and was about to cycle off the troika at the next election. This meant there was continuity, which helped preserve institutional memory.

6 As shown in the map, the H4+ JPCS is active in five districts: Kalabo and Lukulu in Western Province; Chama in Muchinga Province, Chadiza in Eastern Province and Serenje in Central Province.

Figure 1: Map of Zambia showing the H4+ supported districts



1.5 Limitations

The field country case study of Zambia is grounded in documentary evidence, quantitative data, and qualitative information. The supporting evidence is presented in detail in the evaluation matrix (Annex 1). The methodology used for the case study aims to identify, to the extent possible, the programme contribution to improving outcomes in RMNCAH at national, provincial, district and community levels. It does not, however, include the use of counterfactuals, such as comparison communities and randomised sampling, to develop a quantitative impact analysis.

To help provide the overall context of developments in RMNCAH in Zambia, the evaluation has used quantitative data; a financial profile of the H4+ programme; a mapping of the results reported by the programme; and an assessment of changes in the supply of, and demand for, RMNCAH services in the targeted districts. In every case, qualitative information gathered in key informant interviews, group discussions and site visits has been used to interpret and help triangulate the quantitative data.

An important issue arises regarding the availability of outcome data, as there is a tendency to under-report the number of maternal and neonatal deaths at district level as reflected in the DHIS2 data. This occurs partly because of apparent miscoding of maternal and neonatal deaths under other proximate causes such as malaria and tuberculosis. It may also occur because, in common with a great many countries, maternal and neonatal deaths occurring in the community may not be reported. Either way, since the Demographic and Health Survey (DHS) data is available only to the provincial level (and not below that), it is not possible to trace the main indicators of morbidity and mortality in RMNCAH to the district or facility levels. As a result, other indicators such as skilled delivery at birth or the percentage of mothers receiving four or more antenatal visits are used.

2 THE COUNTRY CONTEXT

2.1 Trends in RMNCAH 2011 to 2016

Despite economic growth and a commensurate increase in spending on health,[7] Zambia still has a high maternal mortality ratio, unmet need for family planning, and high fertility rates. The lifetime chances of dying from pregnancy related causes were about 1 in 59 women in 2011.[8] Maternal mortality has been decreasing but at a rate that was too slow to achieve the MDG target in 2015. Leading causes of maternal mortality include haemorrhage (28 percent), complications from abortion (13 percent), obstructed labour (5 percent), retained uterus (10 percent), eclampsia and pre-eclampsia (18 percent).[9] Indirect causes of maternal death were HIV and AIDS (in over 50 percent of cases) and malaria (in 16 percent of deaths).[10]

Table 2: Trends in in maternal and newborn health in Zambia 2001-2014

Indicator	2001-02	2007	2013-4
Maternal Mortality Ratio (deaths per 100,000 live births)	729	591	398
Neonatal Mortality Rate (deaths per 1,000 live births)	37	34	24
Contraceptive use (% of married women using modern methods)	23	33	45
Births per woman	5.9	6.2	5.3
Exclusive breastfeeding for first six months (% of babies)	40	61	73
Delivery in a health facility (% of all deliveries)	44	48	67

Source: Zambian Central Statistical Office, *Zambia Demographic and Health Survey (DHS) 2013-14,* March, 2015. All data are from the 2001-2, 2007 and 2013-14 Demographic and Health Surveys, Zambia.

According to the 2010 census, 60 percent of the Zambian 14 million population lived in rural areas while 40 percent were urban based.[11] There are significant disparities in health outcomes between urban and rural dwellers (Figure 2) as well as significant socio economic disparities. More than 82 percent of Zambians living in urban areas fall into the top two wealth quintiles while 63 percent of rural dwellers are in the two lowest wealth quintiles. The disparities are numerous. For example, the number of births per woman was 3.7 in urban areas compared to 6.6 in rural areas and, as Figure 2 shows, RMNCAH outcomes are inferior across a range of basic maternal and child health indicators. Three barriers to access have been identified as the most crucial to resolve:

1) Geographic access to health services (roads, transportation, incentives to make the long journey)
2) The quality of care on arrival (presence of trained staff, medicines and functional equipment)
3) Motivation and knowledge across the whole community about why a facility birth is better for women, the benefits of delaying pregnancy, and other preventative health knowledge.

There are other reasons as well, but resolving these three would address many important concerns. For example, access to health facilities was cited as the main reason rural women did not attend a health

[7] According to the World Bank Data Bank, health expenditure per capita has increased from USD 64 to USD 85 between 2010 and 2015. http://data.worldbank.org/indicator/SH.XPD.PCAP?locations=ZM

[8] Banda P, (2015) Maternal Mortality in Zambia: Use of Routine Data Journal of African Population Studies, Vol.29, No.2, 2015

[9] Ministry of Community Development, Mother and Child Health and Ministry of Health (2015) Zambia National Emergency Obstetric and Newborn (EmONC) Needs Assessment 2014-15, Preliminary report, October 22 2015, Lusaka, Zambia

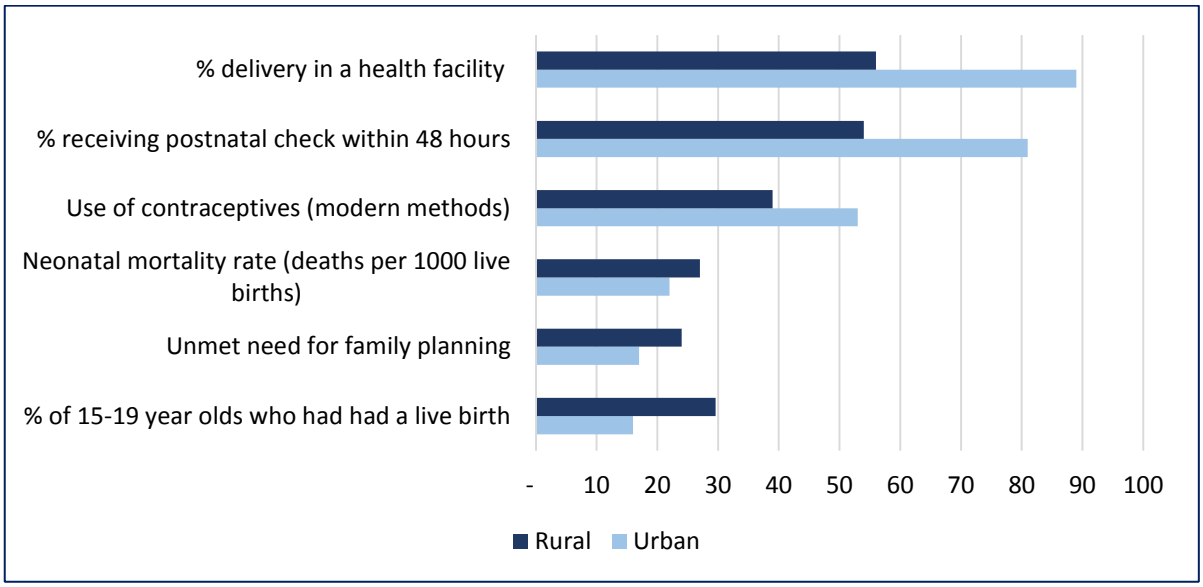
[10] Ibid. p.16

[11] Central Statistical Office (2012) Zambia Census of Population and Housing, 2010, Government of Zambia, Lusaka.

facility for delivery.[12] Zambia has only 45 percent of the Basic Emergency Maternal, Obstetric and Neonatal Care (BEmONC) health facilities recommended to meet the WHO standards for basic obstetric health facilities by size of population.[13] In rural areas, 43 percent of women were assisted by a traditional birth attendant or a relative (9.7 percent in urban areas). Not surprisingly, deliveries in the community are associated with low education attainment and the lower wealth quintiles.[14]

Quality of care limits better health outcomes, particularly in relation to the lack of skilled attendants at birth.[15] Some midwives were trained many years ago and need to update their skills. The rate of caesarean sections overall in Zambia is below the WHO recommendation of 5 to 15 percent. In rural areas of Zambia, it was especially low at 3.2 percent while in urban areas it was 7 percent in 2013-14.[16]

Figure 2: Urban – rural disparities in a selection of RMNCAH indicators in Zambia (2013-14)



2.2 National plans and priorities

The government of Zambia has made a number of commitments at the highest level aimed at improving the health of women and children, including through the Vision 2030[17] and the revised Sixth National Development Plan (2013-2016). Within the health sector, the National Health Policy, the National Health Strategic Plan (NHSP, 2011-2015),[18] and the Roadmap for Accelerating the Reduction of Maternal, Newborn and Child Mortality (2013-2016) contain the principal policy and planning statements. These are supplemented by additional strategies for various elements of the overarching plan including human resources for health, a national training plan, a rational medicines strategy, a strategy to reach

[12] For example, in the 2013-14 Zambia Demographic and Health Survey, 32 percent of women in rural areas said the facility was too far or that they did not have transport (Table 9.8).

[13] Zambia National Emergency Obstetric and Newborn Needs Assessment, p. 24

[14] Zambia DHS, Table 9.7.

[15] In Zambia, a skilled attendant at birth is classified as a certified midwife or a doctor. Registered or certified nurses, despite learning midwifery basics are not classified as skilled. Not all health facilities have trained midwives.

[16] Zambia DHS, Table 9.7

[17] The Vision 2030 includes commitments to reducing maternal and infant mortality (p.32). The full text is found here: http://faolex.fao.org/docs/pdf/zam149709.pdf

[18] http://www.moh.gov.zm/docs/nhsp.pdf

adolescents and youth with vital health services and others. The Ministry of Health (MoH) has begun the process of developing an RMNCAH Investment Case.[19]

Health is delivered primarily under the mandate of the Ministry of Health. The health system in Zambia is arranged across three levels of care: primary, secondary and tertiary health care. Primary health care includes health promotion, prevention, detection, treatment, rehabilitation and care. Services are delivered through primary health clinics and centres, and through district or first referral hospitals. The Zambian government aims to develop a universal health coverage approach, which will ensure all citizens have access to quality health services without risk of financial hardship. Primary health care services are currently free at the points of use in Zambia.

2.3 External support to health and to RMNCAH

Zambia currently spends 6.3 percent of gross domestic product (GDP) on health, and on average from 2012 to 2014, about 9.5 percent of the government budget.[20] The total health budget in 2014 was 798 million USD and continues to grow annually. Donor assistance to health in Zambia is currently delivered largely through a series of vertical programmes, as the sector support mechanism was closed in 2009. There are a large number of cooperating partners (CPs) in the Zambian health sector, including the World Bank, the United Nations agencies (WHO, UNFPA, UNAIDS, UNICEF),[21] global funding agencies, and bilateral partners such as the United States government, Sweden, the United Kingdom, Ireland, and the European Union. In 2016, CPs are expected to contribute approximately 636 million USD to fund 179 projects in the Zambian health sector, increasing available resources by about 80 percent. A recent mapping of donor health projects found that of the 179 projects, 35 (20 percent) related to maternal and child health (including family planning) while 14 (8 percent) were concerned with adolescents and youth. Almost half (47 percent) were focused on HIV and AIDS, TB and malaria.[22]

There are several high profile RMNCAH programmes either already being delivered or about to come on stream. Between them, these programmes have the potential to cover the majority of the country with an agreed package of services and investments. Three major bilateral donors have made multi-year commitments from 2016, amounting to more than 200 million USD. The main individual projects are listed in Table 3.

Table 3: Main sources of external aid to RMNCAH in Zambia

Project	Focus	Implementation
Millennium Development Goal Initiative (MDGi) (2014-2018)	To accelerate the achievement of MDGs 1c, 4 and 5 (Euros 44 million)	European Commission funded, the project runs from 2014 to 2018 and is implemented by Zambian national authorities with technical support from UN agencies (UNICEF,

[19] Over the coming year, MoH will reportedly develop a Zambian RMNCAH Investment case with the assistance of the H6 health agencies. Many countries are developing their Investment Case in the context of an application to the World Bank hosted Global Financing Facility (GFF). Due to its middle income status, Zambia is quite low down on the list of countries likely to benefit from the GFF given its economic status (the GFF prioritises the poorest countries with the worst health indicators). However, like other countries in the same position, it has seen the value of the Investment Case and intends to replace its RMNCAH Roadmap in due course.

[20] World Bank (2014) Health Services Improvement Project, Project Appraisal Document, World Bank, Washington DC, February 28th 2014.

[21] UN Women opened its first representation in Zambia in 2016.

[22] Additional historical information was collected from: Ministry of Community and Development, Mother and Child Health and Ministry of Health (2015) Mid-Term Review of the Implementation and Performance of the Revised National Health Strategic Plan 2011 – 2016, Republic of Zambia, Final Report, Lusaka.

		UNFPA and WHO). Funds are managed by UNICEF
The Joint Programme for the Acceleration of Maternal, Newborn, Child and Adolescent Health (2011- 2016)	To accelerate the achievement of MDGs 4 and 5.	Funding from CIDA (Canada) for up to USD 7.2 million
The Reproductive, Maternal, Newborn and Child Health Trust Fund (RMNCH Trust Fund) (2015-2016)	To support the acceleration of maternal and child health outcomes.	Implemented by government with support from UNFPA, UNICEF and WHO. Coordinated by UNFPA which also manages the grant of 7 million USD
RMNCAH support fund (2016-2019)	RMNCAH support to Eastern and Southern Provinces	Implemented through district health authorities, a Sida-funded grant of 60 million USD
Family Planning and health systems support for RMNCAH (2016 – 2018)	RMNCAH building blocks, family planning, Western and Northern provinces	Department for International Development (DFID) for family planning (10 million GBP) and to RMNCAH (35 million GBP)
Saving mothers giving lives (2016-2018)	In nineteen districts across several provinces including Copperbelt and Lusaka provinces.	United States government 80 million USD for health systems and RMNCAH support
The World Bank (2015-2017)	Health Services Improvement Project	To advance the next stage of results based financing in several districts such as Katete and ten others. 50 million USD credit
Other funds include grants from the Global Fund to fight AIDS, TB and Malaria (GFATM), the Vaccine Alliance (GAVI) and others	Accelerate the achievement of MDG 6, achieve a 'born free' generation, eliminate the transmission of HIV from mother to child, combat AIDS, TB and malaria especially during and around pregnancy and delivery	Various funds ranging from 105 million USD (GFATM) to 17 million USD (GAVI).

2.4 Mechanisms and process for coordinating action

2.4.1 National coordination mechanisms and processes

The health sector is coordinated through the Joint Assistance Strategy for Zambia (JASZ) and the Health Sector Memorandum of Understanding. There is an active cooperating partners group in Zambia, and CPs coordinate their participation in the support through their own coordination mechanism managed by a *troika* of partners (currently DFID, USAID and Sida). The coordination meetings include: (i) the annual consultative meeting; (ii) sector advisory group meetings (SAG); (iii) MoH/ CP policy meetings; (iv) monitoring and evaluation (M&E) sub-committee; (v) health sector joint annual review, and (vi) various technical working groups (TWGs) on key thematic areas, such as health care financing, human resources for health and reproductive health.[23] The UN health agencies participate in the sector-wide approach (SWAp) meetings. Other stakeholders include the MoH (as leader and convenor), other

[23] http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_zmb_en.pdf

multilateral and bilateral partners, civil society organisations (CSOs) and non-governmental organisations (NGOs).

2.4.2 Programme coordinating mechanisms and processes

The H4+ JPCS coordinating group, called the Technical Working Group (TRG), is chaired by the Ministry of Health jointly with the H4+ National Coordinator. National authorities have taken a consistent interest in the H4+ programme and it is considered a significant contributor to the Ministry of Health reproductive maternal neonatal child and adolescent health (RMNCAH) programme. As a group, the H4+ meets monthly in principle. In practice, based on minutes of meetings, this is closer to every two to three months. There are meetings every 4 to 6 months with the heads of H4+ agencies (two to three meetings per year) and the minutes of these meetings suggest that these meetings afford opportunities to shape policy and support problem solving. The H4+ agencies appear to work as a cohesive group alongside with national counterparts to produce their work plans and deliver monitoring reports. H4+ focal points report good levels of support from the Joint Steering Committee at global level and from technical advisers based at regional offices.

2.5 The programme in Zambia

2.5.1 Programme Profile

Programme expenditure

The Zambia H4+ programme was funded for just over 7.2 million US$, covering activities at national level and across five districts. Table 4 below shows the actual expenditure between 2012 and 2015 separated by H4+JPCS spending partners in Zambia. The table shows variable spending rates each year which may be partly explained by procurement patterns. The programme started promptly however, and spending, even in the first year (2012), was significant.

Table 4: Distribution of H4+ JPCS expended resources by H4+ partner and year (2012-2016)

Year	UNFPA	UNICEF	WHO	Totals	%
2012	382,460	905,574	732,888	2,020,922	28%
2013	503,443	530,381	481,463	1,515,287	21%
2014	769,267	1,021,498	735,328	2,526,093	35%
2015	491,843	356,746	370,394	1,218,983	17%
Totals	**2,147,013**	**2,814,199**	**2,320,073**	**7,281,286**	**100%**
% of total	**29%**	**39%**	**32%**	**100%**	

Figure 3 Distribution of total H4+JPCS spending by H4+ partner 2012-2016.

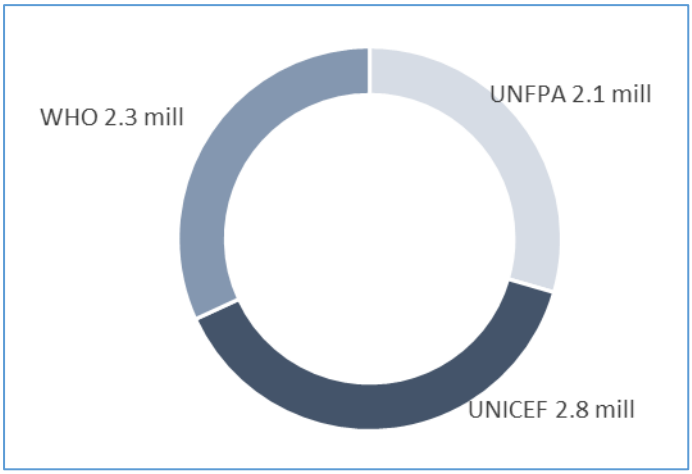


Table 5 below shows H4+ JPCS spending by building block as a total between 2012 and 2016. Spending on human resources was the highest, accounting for 37 percent of the total, and included all training, salaries for substitute midwives and community engagement. There was no spending registered on financing. Service delivery, the second highest proportion of spending included procurement of goods and services including equipment, water and sanitation services, and medical supplies. Looking at Table 5, the data suggest that 86 percent of all H4+ JPCS expenditure was targeted to supply side interventions (outputs 1 to 6) while the balance of 14 percent was used to support demand creation, communication and advocacy (outputs 7 and 8).

Table 5: H4+ JPCS expenditure by output category 2012-2016.

Output	Final Expenditures	% of Total
1. Leadership and governance	$791,196.75	11%
2. Financing	$0.00	0%
3. Technology and commodities	$342,253.68	5%
4. Human resources	$2,701,982.08	37%
5. Information systems, M&E	$841,986.80	11%
6. Service delivery	$1,578,438.73	22%
7. Demand creation	$530,869.02	7%
8. Communication and advocacy	$494,558.94	7%
TOTAL	**$7,281,286.00**	**100%**

2.6 The H4+ JPCS Programme in Zambia

The H4+ JPCS delivered a package of RMNCAH systems strengthening interventions at district and facility level, combined with policy and technical investments and support at national and district level. The health systems investments at district level, aimed to scale up community engagement in health prevention and promotion, accelerate demand for maternal and newborn health care, drive better quality service delivery and invest in genuine capacity improvements. The outputs of the programme were guided by the global H4+ programme, framed using the health system building block framework. These outputs were:

1. **Leadership and Governance:** Governance and management of the health sector as well as strengthened financing systems to ensure RMNCAH services respond to the needs of women and their children.
2. **Health financing:** Availability of funds and right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care.
3. **Health technologies and commodities:** Commodities and technologies are available in health facilities to deliver comprehensive RMNCAH services to women and their children.
4. **Human workforce:** Sufficient number and management of skilled human resources to deliver comprehensive RMNCAH services to women and their children.

5. **Functional HMIS:** Adequate data collection, management, and quality assurance systems to better inform planning processes and decision-making, implementation science, and research.
6. **Health service delivery:** Access and uptake of quality maternal and neonatal (MNH) care at community level, especially in remote areas and integrated RMNCAH services.
7. **Demand** including community ownership and participation in safe motherhood issues.[24]

In Zambia, these generic outputs were translated into a broad programme summarised in Box 2 below.

[24] These inputs were discussed by the H4+ JPCS in H4+ Joint Implementation Update to the Heads of UN, 18 April 2016, UN House, Lusaka. The H4+ JPCS in Zambia did not explicitly identify communications and advocacy outcomes.

Box 2: H4+ Interventions in Zambia 2013-2016

At community level:

- Training and equipping community health volunteers (CHVs) working together as safe motherhood action groups (SMAGs) to support health promotion, service delivery including family planning services, referral, and community health engagement
- Building demand for services through wider community engagement with elders, men and others, specifically around maternal and newborn health promotion, antenatal attendance and clinic based deliveries
- Mobilisation to support youth and school-based health services, in particular family planning services; linking teachers and nurses through joint training sessions to improve their joint support to adolescents through comprehensive sexuality education; supporting youth friendly corners and training of peer educators
- Increasing the uptake of HIV testing and counselling and expanding prevention of mother to child transmission (PMTCT) of HIV
- Community engagement to provide practical support to health services and participation by communities in health facility management through the neighbourhood health committees and the health centre advisory committees.

At facility level:

- Basic equipment and furniture to upgrade maternity facilities including antenatal, labour, delivery and postnatal wards
- Investments to support essential utilities at the facility, including power, water, sanitation, security and safety
- Training and mentoring of clinic staff in basic emergency maternal and newborn care, helping newborns breathe, family planning delivery counselling and delivery skills, and others
- Contracting retired nurses to gap-fill while nurses upgrade as midwives
- Essential maternal and newborn supplies and commodities
- Technical and material support to delivering the PMTCT programme
- Technical and programmatic support to scale up paediatric ART and for the delivery of early infant diagnosis (EID) of HIV through the programme Mwana
- Some transport support including motorcycles
- Radios for communication and referral between health facilities especially those beyond the mobile phone network
- Support to strengthen staff engagement with critical community groups such as youth and to supporting mothers including with Mama-Baby kits
- Maternity waiting homes and strengthened relationships with community health workers including CHVs, safe motherhood action groups and neighbourhood health committees.

At district level:

- Motorcycles to support supervision
- Ambulances to extend referral services
- Technical support and advice to district health services
- Supply of computers and printers to the District Medical Offices
- Training in financial management to support districts as implementing partners to UNFPA
- Technical support to the maternal and newborn death surveillance and Response (MNDSR) process.

At provincial and national level:

- Technical support and policy advice to strengthen the reproductive, maternal, newborn, child and adolescent integrated health policy and care
- Technical support to the MNDSR process
- Printing and distribution of RMNCAH policy documents.

Selection of districts and facilities

The H4+ districts were selected on the basis of criteria agreed with the Ministry of Health. These included that they were underserved areas, with high rates of poverty, performing poorly in terms of maternal health outcomes, with difficult geographical access, and in remote rural areas where populations has little or no other assistance.[25] The programme was implemented in 6 health facilities in each of five selected districts including the district hospital (a total of 30 health facilities altogether). The total population in the 5 districts was about 643,000 according to the 2010 census or about 5% of the Zambian population.

The H4+ Partners

All H4+ partners are active in Zambia (although UN Women opened an office less than a year prior to the evaluation). The H4+ is convened by UNICEF and actively includes only three UN agencies (WHO, UNFPA and UNICEF) who support programme development, receive funds for implementation and deliver activities. UNAIDS provides technical assistance for information management but other than implementing a small amount of WHO funds, is not a significant H4+ JPCS implementer. UN Women was not present in Zambia until early 2016. The World Bank is present in Zambia and has an active health team but does not receive or spend H4+ JPCS funds.[26] The three active H4+ agencies implement available funds in roughly equal shares (32%, 29% and 39% respectively).[27]

Other stakeholders

At the national level, the H4+ coordinated with other partners through a range of mechanisms (see section 2.4.1). The Ministry of Health leads coordination in the sector and the H4+ works closely with the Directorate of Mother and Child Health in particular. H4+ partners include a limited number of implementing partners as the H4+ JPCS is mainly delivered through district authorities. The Institute for Economic and Social Research (INESOR) of the University of Zambia provides monitoring and evaluation assistance to the H4+ and also supports research, documentation and communication about the programme.

3 THEORY OF CHANGE FOR H4+JPCS IN ZAMBIA

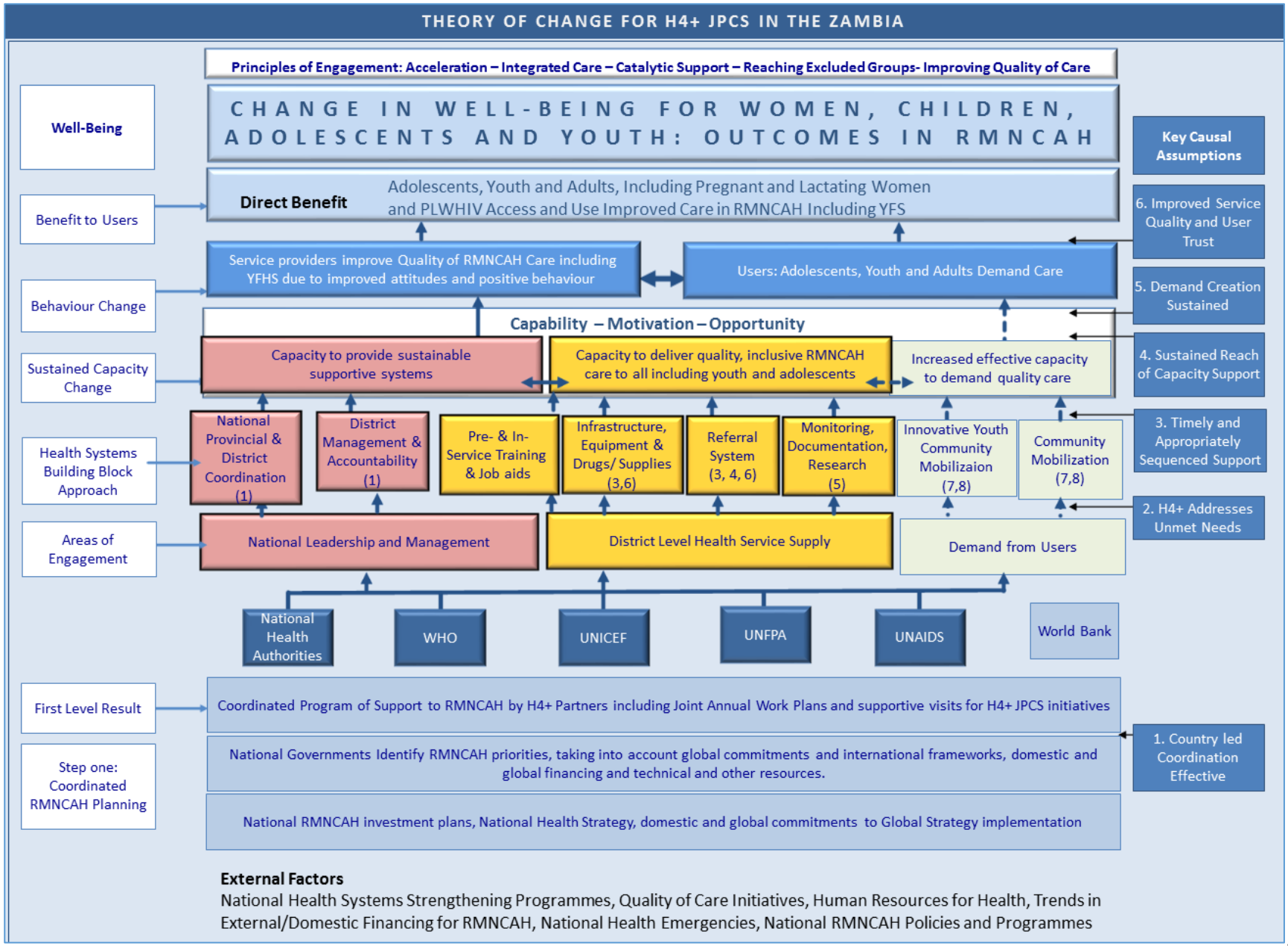
A detailed overview of the Zambia H4+ theory of change (ToC) is shown in Figure 4. The ToC was tested and validated during the field mission and the analysis phase of the country case study. The ToC reflects the H4+ JPCS focus on embedding its investments in national priorities, including national commitments to improving the health of women, newborns and adolescents. The ToC anticipates the leadership of, and close coordination with, the Ministry of Health and other national and sub-national authorities. The balance of the inputs and activities across the three pillars (leadership, supply of quality services, and demand for better health) illustrates the distribution of resources across the spectrum of outputs. This distribution and balance in H4+ JPCS investments will be discussed in more detail in section 4. Detailed descriptions of the key causal assumptions identified on the right hand column of Figure 4 are provided in Annex 6.

[25] H4+ (Assumption 1.1)

[26] The roles and responsibilities of the different H4+ agencies will be discussed in more detail in Section 4.5.

[27] As Zambia received its H4+ grant from Canada (table one) only UNFPA, UNICEF and WHO were eligible to programme grant funds. In Zambia, a very small amount of funds were expended by UNAIDS on behalf of WHO and were recorded as WHO expenditure. This happened in other contexts as well. For example, in the Democratic Republic of Congo, UNFPA transferred some of its funds to UN Women and this was recorded by the global H4+ as UNFPA expenditure.

Figure 4: Theory of change for H4+JPCS in Zambia



4 EVALUATION QUESTIONS AND FINDINGS

This section presents the findings of the Zambia field country case study organised under the six main evaluation questions for the end line evaluation of the H4+ Joint Programme Canada and Sweden (H4+ JPCS) programme.

All sub-sections of section 4 follow the same three-part structure. The first part is a summary highlighting the main findings with regard to the evaluation question. This is followed by an analysis of the key causal assumptions identified in the evaluation inception report as they apply to each evaluation question. By examining the validity of the causal assumptions informing the theory of change (ToC) as they relate to each evaluation question, the case study allows the evaluators to test the programme theory and to build a credible analysis of the H4+ contributions to key outcomes in Zambia.[28] The third and final part of each section addresses the evaluation question under review along with its attendant sub-issues.

The data and information supporting the evidence-based findings presented in this section are provided in detail in the evaluation matrix (Annex 1), and unless otherwise indicated, all of the evidence used to test each assumption is presented in the corresponding segment of the evaluation matrix.

4.1 Strengthening health systems

***Question One**: To what extent have H4+ JPCS investments effectively contributed to strengthening health systems for reproductive maternal neonatal child and adolescent health (RMNCAH), especially by supporting the eight building blocks of health systems?*

Summary

- There is sound evidence that the H4+ JPCS programme was developed through close coordination with national authorities with the objective of increasing equitable access to quality maternal and newborn health services in the worst performing districts.
- The districts and health facilities targeted by the H4+ JPCS were selected using clearly elaborated and explicit criteria.
- The H4+ approach to training midwives has been undertaken in such a way that, in H4+ JPCS target districts, births attended by skilled professionals have doubled during the programme period. This appears to have been reinforced by sustained community engagement through the Safe Motherhood Action Groups (SMAGs) to encourage women to attend the health facility. In Lukulu and Chadiza districts so far in 2016, there have been no maternal deaths.
- The H4+ JPCS approach to programme implementation through district health authorities was appreciated, valued and capacity enhancing for district staff, while the converse was also true in that district staff found centralised procurement disempowering, time consuming and costly.
- Although an exit strategy was raised in discussions with districts at an early stage of delivery, there was found to be insufficient planning in place given the imminent end of the programme.

[28] Where relevant, the possible influence of other factors is also considered although data limitations often make it difficult to judge this with certainty.

4.1.1 Testing causal assumptions for health systems strengthening[29]

***Assumption 1.1**: H4+ partners, in consultation with national health authorities and other stakeholders, are able to identify critical and unserved needs in the eight areas of health systems support for RMNCAH. The needs in each of the eight areas are not fully met by other sources of support and, importantly, programme support can build on investments and activities underway with national and external sources of finance and support to accelerate action.*

Unless otherwise noted, for evidence cited in relation to assumption 1.1 see Annex 1, Assumption 1.1

The 2012 H4+ JPCS programme development process[30] focused on identifying five among the eleven worst performing districts in Zambia for programme support. These were the districts that demonstrated the poorest maternal health outcomes and the slowest rate of improvement. Populations were underserved yet there was poor utilisation of those services that were available. A lack of female (especially adolescent) empowerment along with deeply held cultural traditions and harmful practices were identified as corollaries to low demand and below national average health outcomes. There were few other significant donors or technical partners in these remote districts, and access was difficult. This combination of low demand, lagging outcomes, limited external assistance and remote geography formed the justification for the H4+ programming. The overall objective of the H4+ JPCS programme was to increase the "*equitable access and utilisation of high impact quality maternal and newborn health and family planning services by 2015*".[31]

Interviews with the district health offices in both Lukulu and Chadiza identify H4+ engagement as the first sustained support many of these health facilities had received for RMNCAH in recent years, other than some specific equipment and materials from non-governmental organisations (NGOs) and support for the HIV and AIDS and malaria response.[32] While there were other sources of funding at provincial level and even some NGO funding at district level, one of the reasons these particular districts and facilities were selected for H4+ JPCS support, according to government officials and confirmed in planning documents, was that they were comparatively under-supported. For example, in Western Province, where Lukulu District is located, senior health officials said that they received donor support from:

- Care International (for nutrition, prevention of mother to child transmission (PMTCT) and HIV-TB programmes),
- The Centres for Disease Control (CDCs) (for HIV/ AIDS activities including outreach, mobile ART, technical support and supervision, training, HIV-TB detection, treatment, prevention).

In Chadiza district (Eastern Province), district officials stated that additional health support was received from CDCs for HIV and AIDS activities in line with those conducted in Western Province, and AIDS, TB and Malaria support from the Centre for Infectious Disease Research in Zambia (CIDRIZ). A

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[29] While the term 'health systems strengthening' applies to the entire health system rather than a specific sub-element, the inception phase has shown that almost always, H4+JPCs support to national health systems is aimed very specifically at strengthening national systems for planning, prioritising, budgeting, delivering and assessing services in RMNCAH. For that reason, the evaluation will focus mainly on health systems strengthening for RMNCAH. It will not, however, ignore broader support to national health systems wherever that becomes evident.

[30] As noted above, the global programme was given the green light in 2011 and Zambia started planning immediately in 2012 for programme delivery.

[31] H4+ Technical Working Group (2013) Report of the CIDA H4+ Programme Annual Review and Planning Meeting, Gonde Lodge, Kabwe, Zambia, 4-8 November, p. 2

[32] For example, a programme funded by the Center for Disease Control (CDC) had led to the installation of specific HIV detection and patient management equipment in those facilities classified as Antiretroviral Treatment Centres.

new grant from the Global Fund to fight AIDS, TB and Malaria (the Global Fund), although not yet confirmed, will be used to support services in some of the districts covered by the H4+. A programme funded by USAID called the Zambia Integrated Systems Support Programme (ZISSP), aimed to support planning and delivery of priority programmes in some of the districts in Western Province (excluding Lukulu District), ended in 2014.[33] The evaluation team was informed that a new Sida (Sweden) funded program was due to start. The programme would cover all districts in Western Province with RMNCAH activities.

The Ministry of Health (MoH) was closely engaged with the H4+ during the proposal development. The Deputy Director[34] of the Maternal and Child Health Department[35] chaired the Technical Working Group (TWG) which was established to develop the proposal and then to oversee the programme. Priority investments touched on most of the WHO health systems strengthening building blocks (as discussed above, there was little direct investment in financing). The RMNCAH continuum of care was identified as a gap in the health system, particularly in the H4+ focus districts. The H4+ focus on maternal mortality reduction, newborn survival, reduction of stillbirths, PMTCT and adolescent health were consistent with the Zambia National Strategic Plan and identified in the Zambia Roadmap for Maternal, Newborn and Child Health (2013-2011) as high priorities.

Senior MoH staff reported that they selected the districts where they wanted the H4+ to work using criteria elaborated jointly with the H4+ team according to the orientation they were given. This was confirmed by provincial health staff who said the selection was "*a data driven process*".[36] The criteria included: no or few other technical partners and underserved and poorly performing areas with difficult geographical access comprised of remote rural populations. The five selected districts (Lukulu, Kalabo, Serenje, Chama, Chadiza) have a combined population of just under 700,000 people (approximately 5 percent of the national total) and are considered remote, difficult to access and underserved.

Across all five districts the enabling environment is challenging. The quality and distribution of feeder roads is variable and many are untarred; walking or traveling by motorcycle are the most popular forms of transportation for most people, although district health authorities have some suitable vehicles. Operational costs are high and access is difficult as identified in Ministry of Health policy documents.[37] According to TWG meeting minutes, and confirmed in interviews, *all* the health facilities in each of the five districts were originally targeted for H4+ JPCS support. However, it became clear during the H4+ JPCS implementation planning process that available funds were insufficient to cover all health facilities with meaningful interventions. In coordination with the MoH, the H4+ country team took the decision to select five primary health care facilities, such as rural health centres (RHCs) along with the district referral hospital in each of the five districts. The aim was to focus JPCS efforts and resources on strengthening a cohesive network of health facilities including a referral hospital, in each target district. For example, in Lukulu District (Western Province), there were 25 health facilities altogether (fourteen RHCs, one urban health centre, nine health posts, and one referral hospital) out of which five RHCs and the hospital were selected. The five selected

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33 A full review of other donor support to RMNCAH is also found in: Ministry of Health (2013) MNCH Roadmap, Lusaka, April, 2013.

34 The Maternal and Child Health Department has two deputy directors; one covers children's health and one covers maternal health. The deputy director for children's health chaired the TWG.

35 For some years, responsibility for maternal and child health (MCH) was located with the Ministry of Community Development and Maternal and Child Health (MCDMCH). In 2015, MCH was returned to the MoH. The temporary relocation of MCH was not considered material to the evaluation process or outcome. For the sake of simplicity, therefore, the responsible national authority will be referred to as the MoH in this evaluation even though, technically, there were periods when the responsible authority included the MCDMCH and some documents listed in the annexes were authored by the MCDMCH.

36 Western province health officials recorded in interview. Assumption 1.1

37 For example, MoH (2013) Maternal and Newborn Health Roadmap 2013-2016, Lusaka, April 2013.

facilities were chosen because they met the agreed criteria, including having mainly dilapidated and poorly equipped health facilities, poor or no maternity waiting shelters, low levels of postnatal coverage and high maternal deaths, an inactive community health worker programme and poor or degraded skills among health workers.

In all the five districts, because there was so little external investment or support to health services, the H4+ JPCS approach to supporting maternal and newborn health was comprehensive and touched on most points in the continuum of care, reflecting the high level of need.[38] According to the minutes of planning meetings, confirmed through interviews, the H4+ undertook a process of identifying which programmatic and institutional components of the health system to support and these components were then organised to address the health system's building blocks as they affect maternal and newborn survival at facility and district levels.

***Assumption 1.2**: H4+ JPCS support to sub-national levels funds activities capable of complementing other investments and contributing to strengthening service delivery in RMNCAH. The funded activities are matched with support to health systems strengthening provided by other programmes and sources.*

Unless otherwise noted, for evidence cited in relation to assumption 1.2 see Annex 1, Assumption 1.2

H4+ planning documents suggest that the H4+ aimed to support and shape national policy and programming while also delivering programmes that strengthened health outcomes at district and facility levels. For example, in the 2014 mid-term review, there is a list of new activities added to the H4+ programme. They are almost all national policy activities that link directly to H4+ district and facility objectives. For example, from 2013, the H4+ aimed to support the development of the national Reproductive, Maternal, Newborn and Child Roadmap (2013 to 2016). The H4+ supported the development of the national HIV and AIDS strategy, the national maternal and newborn death surveillance and response (MNDSR) and the national eight-year family planning strategy and plan with both technical and financial resources. These national policies and accompanying strategies and plans were important to shaping the delivery of services in the lead up to the end of the Millennium Development Goals (MDGs). In the mid-term review, as well as through interviews with senior ministry officials, the role of the H4+ JPCS in supporting the national processes was vital to the success of the programme at district and facility levels.

In supporting some key national processes, the H4+ JPCS aimed to strengthen national policy and leadership while simultaneously supporting programme implementation, capacity strengthening and community engagement at district and facility level. For example, the H4+ JPCS aimed to invest in technically supporting the maternal and newborn death surveillance and response (MNDSR) while supporting the application of MNDSR reviews in the H4+ focus districts and provinces to ensure it was maintained. Also, the lack of a coherent family planning policy was seen by both the H4+ partners and the MoH officials as a critical gap, and one that was necessary to fill in order to improve family planning counselling and dispensing skills at the facility level.

At facility and district levels, planning and review documents show that the H4+ JPCS programme was designed to strengthen health system capacity to reduce maternal and newborn mortality through investments in the basic health systems building blocks, including skilled health workers, improving facility quality, engaging communities and reinforcing policy and planning. Ministry of Health senior officials stated that they considered the H4+ approach to be the best in terms of fostering government ownership and supporting the districts to manage their own priorities and programmes.

[38] The presentation of evidence testing these assumptions will be mainly drawn from the H4+ JPCS approach taken in Lukulu and Chadiza districts supplemented where possible with data from the other three districts in the JPCS programme.

They have tried to encourage other donor funded initiatives to work like the H4+ approach. Indeed, other UN programmes are themselves following the H4+ approach, including through the successful application for a 7 million USD grant from the Reproductive, Maternal, Newborn and Child Trust Fund (RMNCH Trust Fund), and the UNICEF implemented grant from the European Union Millennium Development Goal Initiative (EU MDGi) to support RMNCAH outcomes in eight and eleven districts respectively. The features of the H4+ approach most appreciated by MoH senior officials included the balance between supply side support, staff training, demand side investments (community engagement), the use of district systems for planning and implementation, and the joint monitoring missions which enabled MoH officials to travel regularly with UN staff to project sites for monitoring and review.[39]

District officials identified some sequencing problems with H4+ investments. One of these was the slow provision of material and furniture to stock the maternity waiting shelters discussed under assumption 1.5 below. Slow procurement was confirmed by H4+ partners. It was also mentioned by senior MoH officials as one of their main concerns with the H4+ approach. Procurement challenges in the H4+ programme are explored in more depth in section 1.4 below.

Assumption 1.3: *RMNCAH managers and service providers trained with support from H4+ JPCS realise intended gains in competence and skills. These gains in skills and competencies are tested and verified during and after training.*

Unless otherwise noted, for evidence cited in relation to assumption 1.3 see Annex 1, Assumption 1.3

H4+ JPCS assistance included a significant share of training and capacity strengthening support. According to H4+ partners, this support was delivered at three levels:

- More than 47 nurses upgraded their skills through a one-year midwifery training course after which they were registered or certified midwives
- In-service training on emergency obstetric and neonatal care (EmONC) through a competency-based three-week course aimed at reinforcing clinical skills to over 80 percent of targeted nurses and other health facility staff by 2015.
- On-going supervision and mentoring helped reinforce newly acquired competency based skills acquired.

One of the main thrusts of the H4+ programme was the combination of investments to strengthen midwifery and emergency obstetric and newborn care (EmONC). These included:

- The release of enrolled nurses to be trained as qualified midwives (a recognised and valued qualification attracting a higher salary and grade)
- The hiring of qualified retired midwives to fill the places of these nurses at the health facility for a year while they were trained
- Ensuring that all other health staff, especially in peripheral rural health clinics and centres, were given a three-week EmONC training.

Provincial and district health officials pointed out that this combination resulted in a rapid shift in capacity alongside investments in longer term and more durable capacity strengthening. Enrolled nurses were readily released for training as they were replaced while away; quality of care in maternity units increased immediately as retired midwives were on hand; and, as the documentary evidence identifies, many other staff were also trained in emergency management of obstetric and newborn care, and subsequently engaged in the effort to reduce maternal and newborn deaths.

[39] For a more comprehensive discussion of MoH views about the H4+ modality, see Assumption 3.1 and 3.2

According to documentary evidence and confirmed by health staff, the programme delivered in-service training to nurses and existing midwives (and sometimes to other staff like cleaners) to strengthen the relevant capacity and confidence around emergency obstetric and newborn care. The programme also provided other short courses including "*helping babies breathe*", family planning counselling and prescribing skills. District health staff reported that the in-service EmONC training made one of the most significant differences to quality of care because midwives and nurses were more confident about managing obstetric and newborn emergencies using available tools, including the partograph, and they recognised the point at which they had to refer to a higher level and were prepared to do so. This was confirmed by H4+ members, one of whom named the EmONC training as the most transformative feature of the H4+ programme. The documents reviewed (including training workshop review reports) indicate that the H4+ JPCS supported efforts to assess the effectiveness of training and to encourage supportive supervision and mentorship in the aftermath of training.

Trained staff interviewed at the health facilities were able to identify the key steps to managing different kinds of obstetric emergencies when asked, as well as how to use most of the equipment, drugs and procedures they had been taught, including the use of the infant aspirator, the correct use of Kangaroo Mother Care (KMC) and the use of misoprostol. They also seemed confident about referring complex cases for higher level care in a timely manner and the use of the partograph.[40] Trained staff were vocal about their recently acquired skills. For example, one midwife in Lukulu district hospital explained how she had resuscitated a newborn baby the previous Friday using skills she had only just learned in the preceding months. She said it made her "*feel strong to be able to save the life of this baby*" and that prior to the training, she would not have known what to do.

The critical training courses reported by nurses, midwives, district health team staff, MoH staff, community health workers, and the H4+ technical team included:

- EmONC training for all health facility staff (including cleaners)
- Long acting reversible contraception (LARC)
- Helping babies breathe
- PMTCT and Option B+ management[41]
- Comprehensive sexuality education including for teachers
- Youth sexuality counselling and services
- Nutrition.

Comments made in focus group discussions with Safe Motherhood Action Group members and with Neighbourhood Health Committee (NHC) members suggested reasonably high levels of community satisfaction with regard to staff attitudes and overall level of respect for the client.[42] During focus group discussions, community leaders expressed their appreciation of health worker contribution to the community. Staff were perceived as knowledgeable and skilled and "*women no longer die in pregnancy like they did before*."[43] There is, thus, considerable evidence that H4+ support to staff training has resulted in improved skills and competencies for RMNCAH and that these improvements are being tested and proven regularly.

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40 During the facility visits at five health facilities in Lukulu and Chadiza districts, staff were asked open questions about the use of the partograph, criteria for referral, conditions for using particular drugs or equipment and their experience since returning from training, July 2016. Altogether, in 2015, 39 midwives were trained in EmONC.

41 Option B+ management is an approach taken to treating HIV infected mothers that incorporates a commitment to provide lifelong ART for all HIV-positive pregnant and breastfeeding women regardless of CD4 count.

42 At one of the health facilities visited, the community members considered the staff attitudes to be a problem and they had made a formal complaint to the district. However, in other facilities, health staff are clearly appreciated and valued.

43 FGD, Health Centre Advisory Committee member, Lukulu District, July 12th 2016.

H4+ investments have aimed to strengthen the professional approach among health workers, and particularly to reinforce skills and support a core group of nurses to gain increased professional competency. Two structural barriers have limited the impact of the H4+ programme in relation to capacity building. Firstly, when nurses go to train as midwives, they are temporarily substituted by retired midwives but when the nurses return from training, they are obliged to take up an Enrolled Nurse vacancy again as their post has not normally been upgraded to a midwife post. The salary, terms and conditions and grade all remain the same. The result is that the qualified midwife delivers midwife-level duties but receives the salary of a nurse. According to health staff, this is because the health facility establishment is only modified at irregular intervals (that can be five years apart). Key informants from the World Bank human resources for health programme corroborated this finding and said that the centralised bureaucracy surrounding the hiring, deployment, payment and retention of health staff is largely the cause of rigid establishments along with budget limits on public sector recurrent expenditure including salaries.

A second challenge linked to the otherwise innovative midwifery training programme is that while a midwife returns to fill a midwifery post, no enrolled nurses are recruited to the post he or she has vacated. Therefore, the net number of staff at the facility remains constant. For example, according to human resource records in Lukulu district, before the H4+ programme started, there were four enrolled midwives and 32 enrolled nurses (in 2011). Over four years the H4+ supported the training of eight midwives such that by the end of 2015, Lukulu had twelve enrolled midwives (triple their previous number) but only 23 enrolled nurses. The H4+ programme thus upgrades skills and strengthens professional qualifications but it does not necessarily lead to more health workers in post. It may, however, contribute to higher retention of staff through better job satisfaction which was suggested by some staff. However, there is insufficient evidence or consensus on this to be definitive. Nonetheless, the number of trained health workers was considered by most informants (both in the health facilities and the community) as insufficient for needs.

At the national level, the H4+ had the opportunity to use its experience gained in supporting health services at the facility level to inform its participation in the national programme to support human resources for health. There is little evidence that H4+ members demonstrated particular leadership at the national level or became vocal champions for the JPCS approach to upgrading skills. Rather, the H4+ contribution has been to test the approach to filling a post vacated by a nurse undergoing midwifery training with a retired midwife, expand the approach through the H4+JPCS, and subsequently through other H4+ led programmes (the MDGi, the RMNCH Trust Fund).[44] The approach is now being scrutinised by other donor-funded programmes and could be rolled out across much of the country in the next few years.

The H4+ programme identified the importance of community health workers and revitalised programmes in catchment areas surrounding the H4+ supported health facilities. The ability to reach women (and adolescents) in the community and to change their attitudes towards, and utilisation of, the fixed health facilities, was considered an important role for the community health workers. Community health workers reported that they were given training and equipment that included clothing, rainwear, bags and torches to support them in their role. Community health workers were comprised mainly of either members of the SMAG or community based distributors of family planning (CBDs).

There were also community-led health governance groups linked to communities and to health facilities. At the community level, NHCs met to discuss and help support community health activities. One member from each NHC also joined the health centre advisory committee, a group that met at the local health facility to share ideas, support outreach and sometimes raise funds, or in another

[44] This idea was first tested in North West Province by UNFPA on a small scale.

way advance the objectives of the heath facility. The health centre advisory committee attracted community leaders and created a useful bridge between communities and health services. H4+ investments into training and support for community health workers, including members of NHCs and health centre advisory committees, was significant in scope, based on views of health facility staff, communities and the volunteers themselves. For example, in Chadiza District in the first quarter of 2016, more than 1,522 community members went through a maternal death sensitisation workshop across a dozen communities.[45]

The SMAGs had several roles and functions. According to their own view of their job description, the SMAG members in Lukulu district see their role as being to:

- Encourage young women and girls to avoid pregnancy
- Encourage women to register at the clinic in the first three months of pregnancy, including women who miss a period.
- Encourage women when pregnant to go to the health facility for antenatal care and "*she should come with her partner*"
- Encourage women to deliver at the hospital because "*when they deliver at home they could end up with many complications*"
- Encourage women who live far away to come early to the clinic [before the time for delivery] and stay in the maternity waiting shelter
- Encourage women to come for HIV testing, "*so that the baby does not become infected*"
- Make sure that pregnant women are not overworked or lifting heavy objects and encourage women to take care of themselves and not get stressed
- Advise women about breastfeeding and family planning

Many SMAG members had previously been traditional birth attendants accustomed to assisting women give birth in the community and using traditional approaches to managing complications in childbirth. The training they received was instrumental in both educating them about the dangers of home or unskilled deliveries and about the important role they could still play in supporting healthy pregnancies. They were an important part of the H4+ package of support that aimed to encourage women to attend the health facility early, and often, for antenatal care. They also accompanied women to the facility at the time of birth and supported them to access postnatal checks, post-partum family planning and other services.

Although the SMAGs were an important part of the overall H4+ strategy to reduce maternal and newborn deaths, they raised a number of challenges connected to their role and working conditions that suggest possible implications for their sustainability in the future. SMAG members are not paid, and although they report that they are committed to their role, they feel pressure to give it up in favour of paid employment. As one said, his community and family members sometimes discourage SMAG members to volunteer and "*sometimes it could be my wife discouraging me, and she would always ask, how I am going to take care of material needs of my family if I continue my work as a SMAG since I do not get paid?…but we are not discouraged.*"[46] Among the SMAGs in both districts visited, the lack of pay, even to reimburse work related transportation, was raised as a serious constraint.

Another challenge faced by the SMAGs was their perception that they needed (and they certainly wanted) more training. They reported receiving training in EmONC and family planning (confirmed in

[45] See Assumption 2.4

[46] SMAG member from Chadiza District, July 2016.

H4+ progress reports) but they cite a need for refresher training. Other issues relate to equipment replacement, being issued with an identification card to bolster community recognition.

Assumption 1.4: *Capacity development efforts in RMNCAH are supported with well-sequenced supervision and required equipment, supplies and incentives to allow service providers the ability, opportunity and motivation to improve service quality and access.*

Unless otherwise noted, for evidence cited in relation to assumption 1.4 see Annex 1, Assumption 1.4

In order to make use of the skills acquired, or revitalised, during training or through clinical mentoring, health facilities staff need appropriate equipment, functioning infrastructure, adequate stocks of essential medical supplies and on-going supportive supervision. They also need an incentive structure that keeps them in their post and motivated to provide quality care.

Other than the construction of maternity waiting shelters, the H4+ JPCS did not ostensibly invest in large scale infrastructure (construction of buildings or staff housing, for example). However, it did support repairs to, or installation of, essential utilities including power and water, sanitation and hygiene (WASH) as part of its aim to be catalytic, improve quality and ensure health facilities could genuinely offer 24-hour delivery of care. Based on observations, monitoring records and interviews, the ability of the H4+ to identify, deliver and sustain critical infrastructure improvements to achieve this result appears to have been fairly well demonstrated. For example, all five health facilities visited by the evaluation team in Lukulu and Chadiza districts had the means to generate their own power through a generator, reliable connection to the electricity supply or a series of solar panels. According to the H4+ country team, the programme refurbished fourteen labour wards and fifteen maternity waiting shelters across the five H4+ districts.

Although there was generally reasonable access to power, in some locations such as Lukulu, the whole town was powered by generator which was switched off between 12 midnight and 6 am. At that time, the hospital adopted a series of measures to protect patients, including removing babies from the single functioning incubator (an H4+ contribution) and emergency lights, powered by solar, were switched on. In the event of an emergency – for example, the need to do a caesarean section which required more lights than the solar panels could sustain – the hospital informed the local office of the electricity company and power was switched on for the whole town for the duration. The hospital director reported that they need emergency power in the night time about once a week. H4+ investments through the district office facilitated access to additional power, mainly solar panels, in most H4+ supported health facilities.

The H4+ investment in ambulances, VHF radios and training supported the strengthening of the referral network in a way that made a material and visible difference to maternal health. All VHF radios located in H4+ supported facilities were operational at the time of the evaluation team visit although staff said they preferred to use personal mobile phones rather than radios (if they had mobile phone signal) because the response at the other end, they said, was likely to be faster. The referral system was visibly operational and actively being used. Ambulances supplied by H4+ (and others) were well used. Motorcycles situated at primary health care facilities were privy to approved and predictable fuel allowances although there were mechanical issues with the motorcycles in Western Province due to the sandy roads and their effect on the equipment.

Most rural health facilities wanted to have their own ambulance because the long distances implied a significant delay in the arrival of assistance in case of an emergency. However, health staff demonstrated flexibility in managing distances and making full use of available vehicles. For example, the Lukulu Hospital Director had formed a “flying squad” and depending on the distance from the hospital and the nature of the condition, he gathered up a midwife and some supplies and headed off with the ambulance to the patient’s home or the rural clinic. There, he said they would attend the

patient with the view to leaving her at home, thus saving her and her family considerable difficulty. The most recent case he described was a woman with a cervical tear, living 80 kilometres from the hospital. He went to her, reducing her waiting to half the time, stitched the wound and was able then to pass her to the care of the local health facility. The "flying squad" is an example of motivation, innovation and leadership in a challenging environment. H4+ support to district health services contributed to the operational costs of the flying squad.

On the other hand, H4+ procurement delays affected the flow of H4+ support to both infrastructure installation and the supply of equipment and furniture. Water reticulation systems had not yet been installed in two of the facilities. The delay was due to procurement related issues according to UNICEF staff. The first procurement round of two water reticulation systems (pumps, wells, towers and piping) was handled in 2014 by the relevant district health office working through the provincial procurement office. That procurement approach was accessible to local suppliers, and the district health team was highly engaged in the process.

For a reason that UNICEF was unable to fully explain, the second procurement round initially for five water reticulation systems was done centrally by UNICEF procurement office, based on open tender principles but with tighter rules that effectively excluded smaller, local suppliers. As one example of this effect, the supplier had to be able to waive value-added tax (VAT) since UNICEF does not pay local taxes. The onus was on the supplier to waive VAT and this required the supplier to have a tax exemption number from the national tax authority. Smaller suppliers in outlying districts tend not to have such an arrangement in place. The net effect was that the second round of H4+ water reticulation systems were larger than the first round but were procured centrally at considerably higher cost and delay (over a year at the time of the evaluation team visit) while district authorities had been effectively excluded from the process. The first approach, through districts, created an opportunity to build district capacity, support local suppliers, deliver rapid outcomes with accountability and control; the second approach was expensive, time consuming, created no meaningful role for the owners of the equipment and was more likely to create maintenance problems down the line if spare parts for the installed systems were not available locally.

Once the programme is completed, it is unclear where funds will be sourced to cover the costs of utilities, fuel, lighting and other recurrent expenditure. Some funds may be made available from the government budget. One feature of the H4+ that was well received and positively commented on at all levels (from the most senior MoH official interviewed to the H4+ members, the provincial and district officials and the facility staff) was that the H4+ channelled recurrent funding through the district itself. Implementation was through the district rather than through an NGO selected for the purpose. Senior ministry authorities said that the H4+ approach to working through districts was its model for other donors. It reinforced their leadership and strengthened capacity where needed most. H4+ partners also identified the value in terms of building ownership at district level.

Significantly, there is evidence from earlier H4+ annual reviews (for example the 2011-12 annual review) and from the mid-term review that there was thought given to ensuring sustainability in the H4+ programme from the start. In the mid-term review, signs of sustainability included: "*Good ownership at district level, self-perpetuation of some activities,[…] ministry replication of pilot models*."[47] However, even then, the durability of changes introduced by the H4+ was doubtful and one respondent in the review suggested that it was too soon in the programme delivery to estimate the impact of the programme after 2015. Despite being one of the few documents in which sustainability is discussed, the midterm report made no recommendations focused on building sustainability.

[47] H4+ (2014) H4+ Canada Supported activities: Midterm Review in Zambia, 2012-13, Ipact, Lusaka 2014, pg. 32

In later years, discussions about sustainability are less visible in the documentation. During the key informant interviews with both Lukulu and Chadiza district health teams and facility staff, the post-H4+ programme arrangements were discussed. Both districts have carved out allocated budgets to continue sending one nurse per year to be trained in midwifery. They both aim to have funds set aside for mama packs (discussed below in Assumption 2.2 and 4.1). By and large, however, arrangements to sustain all the main elements of the H4+ programme were not well advanced and at the time of the evaluation, few concrete commitments were in place to ensure the achievements of the programme would be maintained.

***Assumption 1.5**: The combination of improved quality of services in RMNCAH, increased trust and understanding between service providers and users, and increased capability and opportunity for service users to effectively demand care is sufficient to produce a notable increase in the use of services and to overcome barriers to access which existed in the past.*

Unless otherwise noted, for evidence cited in relation to assumption 1.5 see Annex 1, Assumption 1.5

There appears to have been a sustained growth in demand for maternal and newborn services over the last several years (since 2012) in H4+ supported districts.[48] Using DHIS2 data obtained from the Ministry of Health, the utilisation patterns across the five H4+ support districts are shown in Table 6 for all health facilities combined.[49]

Table 6: Utilisation and service delivery in five districts in Zambia, 2012-2015

	2011	2012	2013	2014	2015	% Change
1st ANC Visit						
Kalabo	7261	7232	7259	6949	6673	-9%
Lukulu	2061	2530	2150	1116	1421	-45%
Serenje	679	880	488	661	571	-19%
Chama	3636	2926	3980	5503	5460	33%
Chadiza	1443	1351	1596	1862	1951	35%
Skilled deliveries						
Kalabo	3205	3555	4178	3792	3902	18%
Lukulu	1556	1541	2346	1976	2460	37%
Serenje	1736	2604	1854	3362	3350	48%
Chama	3410	4293	4171	4073	4396	22%
Chadiza	2932	3224	3486	3259	3534	20%
Births at home						
Kalabo	-	-	-	-	-	-
Lukulu	85	45	85	55	50	-41%
Serenje	1017	799	374	498	444	-56%
Chama	210	159	175	185	182	-13%

[48] A note about the data in this section: Data are drawn from the DHIS2, supplied by each district authority. The data are difficult to interpret and probably reflect (i) the development of the new data management system (the DHIS2 system was itself implemented after 2012) and (ii) a change in behaviour in relation to counting some kinds of outcomes. For example, stillbirths have only very recently started being counted systematically while neonatal and maternal deaths that occurred in the community were often not counted at all. An increasing trend is therefore not necessarily a genuinely changing (improving or worsening) situation. Across all the data, there was a significant dip in 2014 and this remains unexplained but may have to do with methodological changes implemented that year.

[49] The lowest level of measurement in the DHIS2 is the district. By counting outcomes at the district level, more than just H4+ health facilities are included.

Chadiza	149	89	74	130	110	-7%
Family Planning (all methods)						
Kalabo (new users)	5888	6175	7171	6458	6877	14%
Lukulu (new users)	3012	4797	3966	3599	4690	36%
Serenje (new users)	6007	6519	3786	5903	6519	8%
Chama (new and repeat users)	19549	27173	23562	24556	28298	31%
Chadiza (new users)	1333	1923	5576	7176	8176	513%
Caesarean Sections						
Kalabo	74	61	108	97	79	7%
Lukulu	46	33	69	66	69	50%
Serenje	81	115	79	126	163	101%
Chama	78	125	178	226	232	197%
Chadiza	0	0	181	194	266	46% since 2013

Data sourced from the DHIS2, Ministry of Health, Zambia. Data from Chadiza have not been made available.

The data include all health facilities in each of the districts, not just the H4+ facilities and are difficult to interpret without triangulation. Generally, with some exceptions, the data show steady improvement in utilisation up to and after 2014.[50] This improvement slowed, stopped, or even reversed in 2014 just about everywhere and the explanation is not entirely clear.

Other sources of evidence can be tapped to assess trends. For example, using data from the districts, H4+ facility attendance appears to be more consistently trending upwards over the lifetime of the H4+ JPCS. According to Lukulu District health officials, the number of skilled deliveries in the district increased from 48 percent in 2012 to 64 percent in 2015. In the two rural health centres visited in Lukulu, the data support this statement (Table 7).

Table 7: Increase in skilled deliveries at birth in Lukulu district health facilities

Clinic	Skilled deliveries 2011	Skilled deliveries 2015	% increase
Luvusi	112	210	89%
Lishuwa	111	384	246%

Skilled deliveries increased by almost 90% in one clinic and by two and half times in another. The data reflect higher attendance, but they also reflect the growing numbers of skilled birth attendants. In Zambia, a skilled birth attendant is defined as a midwife, a clinical officer or a medical doctor (not enrolled nurses therefore). These data reflect skilled deliveries (not facility births) so they are births attended by a midwife, clinical officer or doctor. As more are employed at the clinics, the births attended by the growing number of midwives (including graduates supported to do the midwifery course or retired midwives contracted by the H4+) are classified as skilled births whereas births attended by an enrolled nurse are not. As the number of midwives increases, the number of deliveries classified as skilled will increase too. For example, Table 8 shows the way that attendance increases between 2012 and 2015 but the proportion of skilled birth attendance increases even faster, more than doubling. Presumably, this is partially, if not largely, a result of the H4+ investment in training midwives and contracting retired midwives as well.

[50] There was a decline in ANC attendance despite a growth in facility births and a decline in home births. One explanation lies in growing use of family planning leading to fewer pregnancies.

Table 8: Trends in facility and skilled deliveries in Chadiza district 2012 - 2015

Output	2012	2013	2014	2015
% of all births taking place at a health facility	74	80	77	81
% of births attended by a skilled birth attendant	33	65	64	68

Other data confirm that the number of patients attending services is genuinely increasing as well. For example, in Lukulu District as a whole, the percentage of women attending four or more ANC visits increased from 50 to 64 percent in 2012 and 2015 respectively.[51] The percentage of mother-baby couples getting a postnatal check within 48 hours rose from 34 percent in 2012 to 49 percent in 2015 in Lukulu and from 68 to 81 percent in Chadiza in the same time frame.

After two maternal deaths the previous year (2015) and six the year before, Lukulu District had not had any maternal deaths so far in 2016. The District Health Officer said they were working as hard as they could to try to complete the year with no deaths. Likewise, in Chadiza district, there have been no maternal deaths so far this year. Chadiza was selected to be part of the H4+ JPCS because it was a poor performer but now is well ahead of other districts. There were ten stillbirths in quarter four (Q4) of 2015 and four in Q1 of 2016; most were macerated.[52]

The testimony of communities during focus group discussions suggest that the H4+ programme led to service delivery changes that were valued and which have had an effect on utilisation and sustainability of interventions. For example, there was a common thread across the focus group discussions with communities, especially with SMAGs, identifying a change of attitude (at a societal level) towards women receiving help during labour.

This included a greater acceptance and recognition that the woman's partner or husband had a responsibility to help her get to the clinic and attend ANC with her. During the focus group discussions with SMAGs, there were several comments made reinforcing the change in attitude such as: "*Before the training we were in the dark about these things; we didn't know that if a woman was in trouble in labour, she could get help; we didn't know what kind of help we could get. We didn't know that the H4+ could help renovate the structure and make things better,*" while another said: "*Before the training a lot of people were interested in traditional methods of medicine and a lot of women used to die in pregnancy. After the training we came to learn that we should come and register the baby and for delivery*." A third person said: "*I agree with others, that in my community no more women will have deliveries in my village and there have been no more stillborn.*"[53]

Health outcomes reported by the districts (for all district, not just H4+ facilities and catchment areas) are shown in Table 9. Again, interpretation of the data is complicated by concerns about quality and completeness. For example, as mentioned, stillbirths have not been reliably counted until recently. Deaths in the community are particularly difficult to track, and this is where many neonatal deaths occur. Overall, the trends leaning towards a positive curve, however, suggesting both that more births and deaths are counted and that health outcomes are improving.

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[51] Although the number of women attending a first ANC appointment declined in Lukulu (Table 6), among those who did attend, they were more likely to attend four or more times. As previously discussed, the decline in first attenders may be related to data quality or increased uptake of family planning, especially long term methods or a combination of these and other factors.

[52] A macerated stillbirth is one where the foetus has died in utero some hours or days before the delivery. Fresh stillbirths are those where the foetus was alive going into labour but died in the course of the delivery. Both types of stillbirth are largely preventable. Numbering about 2.5 million annually across the world, stillbirths have only recently begun to be counted systematically and data is difficult to interpret as a result. A declining number of stillbirths is the direct result of better maternity care (both antenatal and during delivery).

[53] Lukulu District SMAG members (Assumption 1.3)

Table 9: Maternal and newborn deaths and stillbirths in five H4+ districts 2011-2015

	2011	2012	2013	2014	2015
Stillbirths					
Kalabo	94	93	107	57	82
Lukulu	21	41	71	41	54
Serenje	76	96	26	88	73
Chama	75	39	40	50	32
Chadiza	54	88	47	65	31
Neonatal deaths					
Kalabo	-	-	9	18	15
Lukulu	8	6	13	18	22
Serenje	-	-	-	13	15
Chama	4	9	12	9	12
Chadiza	3	2	17	26	31
Maternal deaths					
Kalabo	11	8	10	7	9
Lukulu	-	10	10	6	2
Serenje	4	-	6	8	4
Chama	7	5	12	4	2
Chadiza	3	2	10	4	6

Data sourced from the DHIS2, Ministry of Health, Zambia. Data from Chadiza covering stillbirths and neonatal deaths have not been made available.

4.1.2 Contributing to health systems strengthening

The evidence reviewed suggests that the results of the H4+ JPCS health systems strengthening investments have been positive with important caveats. Training materials, job aids, and specific devices or commodities to improve quality of care and clinical decision-making have been strengthened, are in use, valued and making a difference. Most community groups and individuals point to respectful, caring and hard-working staff. The referral system clearly works, and efforts are made to overcome the long distances for the benefit of patients. Most of the essential medicines needed to support emergency management of mothers and newborns are largely, if not fully, in place (condoms were the most frequent commodity missing at the health facilities). Infrastructure has been refurbished or replaced, and modern spacious and clean maternity waiting shelters are a big attraction for women who live at a distance. The enabling environment remains challenging in terms of geographic terrain, distances, public transport and road quality. Progress has been made with sustained efforts by facility, district and other staff, and several officials voiced concerns about how they would maintain momentum once the project was ended.

Despite these positive developments, there are examples of poorly sequenced, incomplete, or insufficient investments as reviewed above. There was some thought given to an exit strategy or sustainability plan in the early years of the programme. Some districts were able to identify how they had selected one or two components of the programme to continue funding through the government budget. The enabling environment is a major constraint in the development of better services and higher demand. The H4+ efforts to address – or circumvent – these constraints have been partially successful through the use of maternity waiting shelters, but even these efforts (including, for example, strengthening the referral system so that women can be transported to higher level hospitals despite road conditions) are at risk if the programme ends without sufficient considerations made to continuity and sustaining the gains.

Developing a common view of critical needs for health systems support

The H4+ worked closely with the national, provincial and district authorities to build a common understanding of how to deliver RMNCAH support in Zambia. The package was modelled on the RMNCAH road map (which the H4+ members helped develop). It has been so successful in terms of logistics, applicability, targeted results and practical support that the MoH has encouraged other donors like USAID, DFID and Sida to use it as a model for their RMNCAH programmes.

Catalytic interventions building on existing or planned interventions and sources of funding

Few or no other donors have supported RMNCAH outcomes in the H4+ districts during the lifetime of the programme. Additional resources are available in some of the districts as new province based RMNCAH programmes start to become operational. The H4+ effectively introduced a number of innovations and programme elements that had been tested in a small way beforehand by two of the H4+ partners. For example, UNFPA has experimented with contracting retired midwives while enrolled nurses underwent midwifery training. Based on this small experiment, the H4+ then tested the innovation in its five JPCS supported districts. The approach has now been absorbed into national policy. Another example is the use of the mama packs – an innovation that will be discussed in section 4.4 below – which was tested by UNICEF on a small scale, thoroughly scaled up to the five districts under the H4+ and has now become national policy.

Sufficient reach and duration to contribute to lasting change

Given the nature of the programme – to support quality improvements in health service delivery for widely dispersed populations – it would be difficult to demonstrate that any programme, heavily dependent on recurrent investments, could be durable far into the future once those inputs had ceased. There are some elements of the H4+ programme that are likely to endure for some time, including infrastructure and equipment investments such as the maternity waiting shelter, the theatre and delivery room equipment. Favourable attitudes to attending the health facility for antenatal care and delivery may persist for some time but if SMAGs are not supported and mentored, eventually they are likely to revert to their previous roles. Some elements of the H4+ programme have already been identified for integration into the public sector budget, but more thought is needed urgently to preserve some of the gains made by the programme.

Demonstrating approaches that can be taken to scale

The H4+ JPCS has demonstrated several approaches and interventions that could potentially be taken to scale. Interventions include investments in most of the health systems strengthening domains including human resources for health (training nurses while contracting retired midwives to fill gaps, use of job aids), effective use of commodities such as misoprostol, service delivery quality improvements, and engaging communities effectively and helping to overcome barriers created by the enabling environment such as through the use of maternity waiting shelters. Some of these interventions are innovations and will be discussed in more detail in section 4.4.

4.2 Expanded access to integrated care

***Question Two**: To what extent have H4+ JPCS investments and activities contributed to expanding access to quality-integrated services across the continuum of care for RMNCAH, including for marginalised groups and in support of gender equality?*

Summary

- The H4+ JPCS has been able to favourably shift community attitudes and social norms around a preference for facility births, and to prompt increased trust, and demand from the

community for quality services. H4+ JPCS supported districts show a trend towards skilled delivery at birth and use of family planning in all the H4+ JPCS districts.

- The H4+ JPCS supported capacity building of staff significantly and increased their ability to manage maternal and neonatal emergencies and to refer with confidence, reinforcing a positive cycle and further contributing to building more trust with the community.
- The Maternal and Neonatal Death Surveillance and Response process was shown to be important to support quality assurance and has been strengthened with H4+ JPCS support; some H4+ districts have been particularly active in maintaining it.
- Ruptures in H4+ programme delivery included equipment and furnishings for the maternity waiting shelters which were delayed. Despite this, the maternity waiting shelters were already well used and appreciated by communities. However, the H4+ JPCS programme had not yet been able to help resolve a secondary challenge in the form of food availability at the shelters as well as for many in-patients, especially at certain times of the year such as just before the harvest.
- There is some evidence that an exit strategy or sustainability plan had been anticipates in the early years of the H4+ programme but there appears to be little decisive action being taken as the programme neared its conclusion. Many of the gains made, while impressive, were judged to be reversible if no further action was taken to assure sustainability.

4.2.1 Testing causal assumptions for expanding access to integrated care

Assumption 2.1: *H4+ JPCS-supported initiatives are targeted to increasing access for marginalised group members (rural poor women, families in geographically isolated areas, adolescents/early pregnancies, pregnant women living with HIV, women/adolescents/children living with disabilities, indigenous people).*

Unless otherwise noted, for evidence cited in relation to assumption 2.1 see Annex 1, Assumption 2.1

On the demand side, H4+ JPCS members have made important efforts to understand the social and behavioural attitudes of the communities they supported and to identify and help overcome the main barriers to access. For example, they commissioned a baseline household survey to help identify what attitudes, knowledge and practices were creating barriers to better RMNCAH services utilisation and to document and map patterns of service utilisation. Using the baseline survey and a commissioned facility survey, the H4+ partners worked with national authorities to conduct a RMNCAH bottleneck analysis which was used to identify programme implementation priorities.

Importantly, this was a household survey which overcame some of the bias introduced by facility based surveys. The results of the baseline survey highlighted poor ANC attendance, challenges associated with the enabling environment (long distances, poor access to transport), and a lack of robust information about health and health service choices. Community concerns about the quality of services they were able to access were also identified. Among the main concerns were quality of care, availability of medicines and supplies and availability of health staff able to deliver better services than they would receive in the community. Combined with long, expensive journeys, the doubts about services meant that many prospective patients sought assistance closer to home.

H4+ investments at the community level, in response to these findings, included a revitalisation of community based health workers (CHWs) drawn from among traditional birth attendants (TBAs) and other volunteers from within the community.

The selection process was rigorous; as one CHW said: *"[it] identified people who would be committed and dedicated to the role*." They were identified by community leaders and saw it as a very important role in the community that would help save lives. Community health workers were organised into Safe Motherhood Action Groups (SMAGs) and were given formal training, bicycles, equipment and supervision. These investments were delivered through UNFPA and UNICEF working together. Each H4+ partner had a different responsibility in relation to community engagement (Table 10).

Table 10: H4+ members and their approach to engaging communities in Zambia

UNFPA	UNICEF	UNAIDS	WHO
- Support to adolescent engagement and training peer educators and teachers - Training SMAGs and CBDs - Engaging community leaders around RMNCAH issues - Training health workers to respond to community demand.	- Procurement of equipment and supplies for the SMAGs. - District capacity building to support demand creation for RMNCAH.	National level investments in mass communications (radio) about male circumcision and other interventions to prevent HIV.	Printing materials.

In focus group discussions and meetings with community leaders, it was evident that the approach adopted by the H4+ JPCS increased the willingness and openness of the communities to access antenatal care, skilled delivery and uptake of family planning, especially among adolescents. Among marginalised groups, it was difficult to find extensive specific evidence. In one sense, everyone in the community was marginalised since it was an underserved area with little targeted support, poor human resources availability and a poorly functioning referral system. In focus group discussions, it appeared that there was an expectation in the community that women would deliver at home and that deaths among women and newborns were unavoidable. Discussions with midwives and health staff confirm that the H4+ approach to integrated care across the RMNCAH continuum focused on identifying and addressing several elements of demand, in particular around women's access to reproductive health services, skilled delivery and newborn care. This includes reducing adolescent pregnancies, eliminating mother to child transmission of HIV and reducing malaria in pregnancy.

The H4+ JPCS midterm review found that there were few specific objectives focusing on adolescents and youth in the H4+ programme. One of the operational strategies of the programme was "*Communication for development to promote girl child education, to discourage early marriages and promote institutional deliveries*" and this does somewhat target youth and adolescents. One activity *"Reproduction of IEC materials or posters on FP targeting teenagers and the youth"* is the only one ostensibly targeting adolescents and youth at the midterm review point.[54] However, the H4+ partners themselves identified a need to do more in order to meet the needs of young people. For example, in the minutes of a 2013 meeting, the UNFPA country representative said that family planning, adolescent health and early marriages were not yet adequately addressed by the H4+, and emphasised the need for integration of services and to strengthen the 2014 plan for Zambia.

Following this 2013 meeting, it appears that additional policy and programming efforts were made to strengthen the JPCS approach to adolescent services. The Western Province health authorities considered youth and adolescent services critical to improving maternal and newborn health outcomes. They have developed a youth-friendly approach to service delivery (youth can attend whenever they want to and can talk to whichever staff member they choose). The provincial officials also reported that H4+ JPCS was funding teacher training in youth comprehensive sexuality

[54] H4+ (2014) Mid Term Review in Zambia, Country Report, 2012-2013, 24th April 2014, pg.11

education and also joint teacher-nurse training so nurses and teachers can work together to support young people.[55] The ideal outcome of these innovations will be fewer youth dropouts, fewer pregnancies, and more knowledgeable young people.

Supporting access to services by youth and adolescents thus became an increasingly important element of the H4+ programme, and reaching young people with comprehensive sexuality education and reproductive health services was identified more concretely as a programme objective after the midterm review. This adjustment was an example of efforts to improve the programme over time. Prior to the H4+ programme, young people reported that they had no space to talk about the issues that concerned them on reproductive health, sexuality and family planning. Comprehensive sexuality education, delivered through schools, after school clubs, youth friendly health corners and other means, were considered "*a good innovation brought by the project and should be replicated in other locations*".[56]

In focus group discussions, peer educators reported that although staff at the health facility welcomed young people and provide a friendly service, young people were shy or feared being seen by people who knew their parents, and as a result they preferred to use services at the youth centre. Young people reported being able to access a range of services through the youth centre in Lukulu for example: comprehensive sexuality education, family planning, sexually transmitted infection management, male circumcision, HIV counselling, gender based violence counselling, girl empowerment activities, safe abortions and unplanned pregnancy services. However, there were many youth in rural areas who had had little access to services due to distance and who were not able to access information, for example about gender based violence or the risks of early marriage.

Assumption 2.2: *H4+ JPCS support to capacity development and to effective demand by community members has adequate reach to effect access to quality services for marginalised groups. H4+ JPCS support addressed the three dimensions of sustainable capacity improvement: capability, opportunity and motivation for sustained provision of care.*

Unless otherwise noted, for evidence cited in relation to assumption 2.2 see Annex 1, Assumption 2.2

The number of maternal deaths in the two visited districts appears to have decreased from 20 in 2013 to 8 in 2015 and 0 by July of 2016. Although health facility staff said they were sure there had been no maternal deaths in the community either (for example, associated with residual home births), it is not possible to be certain especially for earlier years because deaths in the community were not rigorously recorded until very recently.[57] It would be problematic, therefore, to use only the number of deaths recorded in the DHIS2 system as a measure of quality of care and other proxy measures may be more useful. Family planning uptake has increased in all the districts for example (Table 6). Skilled deliveries increased over the lifetime of the H4+ as did caesarean sections suggesting a growth in capacity, equipment and demand.[58] Although in most focus group discussions, community leaders and health volunteers were enthusiastic about improvements at the H4+ supported health facilities, some raised concerns about equipment shortages, medicines stockouts and staffing shortages underscoring the complex nature of health systems strengthening work.

[55] This strategy was tested by UNFPA in North West Province before being rolled out across the H4+ programme.

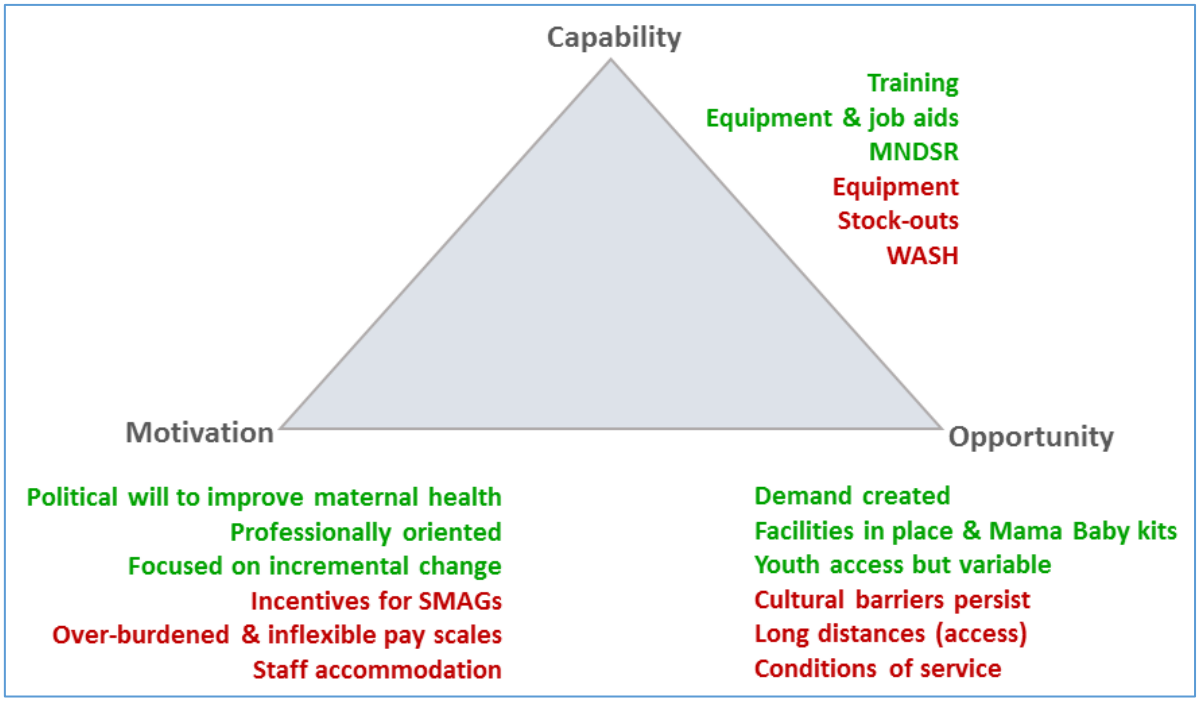
[56] Peer educators, Lukulu District. Assumption 2.1

[57] Data supplied by the Ministry of Health and taken from the DHIS2, Zambia. The number of home births has declined (Table 6).

[58] First ANC visits declined almost everywhere. This may be due to there being fewer pregnancies since family planning uptake increased significantly especially in some districts.

The H4+ JPCS programme also encouraged capacity development in several ways. Based on the capacity triangle model, Figure 5 below summarises H4+ contributions to capability, motivation and opportunity, and identifies continuing limitations. The figure is discussed in detail below.

Figure 5: The Capacity Triangle in Zambia



Looking at the three points of the triangle (capability, motivation and opportunity), the figure highlights some of the positive influences achieved with support from the H4+ programme (in green). The figure also identifies continued limitations or barriers (in red) which include those created by the enabling environment, the larger health system or the national public budget and policies. These have been touched on in the previous section and are discussed in more detail below.

Capability

The H4+ programme supported capability strengthening through a range of training courses primarily through EmONC training to health staff and other courses such as *Helping Babies Breathe* training. As discussed, nurses were sent to midwifery college for one-year upgrade certificates as well. The combination of these training interventions had a material impact on skills, confidence and capability. As one district hospital director said of a recently graduated staff member: "*It was like she was a different person*."[59] The trainings included the use of specific job aids, most importantly, the partograph, which were then distributed to health facilities. Health facility staff, MoH technical staff and H4+ focal points all pointed to the importance of the partograph in identifying the critical point for referral. They said that previously, a midwife might keep trying to deliver the baby even well past the danger point.

The MNDSR process was also identified by staff, senior MoH officials and by political leaders such as the Chadiza District Commissioner, as a critical process to support quality improvement and change community expectations. The MNDSR strengthens accountability and provides an important learning opportunity (discussed further in section 2.4). In Zambia, the MNDSR includes a community focused component, and the minutes of death review meetings demonstrate the range of participants which included district health administrative and management staff, health workers, and community representatives.

[59] District health leaders, Chadiza District.

Despite the improved skills, staff were found to be delivering services with insufficient or faulty equipment and, as mentioned already, occasional drug stockouts (magnesium sulphate) and, in some locations, limited access to water and power.

Motivation

Despite challenging conditions in H4+ supported facilities, many health workers were motivated by the opportunity to improve their skills and knowledge of clinical procedures. This was reinforced by having access to equipment and medicines and the knowledge that they could call for back-up through a largely functioning referral system. Overall, staff were largely aware that deaths would be subject to the accountability process of a maternal death review.

In some locations, motivation was also dampened by poor staff accommodation. Staff housing was often insufficient (leading to shared quarters) or without power, water or other amenities and staff said they might spend their evenings at the health centre for example if they were studying at night. Newly certified midwives who were not upgraded to appropriate posts (with commensurate salaries) were demotivated. As a result of the rigid establishment based human resources system in Zambia, health workers were only shifted to new posts (irrespective of their qualifications) at irregular intervals. The last time was reportedly around 2010 or 2011. As mentioned above, this meant that after a year-long course, qualified midwives returned to enrolled nursing posts at the same salary, status and grade. They might work as midwives but would not be paid as midwives.

SMAGs and other health volunteers such as the community based family planning distributors faced a lack of resources for transport (either money or bicycles) which made it difficult to do their job. These individuals received no incentives and often spent their own funds to perform their role.

Opportunity

The H4+ JPCS invested about 14 percent of its resources on community engagement, education and mobilisation. This investment delivered some results as an increased number of women attended the clinic for antenatal care and delivery. With increased use, demand for services also increased and expectations grew. Skills and knowledge of the health workers were tested by increased attendance for services. There was growing opportunity to deliver quality services and the results were positive. For example, neither Lukulu nor Chadiza district reported a maternal death so far in 2016. As noted earlier, services targeting youth and adolescents were largely welcomed across the community and seen as a successful intervention to enable girls to stay in school, delay marriage and remain HIV negative.

One innovation appreciated by the communities and mentioned by midwives, mothers, and health volunteers as well as senior MoH officials, other cooperating partners and H4+ partners themselves was the mama pack, a set of useful baby gear including a diaper, receiving blanket, Chitenge, and other products. The mama pack was given to women after they had attended antenatal services, delivered in the facility and attended a postnatal check. The kits were much loved (mentioned in every focus group discussion and by most health workers) and with a clear impact on attendance.[60] However, the kits were out of stock and had been for almost a year. There were no plans to replenish stock with H4+ JPCS funds. Finding a way to transfer the cost and logistics required to assemble and distribute the mama packs was a challenge raised by district and provincial health authorities one of whom said they had included the cost of the mama pack in their budgets.[61]

Assumption 2.3*: H4+ JPCS support at national and sub-national level has been sequenced appropriately with support to RMNCAH from other sources. H4+ JPCS supported investments and*

[60] Mama packs led to increased attendance. See Assumption 4.1.

[61] Mama packs are discussed in more detail in section 4.4.

inputs do not conflict in timing or overlap with those provided by other programmes. Further, H4+ JPCS support combines with other programme inputs to allow services to be scheduled and delivered in manners appropriate to reaching vulnerable group members and building trust between providers and users.

Unless otherwise noted, for evidence cited in relation to assumption 2.3 see Annex 1, Assumption 2.3

MoH technical staff credit H4+ JPCS with bringing together the work of UN agencies, drawing on their collective strengths to provide input across the whole spectrum of the eight health systems building blocks, including community engagement and communication. The H4+ country team stated that the collaborative approach was a major achievement (and not easy at the start). Several H4+ country team members described H4+ programme as the first time UN agencies had genuinely worked in a holistic way although they also had experience working together as One UN.

However, the bonds among the agencies have not been able to prevent some shortcomings in sequencing and timing. For example, the equipment and furniture for some of the maternity waiting shelters and labour annexes are overdue, and according to MoH officials, the procurement process started late in the programme and has taken longer than expected. The shelters may be furnished and equipped before the end of the calendar year (2016) but the timing will mean most of the other H4+ inputs will have ended. Remaining WASH inputs including water reticulation in two health facilities will be installed in the second half of 2016 as well. Another example of weak collaboration related to documenting evidence and monitoring results and these are discussed below, first in assumption 2.4 and then more fully in section 4.

Assumption 2.4: *The combination of improved quality of services in RMNCAH, increased trust and understanding between service providers and users, and increased capability for service users to effectively demand care is sufficient to contribute to a notable increase in the use of services and to overcome barriers to access which existed in the past.*

Unless otherwise noted, for evidence cited in relation to assumption 2.4 see Annex 1, Assumption 2.4

Note: This assumption was also addressed as assumption 1.4 with regard to health systems strengthening. The focus here (in relation to evaluation question two) is on the resulting improvements in access for the marginalised, and overcoming barriers to their participation.

Key informants commented on a "before" and "after" H4+ effect. Before, patients were less likely to visit the health facility especially for second pregnancies. Women tended to deliver at home, mainly because they lived far from the clinic, and they did not think the services were worth the journey. They preferred the traditional birth attendant, who did not herself believe the clinic could do anything about improving the outcome of childbirth.

After the H4+ intervention, most communities consulted had developed an understanding of what could be done to improve the outcome of birth and the role that the health facilities played in that outcome. They also felt more trusting of the services as they could visibly see the equipment, furniture and commodity improvements. However, they complained that the medicine stockouts, while notably less, continued to be a problem. Much appreciated and valued were the maternity waiting shelters built or refurbished in all the H4+ supported facilities: "*The H4+ built a mothers' shelter, refurbished maternity ward, including toilets and showers."* [62]

The **maternity waiting shelters** attracted women and created an effective bridge between the advice for women to attend the health facility with the challenges many faced due to the enabling

[62] SMAG members at Tafelansoni Rural Health Centre, July 2016.

environment including poor roads and long distances. They came to the shelter in greater numbers according to the health facility staff and the SMAGs. For some community leaders, these shelters were the main contribution of the H4+ and its most visible outcome. The health centre advisory committees, made up of community leaders from the catchment areas, were also clear about the role and value of the shelters. However, the advice to attend plus the availability of a modern, clean and safe shelter was not enough to fully overcome all the access barriers, notably the challenges of acquiring and bringing enough food to last through the delivery plus two days for the postnatal check. Many could not bring enough food for themselves and also leave enough food for the family that stayed behind. One solution was that whole families moved to the shelter. Another was that women did not attend. For example, at a shelter in Chadiza District Hospital, admissions vary dramatically according to the time of year, the agricultural season and the availability of food (Table 11). During periods of food scarcity (for example, the period immediately before the harvest), three women discharged themselves because, according to the district health authorities, they probably did not have any more food.

Table 11: Maternity waiting shelter admissions January 2015 to July 2016, Chadiza District Hospital

Quarter	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
Number of Admissions	**13**	**52**	**24**	**2**	**22**	**14**

This is an important secondary problem that H4+ programme investments uncovered. One success leads to a new wrinkle. The progress review in the first half of 2013 identified food for mothers in the waiting shelter as a problem and pointed out that in some locations "*neighbourhood health committees engage in works in order to contribute money for food for their food banks*".[63]

Lack of food for mothers and their relatives was also identified as a challenge in the September 2014 H4+ review meeting in Chaminuka. The solution identified was to engage both the "*community and [the] SMAGs involvement for preparedness and income generation activities (IGAs) and to identify strategic partnerships to focus especially on IGAs linked to agriculture*".[64] Furthermore, WHO was tasked with documenting "*potential income generating activities related to food security for [maternity waiting shelters] linked to SMAGs*". There is no evidence that this documentation process ever happened. As things stood during the evaluation, neither health staff nor district health authorities had a clear idea of options to manage this challenge. There was little evidence to indicate that the H4+ country team discussed the problem and developed ideas to support districts design or implement innovative solutions.

A second major contributor to quality improvement in the H4+ JPCS was the sustained commitment to maternal and newborn death reviews through the MNDSR process. In Chadiza district, for example, the MNDSR was raised as a vital component of the H4+ programme in interviews with the provincial health authorities, the district commissioner, the district health authorities, health facility staff, members of the heath centre advisory committee and in focus group discussions with SMAGs. Copies of reports from MNDSR meetings show an active and persistent level of participation at all levels (Table 12). Although not fully complete, the dates of the meetings, based on the minutes located by the evaluation team, suggest that the Chadiza health authorities have had MNDSR at the front of their planning in the last two to three years, confirming their statement that they try to have some kind of meeting every quarter whether there has been a maternal death or not. Documents refer to the MNDSR global guidance for conducting a review.

[63] INESOR (2013) Preliminary results for Quarter One and Quarter Two 2013, H4+ JPCS, Lusaka, 2013.

[64] H4+ (2014) Review of 2013 Mid-Term Review & Joint Monitoring visit Findings, 18 – 22 August 2014, Chaminuka Lodge, Chongwe.

Table 12: MNDSR meetings and reviews in Chadiza District 2013-2016

Meeting	Date	Comments
Sensitisation and discussion	Quarterly meetings	These were held with community members, leaders, health workers and health volunteers.
Death reviews	31 December 2013 28 August 2015 12 October 2015 15 June 2016	Six maternal deaths and six stillbirths (most macerated) were discussed in four maternal death reviews.
MNDSR sensitisation Meetings	26 June 2014 9-10 March 2016 3 March 2016 Q1 2016 workshops with 1522 health workers across all district health facilities.	Most of these are sensitisation meetings about avoiding maternal deaths and conducting a maternal death review.

Assumption 2.5: *Demand creation activities and investments have sufficient resources and are sustained enough over time to contribute to enduring positive changes in the level of trust between service users and service providers in RMNCAH. Investments and activities aim to change service providers' attitude and behaviour towards users in an effort to build mutual trust. Improvements in service quality and access are not disrupted by failure to provide adequate facilities, equipment and supplies of crucial commodities in RMNCAH. H4+ JPCS support is not subject to disruptions, which can weaken trust and reverse hard won gains.*

Unless otherwise noted, for evidence cited in relation to assumption 2.5 see Annex 1, Assumption 2.5

There is evidence (set out above) to suggest that the H4+ JPCS has been able to shift attitudes, increase trust, build demand and extend access to RMNCAH services in previously underserved, marginalised and difficult to reach districts. While there is evidence to suggest an upward trend in utilisation of life saving services (especially family planning and skilled deliveries), there are also some clear threats to maintaining that trend into the future. These include the loss of programme contributions that were materially supporting community engagement such as funds to outreach and maintain SMAGs, neighbourhood health committees and health centre advisory committees.

Some of the equipment supplied by the H4+ programme was already broken or had never worked. The autoclave and an incubator at Chadiza District Hospital, for example, were not operational at the time of the evaluation visit. The hospital technicians reported that they were unable to repair the incubator as they were apparently unfamiliar with the model, while the autoclave had never worked. The programme has not completed delivery and in some facilities, planned interventions will be abandoned as a result of a lack of funds (for example, water reticulation systems in at least three health facilities out of a total of ten planned). The secondary problems identified once initial barriers have been addressed may be insurmountable without focused and pro-active assistance from district authorities, including food for inpatients (such as women who have had a caesarean section), mothers and their relatives in the maternity waiting shelter or those awaiting their postnatal check. Another secondary problem that needs pro-active resolution, though probably at the national level, is the de-motivating effects on newly qualified midwives who are forced to work as enrolled nurses for years after finishing their additional training.

4.2.2 Contributing to expanded access to integrated care

There is strong evidence to demonstrate how H4+ JPCS investments have engaged communities in a range of ways and through different mechanisms including mass media, support to community based health workers, health education programmes and engagement of community leaders. Most of the

active H4+ partners have participated in delivering some component of the community-focused programme. This broad participation by H4+ partners reinforces the importance placed on community engagement and demand creation. However, limitations become evident (in addition to those presented in section 4.1 above) including: late delivery of some key components of the programme including the furnishings in the maternity waiting shelters or uneven supply of commodities. This could test patience and confidence, and the imminent end of the programme could create doubt about many of the on-going activities and their sustainability. There are a number of secondary barriers revealed through addressing primary barriers many of which are related to a complex and challenging enabling environment. One of these is the problem of nutrition and food at the maternity waiting shelters which has a direct impact on their use.

Contributing to quality, integrated services across the RMNCAH continuum of care
The H4+ programme has improved quality, supported the integration of services and strengthened the RMNCAH continuum of care. Especially notable were the role of the SMAGs in community mobilisation and helping change attitudes towards facility deliveries, the investment in training – both longer term midwifery training and short term EmONC training – and contracting retired midwives for immediate quality improvement. Not all communities were equally vocal about quality improvements and one in particular was reticent as a result of concerns related to heath facility staff attitudes. The end of the programme could have an effect on the durability of results, and the lack of comprehensive, coherent exit planning may also affect continuity.

Strengthening the quality and appropriateness of RMNCAH care provided to marginalised and excluded populations
The programme targeted adolescents and youth more actively from 2014 onwards than at the start of the H4+JPCS. There was little visible evidence that disabled populations were particularly targeted. However, as the majority of the populations in all the H4+ districts were underserved, in a sense they all benefitted from the programme. The MNDSR process was an important contributor to quality improvement and accountability.

Strengthening the integration of services across the RMNCAH continuum of care
The H4+ JPCS approach addresses the full continuum of care including family planning, antenatal, delivery and postnatal care, care of newborns, infants and young children and increasing the availability and accessibility of services for adolescents. The 48-hour postnatal check provided an important opportunity to integrate services for mother and baby where in the past, these may have been done separately. The approach includes examples of integrated services through its training modules.

Developing and sustaining trust between service providers and users of RMNCAH services
The H4+ strengthened trust between users and providers to some extent and in some of the programme locations. There was one location where the community had concerns about trust in the staff (and had voiced these concerns to the District Health Office) but this was extraneous to H4+ programme inputs. In addition, there were obstacles to fully motivating staff that the H4+ could not resolve and this does illustrate the limitations of the programme in that, where there are systems challenges that require national action, the H4+ programme, operating at a facility level, cannot have much impact.

4.3 Responsiveness to national needs and priorities

***Question Three**: To what extent has the H4+ JPCS been able to respond to emerging and evolving needs of national health authorities and other stakeholders at national and sub-national level?*

Summary

- Zambian national authorities were engaged in the development of the H4+ JPCS programme, shaping it to ensure it worked in high need districts delivering interventions that were largely consistent national policy.
- The experience of designing and implementing the JPCS programme appears to have enabled the H4+ members to speak in a more unified, coherent way on maternal and neonatal health policy and to build a more team-based approach to programme implementation which the H4+ members themselves see as advantageous to them all. A sub-group of H4+ members, for example, have made efforts to raise additional funds from other sources to implement maternal health programmes similar to the H4+ JPCS approach in other parts of Zambia, building on their experience of working together.
- The efforts made by the H4+ JPCS in delivering a large proportion of the programme through district health authorities has had a positive capacity building influence. However, despite advantages over using non-governmental implementation partners, there were notable limitations. The most significant was that districts were obliged to use a UN financial management system to execute programme funding rather than the UN adapting its financial management approach to that of the districts.
- There was weak or no evidence to show whether and how the H4+ JPCS programme has influenced or shaped national coordination platforms but individual agencies have been influential and the H4+ agencies as a group seem to speak with a more coordinated voice.
- The monitoring and evaluation programme implemented by the H4+ led to the collection of monitoring data using a parallel system to the Zambia national system and there is little evidence that this added value to Zambian information systems or better RMNCAH knowledge.

4.3.1 Testing causal assumptions for responsiveness to national needs and priorities

Assumption 3.1: *H4+ partners supporting RMNCAH in JPCS countries have been able to establish effective platforms for coordination and collaboration among themselves and with other stakeholders using H4+ JPCS funds and with technical support from the global/regional H4+ teams.*

Unless otherwise noted, for evidence cited in relation to assumption 3.1 see Annex 1, Assumption 3.1

The H4+ JPCS programme in Zambia established a Technical Working Group (TWG), chaired by a senior Ministry of Health official and attended by a range of ministry officials as well as H4+ focal points. The group was tasked with the responsibility to oversee and monitor the delivery of the programme. There is evidence of joint work plans and budgets, monitoring and evaluation reports and joint field mission reports. In interviews, MoH officials at national level reported that they felt that H4+ partners spoke more effectively as a single group with more coherent policy messages around RMNCAH. They also liked the integrated and comprehensive nature of the H4+ JPCS approach. H4+ partners themselves raised the issue of policy coherence as an important benefit of the H4+ programming experience. Furthermore, they gave several examples of additional programme funding applications that they have submitted as a group building on their experience of delivering together in the H4+ programme. One successful example is a grant awarded by the RMNCH Trust Fund[65] to roll out a similar package to the H4+ in eight more districts. There were no examples given, however, that included working with UN Women, UNAIDS or the World Bank.

[65] RMNCH Trust Fund is a multi-donor fund established in 2013 by WHO, UNFPA and UNICEF.

Indeed, the World Bank was at the beginning of a significant new programme of RMNCAH funding but it was difficult to identify how or whether they were working in cooperation with the H4+ at all. World Bank colleagues could not identify several key elements of the H4+ JPCS approach including the 48-hour postnatal check, contracting retired midwives or the use of *mama packs* as part of WB projects. H4+ partners reported that they had coordinated with the World Bank around their RMNCAH programme approach to ensure they were all delivering the same package.

***Assumption 3.2**: Established platforms and processes for coordination of H4+ (and other RMNCAH initiatives) are led by the national health authorities and include as participants the H4+ partners, relevant government ministries and departments (including at the sub-national level) and key non-governmental stakeholders.*

Unless otherwise noted, for evidence cited in relation to assumption 3.2 see Annex 1, Assumption 3.2

The Ministry of Health chairs the H4+ JPCS TWG, which strengthens coordination considerably, and helps ensure that the H4+ JPCS programme is well embedded in national priorities. The H4+ focal points and H4+ national coordinator all participate in national coordination committees, as outlined in section 2.4 above, including the emerging RMNCAH coordination group attended by partners engaged in RMNCAH. Two large bilateral partners reported that they have encouraged the H4+ to assume a stronger leadership role in this coordination group both because of the H4+ experience in delivering the maternal and neonatal package of care of the Government of Zambia, but also because as UN agencies, they have a natural mandate to help the MoH lead and coordinate other partners.

Most of the H4+ focal points work in their areas of technical expertise in other programmes concurrently with their support to the H4+ JPCS. There is some evidence through interviews, results analysis, and minutes of meetings, that the H4+ country team introduced interventions, commodities, and processes to the national level coordination groups (for example, the mama packs and the 48-hour postnatal care) explaining how these have been implemented successfully at facility level. While experience in delivering some of these interventions was reported verbally (for example, at annual H4+ JPCS inter-country coordination meetings), other than the review of the mama pack, none of the others has been the subject of focused research to prompt national policy development or programmatic scale up. The other written documentation that the H4+ draws upon are a few human interest stories including one about H4+ support to managing fistula.[66]

***Assumption 3.3:** Programme work plans take account of and respond to changes in national and sub-national needs and priorities in RMNCAH as expressed in plans, programmes, policies and guidelines at national and sub-national level. H4+ partners consult and coordinate with stakeholders at both levels.*

Unless otherwise noted, for evidence cited in relation to assumption 3.3 see Annex 1, Assumption 3.3

There is some evidence that the H4+ was responsive to national needs. As described above, for example, the H4+ JPCS became increasingly focused on reaching youth and adolescents over the lifetime of the programme, particularly following the midterm review (conducted in early 2014). Similarly, as the programme developed, more effort was placed on the role of men in supporting maternal health outcomes and the challenges of early marriage.

An example of where the H4+ JPCS may not have been responsive to national priorities was through the perception that the global H4+ indicators were obligatory in each country of support irrespective of national indicators. Thus, in Zambia, the H4+ commissioned a separate monitoring process run in parallel to the national process, to track the H4+ indicators. Some of these were slightly different

[66] H4+ (2013) "My Fistula is Repaired" a H4+ human interest story, Lusaka, 2013.

from national indicators. For example, the national indicator measured "deliveries" where the H4+ indicator measured "live births."[67] Some of the indicators were very different and implied a different policy entirely. For example, the Zambia approach to postnatal care was to do a check at six hours, six days and six weeks. The H4+ indicator presumed a postnatal check at 48-hours.[68] The documentary evidence suggests that the way the H4+ managed these different indicators was to commission a separate process of monitoring and evaluation. The midterm review assessed that even where the indicator was in fact the same, the data emerging from the DHIS2 and the H4+ monitoring system differed slightly.

There is evidence, from discussions with MoH, that some of the H4+ members became highly focused on H4+ programme delivery and the daily effort associated with daily implementation. Senior MOH officials expressed a concern that they were losing out on technical advice and policy expertise as a result. Their solution would be to nominate a dedicated technical person to manage the implementation of the H4+ and also allow an administrative assistant to be contracted since the use of senior time to send letters and plan meetings was inefficient in this context.[69]

One of the main comments by senior MoH officials concerned what they saw as the diversion of UN technical advisors away from supporting national policy development and instead becoming absorbed in project planning and delivery. "*We need our advisers back*" was one comment. The midterm review identified the time-consuming nature of project delivery as one of the weaknesses of H4+ coordination.

In the latter years of the programme, the shift away from district centred procurement to the use of UN procurement systems was seen as problematic. For example, central MoH staff said it led to long delays and sometimes the products procured were not suitable or national or district authorities were not sufficiently engaged in the process. District staff pointed out that it led to a loss of control over systems and services on their part. Community stakeholders were more delicate in their observations about those maternity waiting shelters that had no beds yet, highlighting instead the convenience of being able to stay so near the hospital, for example.

***Assumption 3.4**: Platforms and processes for coordination of H4+ JPCS do not duplicate or overlap with other structures for coordinating activities in RMNCAH. Further, they provide a strong RMNCAH focus to national and sub-national health sector coordinating platforms.*

Unless otherwise noted, for evidence cited in relation to assumption 3.4 see Annex 1, Assumption 3.4

There was little evidence of overlap or duplication of cooperating partners' support to the health systems in Zambia. The H4+ programme did not duplicate other investments mainly because there were few or no other partners working in these districts prior to the initiation of the H4+ JPCS programmes. Interviews with Ministry of Health and district health officials suggest that the H4+ JPCS programme has been able to work in what were neglected and underserved areas, especially in far west and far east of the country.

The World Bank has been delivering the Health Research Innovation Trust Fund programme (HRITF) in Zambia over several years, and a new health systems strengthening programme was in the final

[67] These slightly different indicators were rationalised according to Institute for Economic and Social Research (INESOR) and to H4+ country team members.

[68] The 48-hour postnatal check was a global H4+ recommendation that the H4+ in Zambia adopted and demonstrated. The MoH has indicated it is advancing the necessary policy changes to adopt the 48-hour check across the health system.

[69] The H4+ JPCS had a dedicated coordinator for a number of years. However, since that person left, an existing full time staff member has taken on the role of coordinator in addition to other duties.

stages of negotiation. The World Bank health team reported that they were rolling out a results based financing approach and had not consulted the WHO or other H4+ colleagues about what kind of RMNCAH interventions would be appropriate. The World Bank explained that, as the primary implementers of the programme, the MoH determined the approach to take and the locations to focus on. However, they did report that steps were taken to avoid overlapping with H4+ supported districts. Although both the World Bank and the wider H4+ group were working on RMNCAH outcomes at the same time and were both focused on strengthening the continuum of care there were no records of meetings taking place among them to ensure a coherent approach.

4.3.2 Responding to national needs and priorities

The H4+ JPCS programme was, to a fair extent, responsive to national and sub-national needs and priorities. As a programme focused on strengthening the health outcomes of women and children, the H4+ JPCS was closely embedded in national priorities. H4+ interventions raised the profile of MNDSR processes and helped reinforce district commitment. While much of the H4+ programme has been appreciated and valued, there are a number of ways it could have been improved that would have enabled the H4+ to demonstrate even greater responsiveness including better sequencing of activities.

Responding to emerging and evolving needs of national and sub-national health authorities
The H4+ was responsive to Zambia health authorities at national and subnational levels in a series of ways. With its focus on maternal and newborn outcomes, the H4+ JPCS enabled new efforts to be launched in marginalised and neglected areas that tackled the full continuum of care. Over the lifetime of the programme, the H4+ support adapted to include more focus on youth, more focus on the role of men in supporting maternal health outcomes, and more support to identifying and addressing the deeper cultural barriers including early marriage. The H4+ JPCS also had some features that were not particularly responsive to national priorities. For example, the programme used a set of indicators apparently imposed from the global level and midway through the programme there was a shift from district based procurement to a central UNICEF managed approach in relation to the water reticulation systems.

Placing country needs and decisions at the centre of the programme
The H4+ was very much centred on the needs of the country and through its implementation via district health authorities, it supported capacity building of country based institutions. The H4+ was seen by national and district authorities as helping them advance their own decisions and reducing duplication. Some elements of the H4+ JPCS did not put country needs at the centre, including some aspects of the procurement process and the parallel collection of the monitoring indicators.

Flexibility in responding to changing contexts and events
The H4+ programme has been fairly flexible in that, when it needed to focus on an emerging priority of the MoH, it was able to do so. The best example of this may be stepping up action on adolescents and youth or on the MNDSR. Going forward, it seems that there will be several new RMNCAH programmes operating in Zambia. Efforts are underway to coordinate these programmes in a rational way through the establishment of the already mentioned RMNCAH Coordination Group. H4+ supported districts might feasibly fall within several of these new programmes which include RMNCAH specific programmes funded in each of two provinces by Sida, DFID and USAID as well some number of districts by the World Bank and a new Global Fund grant (also district focused).

In general, this is an excellent opportunity for the H4+ (now H6) to work jointly with the MoH and district authorities to build continuity for the H4+ supported facilities, thus improving sustainability. There is, however, a risk that provincial authorities may see the H4+ districts as having had enough funding compared to others. In this case, it would still be possible for facilities to suffer from a lack of sustainability planning.

4.4 Innovative approaches to programming in RMNCAH

***Question Four**: To what extent has the programme contributed to the identification, testing and scale up of innovative approaches in RMNCAH (including practices in planning, management, human resources development, use of equipment and technology, demand promotion, community mobilization and effective supervision, monitoring and accountability)?*

Summary

- H4+ partners identified and implemented several viable innovations, testing these through the H4+ JPCS including innovative processes, new commodities and equipment, and emerging policies based on best practice elsewhere.
- The H4+ demonstrated the potential to scale up several exciting innovations that could potentially make a significant (and fairly immediate) difference to maternal and newborn outcomes in Zambia if rolled out nationally. However, much of the evidence is anecdotal and there was little investment by the H4+ JPCS programme into research, documentation and systematic lesson learning.
- Opportunities were missed to use knowledge management to influence the design of a RMNCAH best practice package to be scaled up across Zambia.

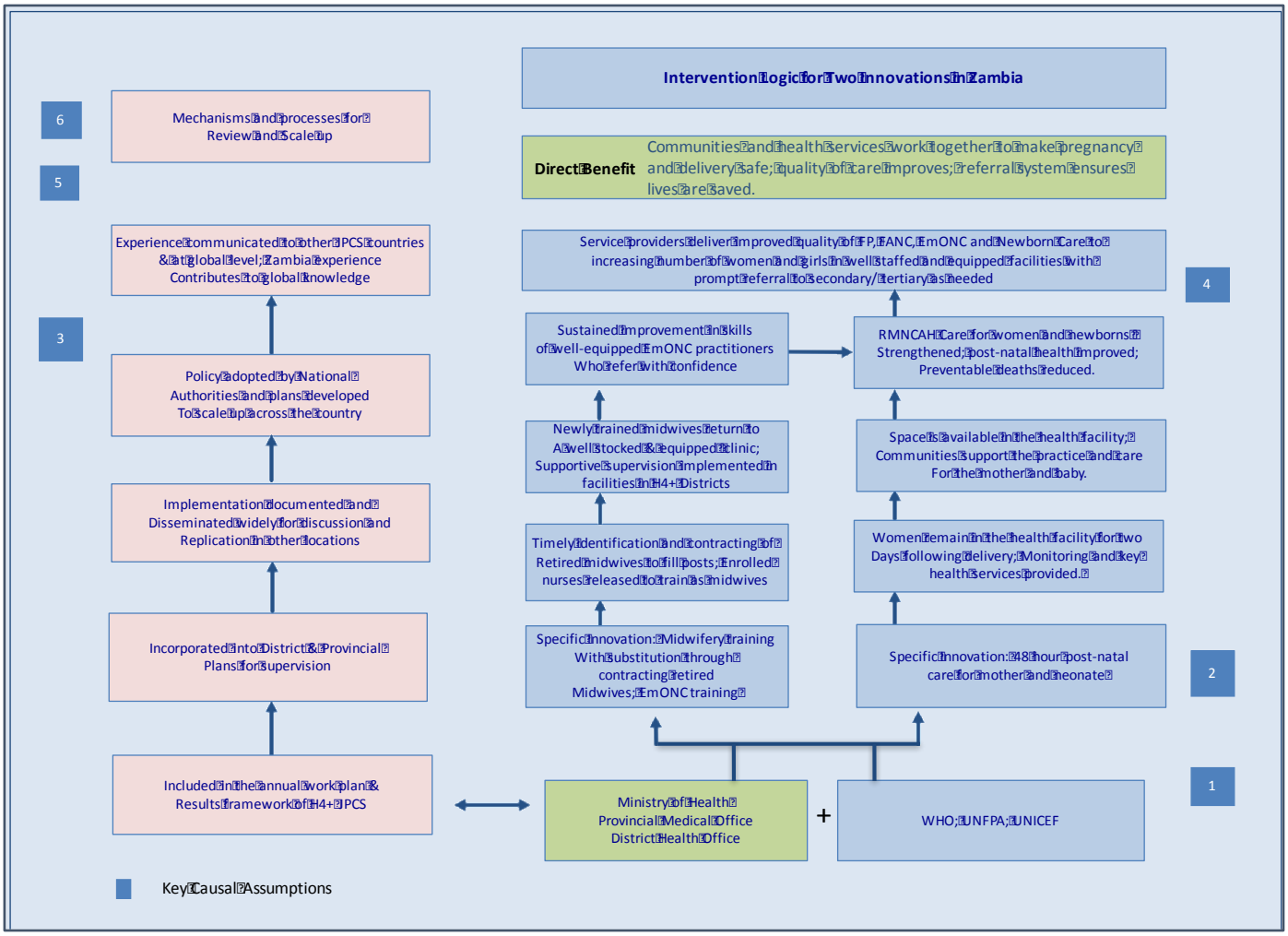
From the start, the H4+ partnership has emphasised the importance of innovation in country level efforts to catalyse and accelerate RMNCAH results. Innovation has not been formally defined by the H4+ JPCS and therefore, for the purposes of the evaluation, innovation is considered a programme practice (including a commodity, process, adaptation etc.) that is new to the locale in which it is being introduced through a systematic and deliberate process. Ideally, this process would include the full cycle of innovation with all the stages shown in Figure 6, as well as identification of an opportunity for experimentation, documentation, communication and adoption of results.

Figure 6: The innovation to policy and scale up process

The theory of change for innovation in Zambia is presented in Figure 7 below drawing on two examples of innovation that were clearly introduced and tested by the H4+ JPCS, although there were other innovations (such as the mama pack). The causal assumptions for this ToC are discussed in detail in the section 4.4.3. A theory of change for innovation in Zambia

4.4.1 A theory of change for innovation in Zambia

Figure 7: Theory of Change for H4+ JPCS: Innovation in Zambia



** The assumptions are set out in full in Annex 6.*

4.4.2 Testing causal assumptions for innovation

Assumption 4.1: *H4+ JPCS partners, in collaboration with national health authorities, are able to identify potentially successful and innovative approaches to supporting improved RMNCAH services. These innovations may be chosen from examples in global knowledge products supported by H4+ JPCS, from practices in other H4+ JPCS countries or from the expertise and experience of key stakeholders at all levels.*

Unless otherwise noted, for evidence cited in relation to assumption 4.1 see Annex 1, Assumption 4.1

A review of documentary evidence combined with evidence gathered from health officials suggests that there were a number of innovations[70] delivered or introduced by the H4+ JPCS in the five target districts since programme start in 2011, including processes (maternal death reviews), policies (Option B+ therapy for HIV management), commodities (misoprostol) and infrastructure (fully renovated maternity waiting shelters). Focus group discussions confirm that many communities noticed a difference following the intensive support from the programme.[71] Some of these, such as Option B+ therapy, have been rolled out across the country (and would have been delivered in H4+ districts at some point with or without H4+ funding) so could not be considered innovative to the H4+.

Others though, were introduced by H4+ partners and their implementation has enabled national and sub-national authorities decide whether to scale them up. Two or three innovations stand out as particularly good examples of H4+ JPCS delivery: the shift to the 48-hour postnatal check, the combination of sending nurses to upgrade as midwives while filling the gap with retired midwives on temporary contracts and the use of the mama pack to encourage early ANC booking, facility delivery and postnatal care. These three innovations are described in Figure 8. The innovations selected were consistent with global guidance, responded to health systems challenges and their impact was measurable and clear.

Figure 8: Three H4+ JPCS innovations

Three examples of demonstrated innovation in the H4+ JPCS

1. **Upgrading staff competence and professional capacity**
   Enrolled nurses were taken from their posts and sent for one-year midwifery training. While away being trained, their posts were filled by retired midwives. The approach led to immediately improved quality of care through the addition of a midwife and the long term, more sustainable upgrading of skills among existing staff.
2. **Shifting to a postnatal check for mother and baby at 48 hours after delivery**
   The majority of maternal deaths after delivery occur within 72 hours. Over 15 percent of newborns die on their first day (their birthday). Ensuring that women and their babies have a comprehensive postnatal check within 48-hours of birth can identify and avert a large number of preventable deaths from sepsis, haemorrhage, respiratory infections and so on. The 48-hour window also enables mothers to be supported to initiate breastfeeding, start family planning, care for their infants and become familiar with danger signs.
3. **Mama packs to encourage attendance**
   Mama packs contain a few items for mother and baby such as a blanket, a hat, a nappy and a wrapper. Mothers are offered a pack when they have attended four ANC, delivered and had the postnatal check. The mama pack led to a 44% increase in attendance for delivery at a cost of USD4 per pack and USD3940 per death averted.

Assumption 4.2: *H4+ country teams have been able to access required technical expertise to assist national and sub-national health authorities to support the design, implementation and monitoring of innovative experiments in strengthening RMNCAH services.*

Unless otherwise noted, for evidence cited in relation to assumption 4.2 see Annex 1, Assumption 4.2

[70] An innovation in the H4+ JPCS is defined as something that is new to the environment where it is being introduced. It is a broad definition and includes scope for policy, practice, and other levels of innovation.

[71] An interesting exception to this general feeling was referenced in section 4.2 above where the community thought the quality of care had actually declined although on probing, this was related to the way the community thought they were treated by the health staff.

Despite the evidence supporting each of these innovations, there were notable gaps in delivery, and maintaining the integration of the innovations into the future (let alone scaling them up) presents additional challenges. For example, the costs of hiring retired midwives cannot be borne from government funding (which cannot pay salaries other than for permanent staff). The 48-hour postnatal check has not been subjected to any rigorous scrutiny or evaluation so it will be difficult to shift the policy change to the next level despite the evidence that individual facilities and districts have successfully incorporated it as policy. Many of these challenges have already been discussed in sections 4.1 and 4.2.

Although there was little systematic evidence for some innovations, this was not the case for the mama packs which were subjected to a rigorous evaluation.[72] The final report found that for a 4 USD input, the mama pack increased attendance for pregnancy and delivery care by 44 percent and would avert 457 deaths for a total cost of 3490 USD per death averted.[73]

There were few examples of what has not worked very well. Interventions that relied on factors determined by the enabling environment were the clearest. For example, overcoming distances and the challenges of transporting an unknown quantity of food to the maternity waiting shelter mitigated the attraction of the shelters for some community members.

Assumption 4.3: *H4+ partners and national health authorities agree on the importance of accurately and convincingly documenting the success or failure of supported innovations and put in place appropriate systems for monitoring and communicating the results of these experiments.*

Unless otherwise noted, for evidence cited in relation to assumption 4.3 see Annex 1, Assumption 4.3

There is evidence to suggest that documentation of the success or failure of innovations was discussed as part of the H4+ JPCS responsibility. The H4+ set aside funds to contract an external body to support the H4+ country team in Zambia to deliver its obligations around monitoring and evaluation, documentation and research. The contract was let to a Zambian national research institute and had four main objectives which were:[74]

1. **Monitoring and Evaluation Plan** – provide leadership in the development and implementation of an M&E Plan for the H4+ Project aligned to the national MNCH M&E plan
2. **Documentation, Research and Learning** – standardisation of project reporting, document contextual factors, conduct operational research assess quality of implementation and assess the extent the programme reaches the poorest.
3. **Capacity building and review** – monitoring and evaluation assistance to the districts, collect a baseline for the H4+ programme, documentation of innovative approaches/interventions, convene quarterly meetings for feedback, participate in district quarterly reviews, conduct annual internal review.
4. **Data Quality** – conduct data quality verification audits.

The terms of reference do not specify the level of effort required for each objective. Among the objectives is an expectation that the research institute will identify and document the H4+ country team's progress and experience in delivering innovative practices. There has been little evidence of

[72] Demand Driven Evaluations for Decisions (3DE) team (2014) "*Measuring the impact of mama kits on facility delivery rates in Chadiza and Serenje Districts in Zambia*", End of Project Technical Report, Zambia Ministry of Health, Zambia Ministry of Community Development, IDinsight, Clinton Health Access Initiative Lusaka, 28 April 2014.

[73] This is comparable to the costs per death averted of long acting insecticide treated bed nets (LLIN) for malaria at USD3400.

[74] Taken from the Terms of Reference developed by the H4+ and used as the basis to let the contract.

systematic monitoring or documentation found that refers specifically to innovative practices. The contractor stated that the funds available were too limited to support much more than annual monitoring and participation at district meetings. There have been no internal reviews, documentation of lessons learned or research conducted.

In discussions with H4+ members, it is evident that the documenting and sharing of innovation successes and failures has been limited to presentations at annual H4+ JPCS intra-country meetings.[75] Interviews suggest that when H4+ stakeholders identified an intervention as an innovation, there was no accompanying process of systematic documentation to ensure research was undertaken to accumulate the information that would help others make a decision about the value of the intervention and its scale up. For example, what makes the intervention a good practice, whether or how to replicate it and what the cost and scale-up logistics would be. Thinking about the stages identified in Figure 6 above, the implementation stops at about stage 4. In the case of the mama packs, the following stages were more carefully followed and the result is the announcement that mama packs are expected to be recommended to all districts as a cost-effective intervention.

Thus, despite the availability of a contracted technical partner to support data collection and lesson learning, there appears to have been little systematic accumulation, analysis and communication of H4+ JPCS activities, lessons learned, and results within the programme. H4+ partners work on a range of programmes with little time, they said, to carry out in-depth reflection and lesson learning. They report that nonetheless, the most impressive of their innovations – contracting of retired midwives, the mama packs, the 48-hour postnatal check – are being adopted by national authorities. The mama packs and the contracting of retired midwives has been picked up by at least some of the cooperating partners in their new RMNCAH programmes but it seems from the key informant interviews that each will choose what they wish to support, rather than take responsibility to deliver a package identified by the MoH (that could have been based on H4+ experience, knowledge and advice).

Assumption 4.4: *National health authorities are willing and able to adopt proven innovations supported by H4+ JPCS and to take them to scale. They have access to required sources of financing (internal and external).*

Unless otherwise noted, for evidence cited in relation to assumption 4.4 see Annex 1, Assumption 4.4

Although the package of services delivered by the H4+ JPCS was centred on national policies, there were several elements of the package that were additional to national policy, had budget implications or were implemented by the H4+ as exceptions to national policy. According to the MoH, several of these innovations are now under discussion. Ministry of Health officials seemed focused on targeting and absorbing innovations but some faced structural barriers, such as contracting retired midwives due to budget regulations. Furthermore, although MoH officials referenced some of these innovations, like the mama pack, there was some confusion about the policy process associated with making them into national policy. In particular, some cooperating partners (including two who between them plan to support four of ten provinces with a package of RMNCAH systems investments) had not heard about the policy shift to ensure every mother and baby received a postnatal check within 48 hours.

[75] For example, in interview with the H4+ technical working group, it was mentioned that H4+ JPCS countries met occasionally and each presented their best practices and innovations to each other. The INESOR team helped the H4+ prepare a list of successes and achievements.

4.4.3 Contributing to innovation for RMNCAH in Zambia

Innovation was a crucial component of the H4+ JPCS and an important aspect of any innovation is selection, documentation and considering how to integrate the results into the routine systems. The H4+ JPCS embraced and implemented many innovations in the course of its delivery.

Recognising potentially effective innovations in RMNCAH

Individual innovations were identified through the global policy processes associated with the Global Strategy for Women's Children's and Adolescents' Health and through the engagement of the H4+ partners at a global level. These include innovations promoted by the various platforms established to accelerate the Global Strategy including Every Newborn, A Promise Renewed,[76] Family Planning 2020, and the Commission on Life Saving Commodities. The H4+ JPCS contributes to testing the practical application of innovations in Zambia in order to support MoH policy formulation. Experience of individual H4+ agencies in testing individual innovations in other settings contributed to their selection as well.

Information on the success or failure of innovations gathered and made available to decision makers

The extent to which the H4+ JPCS has been able to engage in a structured approach to documenting and communicating progress in using or scaling up individual innovations (or indeed the whole programme) has been limited. While innovation was a priority aspect of the programme, the routine and intensive act of programme coordination took precedence to investing in the implementation of the full cycle of programme innovation. Furthermore, the H4+ in Zambia elected to sub-contract the monitoring and evaluation component of the programme and added responsibilities for documenting, lesson-learning and research to the contract. Despite the TORs for the M&E component requiring comprehensive documenting of best practices, and "a*dvice on the quality of the implementation of interventions in order to facilitate remedial action*"[77], little has been done in this area. H4+ agencies added additional elements to the contract including the production of human interest stories while the contractors said that funds were insufficient to do much more than routine monitoring and certainly not enough for significant operational research.

Replication of innovations across districts and provinces

The H4+ programme was in a strong position to support replication and scale up of a selection of innovations. Firstly, the innovations adopted by the H4+ programme had been tested in a small handful of sites prior to inclusion in the H4+ which ensured they could be operationalised. Secondly, the innovations introduced by the H4+ had immediate and measurable effects. For example, contracting retired midwives would have immediate impact on quality of care in deliveries. Shifting to a 48-hour postnatal check period would mean women remain in the facility for at least two days during which time, the bulk of complications in both mothers and babies could be identified and addressed. A reasonably good monitoring system would be able to measure the results of this policy shift. The impact of the mama packs, for example, was measured through rising demand over a one-year period. And, while there might be financing, performance and logistical challenges to resolve in relation to the 48-hour policy or even the mama pack distribution, these are all surmountable with good coordination and planning.

[76] *A Promise Renewed* is a joint UNICEF-USAID led initiative focused on accelerating child mortality reduction and specifically, until 2015, on the achievement of MDG 4 in high burden countries.

[77] WHO (2012) Terms of Reference, National Institute Contract for Monitoring H4+ JPCS delivery 2012-2015, Lusaka, 2012.

4.5 Division of labour in Zambia

Question Five: *To what extent has the H4+ JPCS enabled partners to arrive at a division of labour, which optimises their individual advantages and collective strengths in support of country needs and global priorities?*

Summary

- The division of labour within the H4+ was consistent with individual partner strengths and largely conformed to comparative advantage although there were only three H4+ agencies involved.
- The delivery challenges were primarily two-fold: timely funding flows to districts for activity implementation and long procurement processes both of which affected optimal implementation of the H4+ JPCS programme.
- Monitoring and evaluation, documentation, and lesson learning have been patchy and despite an external partner being contracted for the purpose, knowledge sharing within the H4+ group has been limited.
- The lack of a comprehensive sustainability plan undermines the catalytic nature of the H4+ JPCS programme.

4.5.1 Testing causal assumptions for the division of labour

Assumption 5.1: *H4+ teams at country level in collaboration with key stakeholders have established forums for coordinating programme action and the division of labour for H4+ JPCS financed and supported activities in particular and in RMNCH generally.*

Unless otherwise noted, for evidence cited in relation to assumption 5.1 see Annex 1, Assumption 5.1

The assignment of roles and responsibilities among H4+ partners was generally consistent with the areas of expertise across the H4+ members. Since there were effectively only three of the six H4+ partners operating in the delivery of the programme, rationalising their roles and responsibilities was easier. It was unclear how the budget was established and agreed but allocations were fairly evenly distributed across the three partners and consistent with the implementation roles and responsibilities of each partner.

The H4+ JPCS coordinated RMNCAH engagement at the national level in two ways. One way was through a specific H4+ JPCS technical working group chaired by the Ministry of Health (at the level of deputy director) and concerned mainly with the delivery of the H4+ JPCS. The second way was through the participation of H4+ JPCS members in pre-existing national coordination forums (as set out in section 2.4 above) including a revitalised RMNCAH Coordination Group that included all relevant cooperating partners.

Some of the H4+ JPCS partners have collaborated to apply for additional funding to work on RMNCAH together beyond the H4+ JPCS. An example is the successful application to the Reproductive, Maternal, Newborn and Child Health Trust Fund (RMNCH Trust Fund) for a one year 7 million USD grant to work in eight districts in Central Province. The strength of the H4+ programme was its fusion of the demand side work (especially the very difficult, slower engagement of communities, made possible using community engagement and mobilisation techniques) with the significant investments in supply side support on training, quality improvement, accountability and referral, combined with investments in building and reinforcing leadership, for example around the engagement of the district commissioners to participate in the MNDSR. The combination of health

systems investments, the community approaches, strengthening political will and so on, has demonstrated the value of simultaneous engagement at all levels. It is difficult to see how this programme could have achieved the same results without all the contributions.

***Assumption 5.2**: The assigning of activities and investments in support of H4+ JPCS programme goals in participating countries is based on both the distinct capacities and advantages of each H4+ JPCS agency in that country and the national and sub-national context for support to RMNCAH.*

Unless otherwise noted, for evidence cited in relation to assumption 5.2 see Annex 1, Assumption 5.2

Some challenges were noted around the flow of funds in the H4+ JPCS. In its role to lead on service delivery support, the H4+ agencies took an important step by electing to channel funds through district authorities rather than contracting an implementing partner. However, this did lead to delays in fund disbursements especially in the first quarter of the year when funds were delayed until the end of the second month. All the districts said that they rarely received the funds in the first month of the quarter during the rest of the year either.

A second delivery challenge concerned the pace and approach to procurement. UNICEF, as the lead on procurement, initially channelled funds for water reticulation systems in health facilities through the individual district offices supporting them to run a tender, contract suppliers and oversee delivery and installation. All five water reticulation systems contracted this way in 2014 are still operational and their maintenance has been absorbed into district budgets. There should then have been another round of installations in five more facilities but procurement planning was delayed and ultimately handled centrally. The resulting tender process was prolonged, specifications changed and costs increased. The result has been that instead of five systems, only two will be undertaken. More than a year later, at the time of the evaluation team visit, the contract had not been signed. Senior ministry of health officials also expressed some frustration about the length of time for procurement "*in the UN system*". The newly constructed maternity waiting shelters visited are in use already but so far without beds, mattresses, and blankets.

Table 13: H4+ members and their roles and contributions in the H4+ JPCS, Zambia programme

H4+ Agency	
UNAIDS	▪ Technical advice to information management and interfacing with the DHIS2 system ▪ Communications (radio programming) around PMTCT and HIV and AIDS reduction ▪ Defining PMTCT guidelines and integration into the RMNCAH continuum of care
UNFPA	▪ Pre-service training of midwives and recruitment of retired midwives ▪ Rehabilitation of labour annexes (labour wards) ▪ Construction/ rehabilitation of maternity waiting shelters ▪ Installation of solar power panels ▪ Integrated RMNCAH outreach services ▪ District, provincial and national MNDSR ▪ Adolescent health and comprehensive sexuality education ▪ Teacher training ▪ Training & strengthening of community groups & community leaders' capacity ▪ District and PMO monitoring of HCP & community volunteers
UNICEF	▪ Procurement of supplies and stationery (midwifery kits, delivery books, under-five record cards, etc.)

	▪ Procurement of hospital equipment including incubators, autoclaves, surgical equipment, resuscitation equipment and theatre, delivery room and labour ward equipment ▪ Support to the refurbishment of maternity annexes through the provision of beds, mattresses, blankets, linen, and other furnishings ▪ Refurbishment of maternity waiting shelters through the provision of beds, mattresses, and blankets ▪ Procurement of motorbikes ▪ Support training of community based volunteers (SMAGs, CBD) ▪ Incentives for different community groups including SMAGs, neighbourhood committees (bicycles, t-shirts, gum boots, umbrellas, torches, bags, etc.) ▪ Installation and maintenance of high frequency radios ▪ Expansion of mHealth for early infant HIV diagnosis ▪ Support in-service training on PMTCT and paediatric ART ▪ Procure and oversee the mama pack research ▪ Provision of running water and solar power systems to health facilities
WHO	▪ Contract and manage the partner responsible for H4+ JPCS monitoring and evaluation (INESOR, the Institute for Economic and Social Research) ▪ Printing guidelines and training protocols for RMNCH & paediatric care ▪ Orientation of health care workers on treatment protocols ▪ Developing and printing guidelines for EmONC ▪ Developing and printing information, education and communication (IEC) materials ▪ Support in-service training of health care professionals on EmONC, Family Planning, Helping Babies Breathe and others ▪ Arrange and convene the H4+ review and planning meetings ▪ Lead on the commemoration of international and national days; ▪ Lead on the provincial and district mentorship programme

***Assumption 5.3**: H4+ JPCS agencies have used structures and processes established for programme coordination at country level to rationalise their support to RMNCAH and to avoid or eliminate duplication and overlap in support. This trend is reinforced by increasing levels of coordination contributing to improved operational effectiveness and strengthened advocacy.*

Unless otherwise noted, for evidence cited in relation to assumption 5.3 see Annex 1, Assumption 5.3

None of the interviews with health staff at national and district level identified areas of significant overlap or duplication of effort on the part of the H4+ partners and the services they provided. Indeed, if there is any observation to make regarding overlap, it is that the model established by the H4+ JPCS could have been replicated much sooner and more often in other districts or by other partners thus increasing the systematic delivery of an integrated RMNCAH programme. For example, the new World Bank health systems strengthening/ RMNCAH programmes do not seem to link clearly to the H4+ JPCS programme nor to take the lessons learned forward. The advantages of the H4+ partnership approach to working together and building a coherent approach, according to MoH officials and the H4+ country team members, included:

- More consistent messages and common approaches to advocacy;
- A standardised approach to competency based training and follow up with supportive supervision;

- An agreed focus on a limited range of interventions (in the EmONC) so that capacity was strengthened in a focused way and not spread across the whole RMNCAH continuum of care all at once;
- Promoting the delivery of development assistance through the district health authority (the district health authority as the implementation partner) which ensures that the locus of capacity building is the authority most clearly responsible for health outcomes at that level.

Against this, some of the investments made have not been sequenced or timed ideally: maternity waiting shelters and some labour annexes are still to be equipped; WASH investments are incomplete, and as noted in sections 1 and 4, lesson learning, documentation and research was weak.

According to H4+ country team members, they worked together to develop a set of key messages around RMNCAH which were adopted by all. These key messages, including policies, focused on early attendance at focused ANC services, delivery with a skilled birth attendant and the post-partum check within 48 hours. On the demand side, the H4+ has combined its efforts to support community engagement on a number of levels that has contributed to overcoming some barriers to access and shifted attitudes about using the health facility, making this change possible with practical support such as through the maternity waiting shelter.

4.5.2 Achieving an effective division of labour in Zambia

The programme has led to a genuine experience of working together across all the agencies involved (UNICEF, WHO and UNFPA with selected participation from UNAIDS). Although UN agencies demonstrate collaborative efforts routinely in terms of the One UN initiative, they are rarely compelled to sustain coordination so closely at the programming level including through implementation, reporting and fund management. The pressure to work together and overcome institutional, personal and technical challenges to build and deliver a coherent programme of work was sustained through *the fact of the funding*. That is to say, without *ad hoc* funding, and in the absence of other source of funding, it is considered less likely that the H4+ members would work so closely together to plan and deliver this multifaceted programme. As it is, there were sequencing misfires and only three of the agencies were systematically involved in the programme. This is not necessarily because of a lack of perceived value in working together, but rather because of the inevitable (and possibly universal) pull towards prioritising time and efforts for resourced programmes, including accountability for financial resources.

Robust platforms and operational systems for coordinating support

It would be difficult to demonstrate that the H4+ JPCS significantly contributed to effective and robust platforms and operational systems for coordinating RMNCAH. Firstly, while the H4+ technical working group may have systematically engaged technical staff from both the H4+ partners and from the Ministry of Health, there is no evidence that this group was regularly or systematically working in coordination with other major stakeholders on RMNCAH. The technical working group was principally focused on delivering the H4+ JPCS. This focus would be appropriate of course in a context in which the catalytic nature of the H4+ JPCS regularly reached national coordinating fora. However, while H4+ partners participated in national coordination fora, it does not appear that they used these fora to build coordination around best practices and lessons learned from the H4+ programme. Secondly, the H4+ commissioned an independent group to deliver its project related M&E and this group did not appear to have had an impact on national operational policy. In one respect, that of influencing DHIS2 indicators, the H4+ approach may affect *future* operational systems by prompting a refinement of the HIV and postnatal check indicators and this would ultimately trickle down to all health facilities in the country.

The H4+ partners participate as a matter of course in national coordination fora and that would be expected to continue. The way in which the partners introduce and promote the lessons and policy implications from the H4+ JPCS programme could still strengthen in the future. The H4+ technical working group will potentially continue as the operational body for the joint UN health activities, for example the delivery of the RMNCAH Trust Fund programme.

Making best use of the individual strengths of H4+partners
The H4+ JPCS programme was heavily focused on district and facility delivery and much less so on provincial and national support. There was a drain on national UN policy expertise to support project delivery. Indeed, along these lines, the less immediately pressing work around developing national policy was noticeably reduced in favour of H4+ project delivery, according to MoH officials. One of the effects of this was the limited investment – at national level – into lesson learning and policy transfer resulting from the experience of working on the front line of health service delivery. Given the unique position of H4+ agencies in relation to national health authorities, there could have been more active leadership and coordination around building a package of RMNCAH integrated support that newly emerging programmes could replicate and deliver.

Collaborative programming *vs.* separate initiatives
The evidence is fairly strong that the collaborative efforts by H4+ partners are much more effective than they would be through separate initiatives. This is partly because the RMNCAH continuum of care could not be addressed by any single UN agency operating within its existing mandate. It is also because the programming approach selected in Zambia focuses on using district health authorities as implementing agents which has a much greater impact on capacity building than using NGOs.[78] One limitation to the impact of collaborative programming was introduced by different H4+ agencies' approaches to procurement. Where procurement was done by district authorities it was more streamlined, integrated into programme delivery and more timely.

4.6 Value added for advancing the Global Strategy in Zambia

***Question Six*:** *To what extent has the H4+ JPCS contributed to accelerating the implementation and operationalisation of the Secretary General's Global Strategy for Women's and Children's Health (the Global Strategy) and the "Every Woman Every Child" Movement"?*

Summary

- The H4+ JPCS modality was identified by senior MoH officials as "*the best approach*" to national and sub-national support for RMNCAH. It was used by national and district authorities as a model for other partners to follow despite identified limitations.
- Ministry officials were actively engaged in H4+ supervision, delivery and problem solving; this strengthened commitment and leadership extended beyond the H4+ programme.
- The approach to programme delivery in Zambia drew senior policy expertise away from the national forum and into the realm of project delivery. For example, H4+ partners missed opportunities to promote the global RMNCAH best practice guidance that was tested in the H4+ JPCS programme to other RMNCAH programmes.

[78] This is discussed in more detail in section 4.3 since the main limitation of the approach is that district authorities have to learn and use a UN system of financial management. The UN has still not been able to deliver through the districts using national systems.

4.6.1 Testing causal assumptions for value added

Assumption 6.1*: The establishment of H4+ JPCS in 2011 and its expansion in 2012 helped strengthen the rationale for and extent of policy support for coordinated action in RMNCAH at national and sub-national level by the H4+ agencies*.

Unless otherwise noted, for evidence cited in relation to assumption 6.1 see Annex 1, Assumption 6.1

The H4+ JPCS programme attracted new resources to underserved and remote areas, and the evidence presented so far has highlighted some examples of how this investment has shifted outcomes for women and children in some of these districts. Although it may be difficult to demonstrate that the H4+ JPCS was the driver behind RMNCAH policy development and implementation at national and sub-national levels, the views of the Ministry of Health suggest a correlation between the H4+ JPCS delivery and the acceleration of RMNCAH policy and programme focus. The H4+ programme was delivered in a context where many donor programmes were focused on health systems strengthening more generally as well as on specific systems elements such as essential medicines and supply chain management.[79] The H4+, with its focus on women's and children's health outcomes, introduced an important change in focus in 2011 in Zambia, and senior Ministry of Health officials said that the H4+ modality was the best approach among current cooperating partner approaches to national and sub-national support. This is because it operated through district authorities (largely) and aimed to build systems capacity through delivery. UN funds were channelled through district health systems. While there were positive and negative elements to this, the Ministry officials valued the direct support, the focus on immediate, practical results, and the long term capacity building.

As the H4+ JPCS comes to an end, other donor funded programmes cover almost the whole country with a package similar to the H4+. For example, Sida, DFID and USAID between them will deliver a variation of the H4+ JPCS in all districts of six provinces. The EU funded MDGi, World Bank, and RMNCH Trust Fund are all working in a set of districts rather than covering all the districts in a province. As cooperating partners pointed out during the evaluation, with effective national leadership (supported by the H4+), these programmes – especially the new World Bank programme – could be rolled out in a way that covers the remaining provinces with a minimum package. This would effectively create a national RMNCAH programme.

Assumption 6.2: *By providing targeted funding for global activities (and funding the coordinating office) H4+ JPCS programme funding facilitated the development of knowledge products and joint, coordinated advocacy in RMNCH by H4+ agencies which would not have otherwise been undertaken*.

Unless otherwise noted, for evidence cited in relation to assumption 6.2 see Annex 1, Assumption 6.2

It is neither practical nor desirable to assess the level of output of knowledge products developed at the global level by the H4+ partners when conducting a country case study. However, it is worthwhile to consider which H4+ global knowledge products may have been of most direct use in the policy and advocacy activities when viewed from a country perspective. In June 2016, the global coordinator for H4+ JPCS produced a listing by year and agency of the global knowledge products funded by H4+ through its global workplan. The products with the clearest potential linkages to policy work undertaken by the H4+ programme in Zambia include:

- Toolkit for RMNCAH strategic planning, implementation, monitoring and review (WHO, 2012)
- An RMNCAH policy compendium developed (WHO, 2013)
- Technical guidelines for maternal death surveillance and response (WHO 2013)

[79] There were exceptions such as the USAID funded "Saving Mothers, Giving Life" programme.

- Final version of Rapid Assessment of RMNCH Interventions and Commodities (RAIC) (UNICEF, 2013)
- Development of the list of essential life-saving commodities/equipment for MCH/family planning by the UN Commission on Life Saving Commodities with H4+ input (UNICEF 2013)
- Feasibility of indicators of Quality of Care for MNCH care in facilities tested in DRC, Chad, Tanzania, Zambia and Zimbabwe (WHO 2015)
- Midwifery Services Framework developed and CHW RMNCH training guidelines (UNFPA 2014)
- RMNCH training guidelines developed. A mapping of existing training tools for Community Health Workers (CHW) in SRH/MNH (UNFPA 2013)
- Core competencies for adolescent health and development for health care providers in primary care settings published (UNFPA 2015)
- Template for documenting innovations (UNFPA 2015)
- Zero Discrimination in Health Care and Putting Human Rights on Fast Track (UN Women 2014)
- Policy briefs and advocacy material on rights and equality for SRHR and RMNCAH – one global and two regional (UN Women, 2015).

It is difficult to know which of these products might have been produced at global level in the absence of the H4+ JPCS. What they do demonstrate is that H4+ partners have been active at global level in producing policy inputs, guidelines and advocacy tools that can support action at country level. H4+ partners specifically mentioned their use of the various RMNCH training guidelines, the technical guidelines for MNDSR and the materials to support RMNCAH strategic planning and implementation. Regarding the use of global policy documents, the national H4+ coordinator said that H4+ partners ensure their national, provincial and district level policy advice would always aim to be consistent with globally issued guidance. Furthermore, according to H4+ focal points: "*The practice when developing/ adapting guidelines or manuals is to develop nationally agreed guidelines that can be reproduced and used in districts*."[80]

Based on the review of H4+ documents in Zambia and as confirmed through interviews, the H4+ partners have sustained their efforts to focus on maternal and newborn mortality reduction over the lifetime of the programme. Technical and programme advisers have been engaged as H4+ JPCS focal points alongside other duties including the national H4+ coordinator based at UNICEF. This has theoretically enabled regular dialogue between the H4+ JPCS coordinating group and national policy processes. For example, the H4+ focal points report being engaged in the RMNCAH coordination group. However, as mentioned in section 4.5, MoH officials stated that one of the negative effects of the H4+ programme in their view was that it drew senior policy expertise away from the national forum and into the realm of project delivery: "*Coordination needs the right kind of person. Specialist technical skills are being used for project management. As a government, we are really feeling this is a gap and there is less technical assistance because the person is running the project*."[81] This comment was repeated a number of times over the evaluation visit.

Assumption 6.3: *H4+ partners, assisted by programme funding, were able to be more effective in advocating for commitments to Global Strategy principles and priorities than they would have been without programme support. Their communications and advocacy work was made more consistent through collaboration on common products.*

[80] Assumption 6.2 H4+ focal points
[81] Assumption 6.2 Senior ministry of health officials

Unless otherwise noted, for evidence cited in relation to assumption 6.3 see Annex 1, Assumption 6.3

H4+ focal points and the heads of agencies said they found it difficult to articulate a common position when they first started developing the H4+ JPCS programme in 2011. With practice and experience, they believed their ability to develop a common policy position has strengthened, becoming more coherent. To some extent, this trend is likely to have been supported by the regular, week long supervisory missions undertaken quarterly by H4+ focal points jointly with senior Ministry of Health and Provincial Medical Office officials. During these visits, Ministry of Health officials said that they were able to identify problems and immediately discuss and agree a way forward with relevant H4+ focal points. This process strengthened the policy coherence of the programme by enabling the main parties to build a common position 'on the go' as it were. It is one of the advantages of the programme model.

However, the programme finds a limitation in the fact that not all H4+ partners participated in the supervisory visits. World Bank colleagues, for example, since they were not H4+ JPCS implementers, had no budget to fund the vehicle and hotel costs that would have enabled them to join these missions. Although World Bank and UNAIDS colleagues may not have attended these missions anyway, the lack of budget to support their engagement was a deterrent. As for the H4+ JPCS collaboration, it is very likely that the process of delivering the programme over several years helped build consistency. The agencies linked to the H4+ have been able to develop other programme proposals including most recently, a proposal funded by the RMNCH Trust Fund.

***Assumption 6.4**: Where H4+ JPCS has contributed to improvements in service quality and access for RMNCAH these have in turn made a contribution to positive outcomes in RMNCAH including the targeted operational outcomes of the Global Strategy and "Every Woman Every Child".*

Unless otherwise noted, for evidence cited in relation to assumption 6.4 see Annex 1, Assumption 6.4

The H4+ JPCS can demonstrate some sustained outcomes in some locations. While it may not be possible to link H4+ inputs to a national effect (or even to a district effect), the Ministry of Health has valued the programme and believes it has demonstrated the potential for district level action on RMNCAH outcomes. Senior ministry officials have been supported to engage in global policy processes linked to the transition from MDGs to sustainable development goals (SDGs) (for example, through attendance at the Women Deliver conference in Copenhagen in May 2016). Ministry leadership has been vocal around raising commitment to RMNCAH among other donors, and many cooperating partners cite ministry leadership as a positive element in their decision to invest in national RMNCAH outcomes.

4.6.2 The value added of H4+JPCS

Working as a group, the H4+ partners have contributed to the development of RMNCAH policy in Zambia helping to ensure it is fully in line with the revised Global Strategy for Women's, Children's and Adolescents' Health. The H4+ has engaged parliamentarians around maternal and newborn health. It has also engaged some line ministries, for example those linked to youth and education, during the adolescent and youth health strategy development process. Links to other parts of the government are weaker or non-existent. For example, there is no evidence that the H4+ has been able to engage the Ministry of Finance and since the World Bank is not actively participating in the H4+ process in Zambia, their highly developed link to the finance, the public service commission and other important systems structures have not been integrated into the H4+ approach.

H4+ JPCS advocacy for national commitments to accelerate actions to strengthen RMNCAH investments and systems

The H4+ JPCS has demonstrated an approach to supporting RMNCAH outcomes at district level and has made efforts to engage MoH leadership in developing and testing that approach. In doing this, and specifically through its engagement of national health leaders, rather than directly through its own leadership of other cooperating partners, the H4+ JPCS has helped shift towards the expansion of the model to a majority of the country. However, the H4+ focal points have been unable to capitalise on their significant experience of delivering the H4+ in five districts to build and articulate national level commitment and coordination around scaling up the approach. Opportunities to package up and disseminate the H4+ experience were missed and other cooperating partners have found their way to a H4+ type programme through some element of "hit and miss." On the "hit" side, most of the new programmes will cover all districts in a province (and all facilities in a district) and they will be largely delivered by districts themselves. On the "miss" side, the 48-hour postnatal care policy has not yet been incorporated in the scaled up programmes despite the global guidance regarding its value and the H4+ generated evidence that it is possible to deliver on the ground. Although there has reportedly been agreement to include it as an indicator in the health management information system (HMIS) system, the operational switch from the current approach to postnatal checks to the 48-hour regime is so far unplanned.[82]

Lessons learned in implementing H4+ JPCS to inform the work of the H6 partnership

There are three main lessons learned from the experience in Zambia that could usefully transfer to the H6 as it moves forward.

Firstly, documenting experience requires time, resources and specific skills. Without documentation or investment in learning lessons, the value of the H4+ investments as catalytic is significantly reduced. Documentation alone is insufficient, knowledge management requires ready access to the learning and ability to ensure the evidence is presented in the right way, at the right time to have impact on a national policy process.

Secondly, while there were significant advantages to the H4+ JPCS programme delivery in Zambia (delivering a near complete continuum of care, having the ear and active participation of national authorities), H4+ partners need to be able to straddle micro project delivery and national policy support; a challenging balance act. The H4+ coordinator role is vital to success and should be delegated to a senior policy individual who is exclusively linked to the programme and has few or no other duties. Having one assistant would also free up the time of that coordinator to ensure the right links are made across other programmes delivered by H4+ partners and other cooperating partners.

Thirdly, by engaging in the delivery of services, H4+ partners developed good ideas and experience. However, they missed important opportunities to build policy coherence across other programmes as a result of that experience. The H4+ agencies were looked at by other cooperating partners who wanted more proactive coordination and leadership from the H4+ and the Ministry of Health. An example is the 48-hour postnatal check policy which could be taken forward systematically in all the new RMNCAH programmes that are anticipated to cover most provinces from 2016 onwards for the next three to five years.

5 CONCLUSIONS

This section presents the conclusions and implications of the field country case study of Zambia. The conclusions presented here are directly based on the findings provided in section 4. They are drawn

[82] For example, will the 48-hour check be additional to the current regime? How will all health staff be trained and will the standard record books be modified to include a place to record the 48-hour checks? There are a host of operational issues related to scaling up a new policy that have not been planned as yet.

from the answers to the six evaluation questions and directly address all six areas of enquiry of the End Line Evaluation of the H4+ JPCS.

5.1 Conclusions

1. **National coordination and leadership enabled the opportunity created by the H4+ JPCS programme to be used effectively**. National authorities pointed the H4+ towards neglected geographical areas and identified maternal health as the most important component to address under the RMNCAH continuum of care. The H4+ focused on five of the seventeen worst affected districts, particularly in remote areas and communities. The H4+ JPCS programme was effective in opening up previously underserved areas.
2. **In focusing on the critical points of the RMNCAH continuum of care, the H4+ JPCS has been effective in raising the quality and availability of maternal and newborn health services in the facilities where it has worked.** The H4+ programme has demonstrated how much can be achieved in a relatively short period of time. There are other programmes that will support RMNCAH in Zambia in the future and in particular, in the districts where the H4+ JPCS was delivered, including (and possibly mainly) the facilities and geographical areas not supported by the H4+ in those districts. This could potentially increase the catalytic nature of the H4+ JPCS programme.
3. **The H4+ JPCS successfully demonstrated a programme approach which contributed material gains to maternal health outcomes within a reasonably short timeframe (2012-2016).** The combination of better quality of care, increased supply of services, demand side engagement, strengthened referral systems and the accountability introduced by the MNDSR, combined together was able to increase the quality, utilisation and outcomes in the H4+ JPCS facilities.
4. **Delivering the H4+ JPCS programme for the most part through district health authorities strengthened capacity and increased the probability of ownership and sustainability.** While this approach may have had some short-term disadvantages in terms of the time taken to train district staff, it also had important strengths and ensured the focus was appropriately placed on sub-national authorities.
5. **Even though the programme was delivered through district authorities, the H4+ partners required Zambian implementers to learn and operate through the UN financial management system**. The UN partners did not, therefore, adjust themselves to deliver through Zambian systems. The full value of delivering through the sub-national authority was thus not realised and the H4+ was not able to maximise the capacity building opportunities of the JPCS at the county level.
6. **The H4+ programme in Zambia required a parallel monitoring and reporting process that was implemented alongside the national HMIS.** This created unnecessary expense and confusion and was not best practice in terms of using national systems/ strengthening national approaches to monitoring and evaluation.
7. **Shortfalls in basic principles of programme delivery affected sequencing and timing, which in turn reduced optimal demonstration of the programme potential to improve service delivery**. These shortfalls included first delayed and then long procurement processes, leading to late or out of sequenced delivery of goods and facilities, poorly managed delivery of inputs such as the water pumps and generators, and the on-going challenges around maintenance of equipment and the replenishment of key commodities in the programme such as mama packs. These underscore the programmatic challenges inherent in raising service standards in the many ways necessary to reduce maternal mortality. Early successes in the programme were not built upon (district-led procurement for example).
8. **Despite its achievements, the H4+ JPCS has not identified a comprehensive or even partial exit strategy to ensure the sustainability and durability of gains made.** The absence of

sustainability planning puts some programme achievements at immediate risk and others at risk over the medium term. Although some elements of the programme have been identified by individual district authorities to incorporate into their government budgets, the H4+ country team has not yet developed a strategy or coherent approach to addressing the end of the programme in ways that would optimise durability. For example, at the time of the evaluation, the H4+ country team had not engaged with the four new RMNCAH programmes starting in 2016 to ensure that key gains made under the H4+ JPCS would be preserved.

9. **The H4+ has been somewhat effective in supporting improved sexuality education and reproductive health services for adolescents and youth especially in rural areas**. This has been achieved through multiple investments in community engagement and mobilisation, peer educator training, support to youth engagement by the health and teaching staff, engaging community leaders and young people. Each H4+ partner engaged in the JPCS had some level of involvement in supporting community engagement and mobilisation. Taking a multifaceted approach to community engagement enabled the H4+ JPCS to develop an effective investment in youth and adolescent health. As with other investments, there is no sustainability plan and thus the achievements are unlikely to last.
10. **The H4+ JPCS focused primarily on delivering results at facility level and although they have reportedly influenced and helped shape national policy to adjust the RMNCAH package of care on offer (for example, with the addition of the mama pack or by altering the postnatal check to take place at 48 hours), there were missed opportunities to accelerate the scale up of these innovations at an operational level**. The MoH considered the JPCS a model for strengthening RMNCAH outcomes. Yet, critically, although the H4+ country team had had the opportunity to help shape the four new RMNCAH programmes launched by Sida, DFID, USAID and the World Bank in 2016, there had not yet been a structured learning process under the leadership of the MoH to ensure the new programmes benefited from the learning gained through the H4+JPCS experience.
11. **The H4+ programme was able to add skills but not people to the health care system.** The programme was able to strengthen professionalization and build skills in existing staff but not to resolve national level human resources for health obstacles and challenges. At the facility and district level, the H4+ programme did not address underlying and structural constraints. **Communication and translation of findings to support and influence national health systems strengthening (policy and delivery approaches) was thus inconsistent**. Greater participation by the World Bank in the day to day delivery of the H4+ JPCS might have helped identify more influencing opportunities within and beyond the health sector, for example, supporting the Ministry of Health to engage with the Ministry of Finance.

5.2 Implications for the H4+ (H6) going forward

As the H4+ partners move forward, they may or may not attract further dedicated funds for country level programming similar to those provided by Canada and Sida over the 2012-2016 period. The experience of the H4+ JPCS programme in Zambia suggests some lessons which could support future programming:

1. The H4+ should aim to deliver its support through national and sub-national authorities using national financial management systems to the extent possible. Similarly, H4+ monitoring should be done using national indicators; it is difficult see why the H4+, either at country or global level, would require indicators or gathering of routine data that the country itself does not collect or use.
2. To be catalytic and to support knowledge building, **H4+ programmes should be designed as learning programmes, setting explicit policy goals and linking experience at the district level with policy advice and technical guidance at the national level**. The evidence from H4+ experience should contribute to policy dialogue at the national level. Indeed, the H4+

approach has the scope to become a dynamic lesson learning super-highway by working to unblock barriers at local/ district level and helping translate practical experience into policy at sub-national and national levels. This can be done through using the H4+ experience to support the Ministry of Health construct coordinated approaches to tackling systems barriers at the national level and then ensuring the evidence and knowledge is shared at regional and global levels.

3. To support this learning process**, H6 programmes should thus set aside resources to support the systematic documentation of innovation, experience, and knowledge** which could then be used to inform policy formulation, advocacy and, where national authorities agree, scale up of the most successful approaches.

6 ANNEXES

ANNEX 1 COMPLETED EVALUATION MATRIX

Area of Investigation: Strengthening Health Systems

1. Question One: To what extent have H4+JPCS investments effectively contributed to strengthening health systems for RMNCAH, especially by supporting the eight building blocks of health systems?[83] **a. To what extent has regional and global technical support from H4+ helped enable country teams and national health authorities to identify opportunities, develop innovative approaches and design technically sound initiatives to strengthen health systems for RMNCAH?** **b. To what extent have H4+JPCS programmes at country level supported health systems strengthening interventions which are catalytic and have the potential to build on existing or planned interventions with international or national sources of funding?** **c. Are H4+JPCS supported investments sufficient in reach and duration to contribute to lasting changes in capacity for service providers which can sustain behavioural change?** **d. Are H4+JPCS supported investments at sub-national level (especially in high burden districts) capable of demonstrating approaches to health service strengthening which can be taken to scale at sub-national and national levels?**		
Assumption 1.1 *H4+ partners, in consultation with national health authorities and other stakeholders, are able to identify **critical and unserved needs in the eight areas of health systems support for RMNCAH**. The needs in each of the eight areas are not fully met by other sources of support and, importantly, programme support can build on investments and activities underway with national and external sources of finance and support to accelerate action.*		
	Information/data:	**Information sources:**
1	**Priority issues and unserved needs** "*One of the key challenges faced in Zambia has been that of shortage of skilled/trained health personnel. For instance, according to the SNDP, even though the number of frontline health workers (Doctors, Medical Licentiates, Clinical Officers, Nurses and Midwives) increased to 17,168 as of March 2010 from 12,173 as at end of 2005, it is still lower than the required establishment number of 39,360 in 2010. Further, the number of public sector frontline*	Institute for Economic and Social Research (2014) Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia,

[83] While the term 'health systems strengthening' applies to the entire health system rather than a specific sub-element, the inception phase has shown that almost always, H4+JPCC support to national health systems is aimed very specifically at strengthening national systems for planning, prioritizing, budgeting, delivering and assessing services in RMNCAH. For that reason, the evaluation will focus mainly on health systems strengthening for RMNCAH. It will not, however, ignore broader support to national health systems wherever that becomes evident.

	Health Workers was 0.93 per 1,000 populations in 2009 against the World Health Organization (WHO) recommended figure of 2.5 per 1,000 with the situation being more acute in rural areas."	Highlights of Achievements on Selected Core Indicators, March 2014, Pg. 6.
2	**Low coverage of key health indicators in 2012** "*The Health Management Information System (HMIS) data shows a low coverage of key indicators. For example, skilled birth attendance, facility delivery assisted by skilled attendants, family planning, emergency obstetric and neonatal care (EmONC) services, integrated management of childhood Illness (IMCI) and newborn care services. [There exists an] inadequate number of skilled clinical staff and lack of midwives in most health facilities … [and] limited referral practices exist with no feedback loop. Most of the districts are cut off during the rainy season for as long as six months. [There exists an] extremely high turnover of community volunteers due to lack of community kits and other incentives. Most districts do not have maternity waiting shelters, and this encourages home delivery*."	H4+ and the Ministry of Health (2012) Progress Report: April 2011 – June 2012, Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia, submitted to the Government of Canada through Canada International Development Agencies, Republic of Zambia, Pg. 3.
3	The key informants at the provincial health office suggested that the H4+ is a good initiative as it enabled the district to undertake training, renovations, supervision and monitoring at district health facilities. The H4+ targeted real issues of concern.	Provincial Medical Office, Western Province, key informant interview (KII), 11 July 2016.
4	**Decisions about where the H4+ should work:** Provincial Medical Office had a role in deciding where the H4+ should work. The 11 or 17 poorest performing districts were the shortlist from across the country. Regarding the facilities within the districts that were chosen, the Provincial Medical Office helped identify the facilities to choose. It was a 'data driven' process in that they were looking for the poorest performing and underserved areas.	Provincial Medical Office, Western Province, KII, 11 July 2016.
5	"*The objective being that, women and children from the five underserved and highly vulnerable districts (Chama, Chadiza, Lukulu, Kalabo and Serenje) to receive increased equitable access and utilisation of high impact quality MNH and FP services by 2015*."	H4+ (2013) Report for the 2013 CIDA H4+ Annual Review and Planning Meeting, held at Gonde Lodge, Kabwe, 4-8 November 2013, pg. 2.
6	**How were districts selected?** Selected districts covered five percent of the Zambian population (districts that are sparsely populated and hard to reach). Operational costs are high in these areas. The bottleneck analysis approach was employed to identify constraints and challenges. The Institute of Social and Economic Research (INESOR) assisted with this process. The Government of Zambia selected the districts from among the seventeen worst performing districts based on indicators including poor maternal health, no other significant donor support.	H4+ Evaluation Reference Group, KII, 7 July 2016.
7	**Selection of districts** The government selected the districts based on the poorest maternal health indicators. The selected districts had the lowest indicators and were in geographical locations that made them hard to reach. Also, the districts were	Heads of H4+ Agencies, KII, 7th July 2016.

	within provinces with lowest donor support and those that were not performing or progressing in RMNCAH outcomes.	
8	**Selection of districts** The Provincial Health Office in Eastern Province was involved in the selection of the H4+ districts. The focus of the selection process was the health facilities that showed poor indicators for maternal and newborn health. According to the provincial health officers, initially the H4+ aimed to support all the facilities in the district but the funds were clearly not sufficient to support or cover all so the number of facilities was reduced.	Provincial Medical Office, Eastern Province, KII, 18th July 2016.
9	**Lukulu selected chosen as an H4+ focus district** According to key informants at the District Health Office, Lukulu was included in H4+ programming for a range of reasons: • Health facilities were dilapidated • No equipment in health facilities • The maternity waiting shelters are in poor condition • Low post-natal coverage • High rate of maternal deaths • Inactive community based volunteer programme • Skills in need of strengthening amongst health workers. The population of Lukulu is 65,375. There are 14 rural health centres (RHCs), 1 urban health centre (UHC), 9 health posts, 1 referral hospital.	Lukulu, District Health Office, KII, 11th July 2016.
10	**Selection of the facilities for the H4+ support** Staff at the Lukulu District Health Office were presented with criteria for the selection of sites to be supported. For example, the health facilities needed to have some trained staff (or staff that already had some degree of training). There needed to be an existing maternity waiting shelter, even if it needed refurbishment. The facilities needed to be within a certain distance from the Boma (the main town) to ensure a referral service could be implemented. Rural health posts (rather than rural health centres, were not selected.	Lukulu District Health Office, KII, 11th July 2016.
11	**Luvuzi Health Facility** The rural health centre is one of 14 in Lukulu district. It sits under the Lukulu general district hospital and has 7 primary health care (PHC) posts referring to it. The PHC posts are not staffed with skilled people and only do very rudimentary activities.	Luvuzi Health Facility, KII, 12th July 2016.
12	**H4+ Priorities** According to the key informant from UNICEF, H4+ is aimed at strengthening district management. However, the district is still dependent on the central level of H4+ agencies. He further mentioned, that "*at the end of the day we*	UNICEF, KII, 11th July, 2016.

	can take districts to task and hold them accountable. It is an issue of governance". This is also a relevant point at the health facility level.	
13	**Geographical location** Districts that are hard to reach which were the most disadvantaged selected districts covered five percent of the Zambia population (sparsely populated, hard to reach). So operational costs are high. Used the bottleneck analysis approach to identify the constraints and challenges (INESOR helped with this process).	H4+ Evaluation Reference Group, KII, 7th July, 2016.
14	"*The main objective [of H4+] is to contribute to the improvement of maternal, neonatal and child health and nutrition in Zambia through increased utilisation of quality health and nutrition services by vulnerable women, adolescents and child in selected rural and urban districts comprising 30 percent of the Zambian population.*"	H4+ (2013) Report for the 2013 CIDA H4+ Annual Review and Planning Meeting, held at Gonde Lodge, Kabwe, 4-8 November 2013 Pg. 2.
Assumption 1.2 *H4+JPCS support to sub-national levels funds activities capable of complementing other investments and contributing to strengthening service delivery in RMNCAH. The funded activities are* ***appropriately sequenced*** *and matched with support to health systems strengthening provided by other programmes and sources.*		
	Information/data:	**Information sources**:
15	**H4+ National Human Resources for Health Strategic Plan 2011 – 2015**. "*This plan is built from six building blocks. These include: service delivery, human resources for health, health management information systems (HMIS), health care financing, and leadership and governance."*	Ministry of Health (2011) The National Human Resources for Health Strategic Plan 2011-2015, Ministry of Heath, Republic of Zambia, Lusaka. Pg. 11
16	**Health targets** National Health Strategic Plan sets out the following targets for Zambia as a whole: • Reduce the under-five mortality rate from the current 119 deaths per 1000 live births to 63 deaths per 1000 live births by 2015 • Reduce the maternal mortality ratio from the current 591 deaths per 100,000 live births to 159 deaths per 100,000 live births by 2015 • Increase the proportion of rural households living within 5 km of the nearest health facility from 54 percent in 2004 to 70 percent by 2015 • Reduce the population/doctor ratio from the current 17,589 to 1 to 10,000 to 1 by 2015 • Reduce the population/nurse ratio from the current 1,864 to 1 to 700 to 1 by 2015	Ministry of Health (2011) National Health Strategic Plan 2011- 2015: "*Towards attainment of health related Millennium Development Goals and Other National Health Priorities in a Clean, Caring and Competent Environment*", Ministry of Health, Republic of Zambia, Lusaka. pg. 16-18

	• Reduce the incidence of malaria from 252 cases per 1000 in 2008 to 75 per 1000 in 2015 • Increase the percentage of deliveries assisted by skilled health personnel from 45 percent in 2008 to 65 percent by 2015, and • Reduce the prevalence of non-communicable diseases associated with identifiable behaviours. *"Government desire is for all partners to abide to the Global Declaration which encourages partners to channel their support for Aid Effectiveness by utilising existing government systems. Sweden continues to use GRZ funding channels to support the MOH, with the application of external financial controls. The World Bank provides sector budget support to the MoH and the Zambia National AIDS Council; Non-earmarked health sector support from CPs represented less than 3.5 percent of all financial contributions in 2011-2013*."	
17	**Partnerships for Health and Co-ordination Mechanisms** (in Mid-Term Review of the Implementation and Performance of the Revised National Strategic Plan 2011-2016) *"Future health sector support from Sida will focus on Reproductive, Maternal, Neonatal, Child and Adolescent health service delivery (RMNCAH). That support will be provided jointly with DFID. The funding modality will be programmatic financial aid, earmarked to an agreed evidence-based and best-buy intervention package covering the full continuum of care including reproductive and adolescent health which has historically been under-resourced and low priority. The package of care will be delivered at district level and with focus on under-served areas. The provision of direct support to the government seeks to ensure strengthening of the national health system and a country-led response to RMNCAH.* *The United States government (USG) currently provides annual support to the Zambian health sector to the value of USD 375 million. USG support is provided through USAID, CDC, PEPFAR, the Department of Defence, the State Department and the Peace Corps. Much of the USG support is provided through off-budget funding, to specified projects. UNDP/Zambia has continued to support the GRZ in addressing challenges in the areas of democratic and economic governance, environment, gender and HIV/AIDS. Together with UNAIDS, UNDP/Zambia is working to provide capacity development and technical assistance to strengthen local institutions in the context of HIV & AIDS prevention, mitigation and treatment. JICA supports the GRZ through technical co-operation projects, grants and technical assistance. The health troika represents one currently active channel for focus on health sector coordination."*	Ministry of Community and Development, Mother and Child Health and Ministry of Health (2015) Mid-Term Review of the Implementation and Performance of the Revised National Health Strategic Plan 2011 – 2016, Republic of Zambia, (Final Report), Lusaka, June 2015 Pg. 318-319
18	**H4+ national policy level funding** Annual progress reports identify inputs from the H4+ to national policy level support. For example, in 2011-2012, H4+ JPCS resources were used by the H4+ to support the revision of the national Reproductive Health Policy "*to promote safe motherhood*".	H4+ and Ministry of Health (2012) H4+ Progress Report for April 2011 to June 2012, Lusaka, 2012.

19	Other organisations working to support health in Chadiza district were: • Centres for Disease Control and Prevention (CDC) – some facilities / some districts • Centre for Infectious Disease Research in Zambia, (CIDRIZ) is supporting some facilities with AIDS, TB and Malaria support and also neglected tropical disease control • A new grant is coming from the Global Fund to fight against Aids, Tuberculosis and Malaria (GFATM) and this will be used to support services in some of the districts covered by the H4+ • Various NGOs are also supporting health in the province • The Campaign for Accelerated Reduction of Maternal Mortality in Zambia (CARMMZ), funded by DFID and implemented by United Nations agencies, is now over.	Chadiza District Health Office, Eastern Province, KII, 18 July 2016.
20	**Other programme funding provided to Lukulu district**: • Government of Zambia • Care International (nutrition, prevention of mother to child transmission (PMTCT) and HIV-TB programmes) • CDC (outreach, mobile ART, technical support and supervision, training, HIV-TB detection, treatment, prevention) • A new Sida program is covering safe motherhood action group (SMAG) training, child health weeks, and some other training.	Provincial Medical Office, Western Province, KII, 11 July 2016.
21	**Other partners**: Sida support started during the first quarter of 2016 (and will extend to 2019). This support will build on some of the work of H4+ districts which have been given a budget to procure items and to do child health weeks and SMAG training. Sida funds will focus on all the health facilities including those that are not H4+ facilities in Chadiza district and the other districts of Eastern Province.	Provincial Health Office, KII, Eastern Province, 18th July, 2016.

Assumption 1.3

RMNCAH managers and service providers trained with support from H4+JPCS realize intended gains in competence and skills. These gains in skills and competencies are tested and verified during and after training.

	Information/data:	**Information sources:**
22	Support was provided to pay the salaries of six retired midwives, of whom three have been retained at Dongwe, Lishuwa and Luvuzi. Training courses conducted in Lukulu and Mitete were: EmONC LARC IYCF FANC*	Implementation of CIDA H4+ Initiative, Power Point Presentation, Lukulu, 9 July 2016.

	<2011 | 4 | 0 | 0 | 0 2011 | 0 | 2 | 0 | 0 2012 | 6 | 4 | 11 | 13 2013 | 13 | 3 | 0 | 13 2014 | 7 | 4 | 0 | 0 2015 | 8 | 6 | 0 | 0 2016 | 1 | 5 | 0 | 0 Totals | 35 | 22 | 11 | 26 **LARC: Long acting reversible contraception (such as implants)* *IYCF: Infant and young child feeding* *FANC: Focused Antenatal Care.*	
23	**Human Resources for Health (HRH)** Five trained midwives and three still in training. The district was able to hire six retired midwives to fill gaps. 39 staff have also completed the three week emergency obstetric and newborn care (EmONC) training.	Lukulu District Health Office, KII, 11 July 2016.
24	"*The presence of retired midwives and nurses has been contributing to the increased number of deliveries by skilled health personnel. Furthermore, the situation is expected to improve even more when the other staff who are in training return to their postings*."	INESOR (2014) H4+ Highlights of Achievements on Selected Core Indicators, March 2014, Lusaka, Pg. 7.
25	Training has been in basic emergency obstetric and neonatal care (BEmONC) and Option B+. They are now a paediatric antiretroviral treatment (ART) site.	Health Staff, Tafelansoni Rural Health Centre, KII, July 19th 2016.
26	• 25 health workers trained in Focused ANC (FANC) and 21 in long acting reversible contraception (LARC) • 43 people trained in paediatric ART which has enabled the district to open more facilities • EmONC training is valued for its transformative effects.	Chadiza District Health Office, Eastern Province, KII, 18th July 2016.
27	**EmONC training** Training had been done in sufficient numbers and every delivery was covered by skilled personnel using the Zambia national definition of "skilled" at least at the district hospital. The training has been highly valued. "*Among all the activities supported by H4+, EmONC training has been the most effective"* (in the words of one key informant) and EmONC training was his 'top pick' out of all the H4+ support in terms of having a transformative effect. For him, it was as if a different person had come back from training. One midwife was excited by the fact that the previous week she had resuscitated a newborn and she said that it made her feel proud and strong to be able to intervene that way to save a life. We saw the newborn later during the visit to the district hospital. However, before the training, the midwife did not know how to resuscitate a newborn and so it was a completely new skill to her. She also commented that having new and powerful skills was the best thing about the	Chadiza District Health Office, Eastern Province, KII, 18th July 2016.

	programme. Several training reports were seen at the health office, including EmONC, Option B+ management, paediatric ART, training for SMAGs and community health workers. In all of the reports, students were tested at the end for knowledge and had to achieve a minimum grade or else take the test again.	
28	**Some of the areas that were identified for improvement included:** *"Adding more people on the ground [in Zambia], having more retired midwives by increasing funds, collecting information routinely through health management information system (HMIS) (e.g. community births), easing some UN bureaucratic processes which took long, and increasing district ownership."*	H4+ Canada Supported Activity, Mid-term Review, Vol. 1, Global Report, Period: 2012-2013, 30 April 2014, pg. 36.
29	**Trainings were conducted in** • Communication for change, human rights approach, H4+ activities and long term family planning. Twenty-one staff from health centres were trained in LARC insertion, and out of the 21 centres, 18 are implementing the LARC programme and inserting implants • Since the H4+ started, Chama district has increased its outreach programmes with all health facilities conducting outreach services • Seven health staff were trained in providing EmONC services • SMAGS were trained and 10 out of 23 health facilities have trained SMAGs • PMTCT and Option B+ training delivered and HIV-exposed babies are being followed up • Seven nurses were sent for training in midwifery • Three retired midwives were contracted and deployed to support midwifery services while nurses were being trained.	H4+ Field Mission to Build Capacity for Monitoring and Evaluation of Maternal and Child Health Activities in H4+ Districts and Indicator Harmonization, University of Zambia, Institute of Economic and Social Research (INESOR) October, 2013.
30	**Human resources for health (HRH) challenges in Zambia:** The informants said that the issue in HRH used to be that not enough health workers were trained, but now the issue is rather that the absorption capacity is poor. The Ministry of Finance sets the number of health workers that can be appointed in a given year or it might set an amount as a maximum to fund new health workers outlined in the National Health Training Programme. The Zambian approach to HRH based on 'the establishment' (the formal staff structure or agreed posts at a facility) is a rigid and inflexible system that is updated every five years or so. In between, newly trained health workers may continue to be paid at their previous grade for several years. So a nurse who has upgraded to midwife would return to her health facility, perform the duties of a midwife, but continue to occupy (and be paid) at the grade of a nurse until the establishment for that health facility is updated. It demotivates. The number of certified midwives is growing based on graduates from the programme but the number in post is declining because the records are not being updated to take account of the newly trained midwives. A further point is that the establishment is structural and not based on need or reality. The Central Board of Health makes decisions, and rather than adopting an incremental approach based on what is actually in place (i.e. start with the number of nurses and midwives in the facility and adjust or increase this over time) the	World Bank, KII, 14 July 2016.

	policy has been to decide centrally what staff a facility should have. However, there is a decentralisation plan afoot and it may be that further HRH reforms will be delayed until then. So far, there has been a government circular about decentralisation but no law. The IMF expenditure caps need management and there should be contact between the Ministry of Health (MoH) and the Ministry of Finance about it.	
31	"*Positions in the Establishment can only be filled when Treasury authority is granted. The funded Establishment represents positions with the Treasury authority from the [Ministry of Financing]. In this regard, the head count … represents the number of funded positions in that particularly year*."	Government of Zambia (2011) National Human Resources for Health, Strategic Plan, 2011-2015, Ministry of Health, Lusaka, pg 16.
32	*"Clinical cadres do not conform to the Establishment. The Establishment does not meet or reflect hospital or health sector needs. We cannot change the Establishment to reflect skills or cadres so our actual cadres usually do not match up with the Establishment."* The key informants are explaining that the establishment of the hospital (the number of doctors, nurses, midwives etc. that it is able to have according to the Public Sector Commission) does not reflect either the needs of the hospital on the one hand or the actual range and numbers of staff that the hospital currently has in place.	Chadiza Hospital staff, PowerPoint presentation to the Evaluation Team, 18th July 2016.
33	Retired midwives have been contracted to fill the place of nurses who have gone to be trained.	Provincial Health Office, Western Province, KII, 11 July 2016.
34	Nurses used to retire at age 55 but this was extended so that if they chose, they could work until age 65 and more midwives work for longer. Midwives that retired at 55 are re-joining to work full time again. H4+ funds are being used to fund contracted midwives while they wait to be re-integrated into the health service.	H4+ Evaluation Reference Group, KII, 7 July 2016.
35	**Staff turnover** *"Looking at performance, you might see fluctuations in the number of skilled staff. This is due to the movement of staff."*	H4+ Evaluation Reference Group, KII, 7 July 2016.
36	**Training about referral** Nurses are given training about referral when they complete EmONC training. The midwife is trained on partograph. There are certain things that cannot be done in the BEmONC (for example, blood is only given at the comprehensive emergency maternal, obstetric and neonatal care (CEmONC) facility). The transport issue is overcome with the ambulances.	UNICEF, KII, 11th July 2016.
37	**The H4+ supported training of community based health workers** (CHWs) in Serenje District in the care of the newborn at home. The training went well but there were no funds for the follow-up monitoring and so far there has been no return to the district to assess the impact of the training, follow up the process or determine whether to do any more training/ scale up etc.	H4+ Evaluation Reference Group, KII, July 7th 2016.
38	**Human Resources for Health**	

<table>
<tr><td></td><td>"Five trained midwives have returned to the health facilities and three are still in school. We hired six retired midwives to fill gaps. 39 staff have done the EmONC training."</td><td>District Health Office, Lukulu, KII, 11th July 2016.</td></tr>
<tr><td>39</td><td>Current Funding for Human Resource (DFID)
"DFID currently has a large human resources for health support programme. This includes training anaesthetists and other specialists. DFID is funding a programme focusing on community health assistants and the training of medical technicians which is already set up and running. Moving forward, DFID is considering a focus on anaesthetist technicians. CHAI also supporting the training of some anaesthetists."</td><td>DFID, KII, 14th July 2016.</td></tr>
<tr><td>40</td><td>"H4+ has helped with human resources which we think is critical, like with midwives' capacity. If there are no bodies to assist delivery, there is no point."</td><td>Senior Officials, Ministry of Health, KII, 8th July 2016.</td></tr>
<tr><td>41</td><td>"The facility should have a clinical officer but instead has the Officer-in-Charge (who is a midwife), a retired midwife, a psychosocial counsellor and two cleaners. All staff help out with providing all the health care and even the cleaner may have to give injections or help with a delivery. They have all had EmONC training."</td><td>Luvuzi Rural Health Facility, Western Province, KII, 12th July, 2016.</td></tr>
<tr><td>42</td><td>Nursing capacity
Training for midwives: Training used to be just one intake per year but now there are two intakes within a year. Nurses are sponsored to enrol in midwifery training in every H4+ district.
Retired midwives
The employment of retired midwives has also meant that there have been no gaps in service provision when nurses go for training. Some facilities had no nurse; part of the government strategy was to ensure a network of BEmONC sites that referred to a CEmONC facility (the district hospital) and ensure there were trained midwives in each of the BEmONC facilities at a minimum. The government said every district would have one CEmONC site and five BEmONC sites."</td><td>H4+ Evaluation Reference Group, KII, 7th July 2016.</td></tr>
<tr><td>43</td><td>"Nurses used to retire at age 55 but this was extended so that if they chose, they could work until age 65 (so now there is the option) and more midwives work for longer. H4+ funds are being used to fund contracted midwives."</td><td>H4+ Evaluation Reference Group, KII, 7th July, 2016.</td></tr>
<tr><td>44</td><td>Skilled up Enrolled Nurses (ENs) but they are not added to the establishment (gained 8 Enrolled Midwives (EMs) during four years of H4+
Comparative analysis
<table>
<tr><th></th><th colspan="2">2011</th><th colspan="2">2015</th></tr>
<tr><th>Estab</th><th>Actual</th><th>Gap</th><th>Actual</th><th>Gap</th></tr>
<tr><td>ENs</td><td>32</td><td>33</td><td>23</td><td>42</td></tr>
<tr><td>EMs</td><td>4</td><td>26</td><td>12</td><td>18</td></tr>
<tr><td>Totals</td><td>36</td><td>59</td><td>35</td><td>60</td></tr>
</table></td><td>H4+ (2016) Progress Report, Implementation of CIDA H4+ Initiative, Power Point Presentation, Lukulu, 9th July 2016.</td></tr>
<tr><td>45</td><td>Capacity constraints</td><td>Eastern Provincial Health Office, KII, 18th July, 2016.</td></tr>
</table>

	There is a limited number of midwives even with the training; midwives have been trained in EmONC. Nurses and other health staff including cleaners (Classified Daily Employees (CDEs)) are also trained in EmONC to boost capacity.	
46	**Assessing training effectiveness/usefulness** WHO officials said that in their trainings, pre-test and post-tests assessments were done and improvements could be noted from comparing results of these tests. When observing EmONC and family planning practical training, it was possible to see improvements, for example in skills like the insertion of implants. The trainings were structured to cover EmONC theory in the first week, assimilation and practical review in the second week and competency-based training and assessment in the third week. Each participant is also assessed at the end of each session. Follow up visits were conducted to assess the trainings, observe if skills are improved or there are challenges. However, follow up has not been systematic due to limited resources and transport in some districts. E.g. Kalabo and Chandiza have no transport. [**Note**: the pre and post testing for EmONC training was corroborated verbally by ministry of health technical staff.]	WHO, KII. July 8th July 2016.
47	**Training Needs** According to members of the Community Health Advisory Committee, training is needed in order to improve the provider's attitude towards service users. "*If the sole trained provider is on leave or travels to town, then there is no one here to provide care*." The Advisory Committee feels that there should be three trained providers and two cleaners. The providers are all male (one midwife and two cleaners) and this is an issue for the community. They feel that some service users may be reluctant to come to the clinic because of this. There were some concerns expressed about the quality of care and respect of patients by staff. The Lishuwa Community Health Advisory Committee said they had been trained to maintain the facility and the health posts; they have been trained to recognise danger signs (e.g. referral for pregnant women, malaria, HIV+ positive individuals and follow-up); they have been trained to refer any form of bleeding (and to avoid the use of traditional medicines); they were taught in July 2015 and again in 2016.	Community Health Advisory Committee, Lishuwa Rural Health Centre, FGD, 13th July 2016.
48	**Training for health workers in Zambia – 2011** "*As of 2011, there were 22 pre-service, 7 post-basic and 16 post-graduate training programmes available within the country*."	Ministry of Health (2015) National Human Resources for Health, Strategic Plan, 2011 – 2015, Ministry of Health, Republic of Zambia, Lusaka Pg.16.
49	Thirteen **Safe Motherhood Action Groups (SMAGs)** have been formed. The health personnel establishment is 399 and actual number of staff is 234 of whom 12 are certified midwives. The implementation of the H4+ in Lukulu started in 2012.	Lukulu District Health Office, KII, 11 July 2016.

50	**Impact of SMAGs on the survival of women and newborns** "*Before the training we were in the dark about these things; we didn't know that if a woman was in trouble in labour that she could get help; we didn't know what kind of help we could get. We didn't know that H4+ could help renovate the structure and make things better.*" "*We didn't know a lot about the kind of things available, like the ambulance that could pick up the woman for referral*." "*We didn't know about the availability of an ambulance.*" "*We didn't know before that it was important to register the woman early at the clinic."* "*People know the motto, 'No women should die giving life'."* "*You see the structures themselves like maternity waiting shelter; People like to come to the maternity waiting home now.*" *"We deal with the young ones, the youth. But the challenge is that girls are shy to come*." "*Before the training a lot of people were interested in traditional methods of medicine and a lot of women used to die in pregnancy. After the training we came to learn that we should come and register the baby and for delivery*." "*I agree with others, that in my community no more women will have deliveries in my village and there have been no more stillborn.*"	Safe Motherhood Action Group, Luvuzi and Lishuwa, FGD, 12th and 13th July, 2016.
51	**Role of SMAGS (as reported by SMAGs at Lishuwa and Luvuzi) was to encourage women and young people to:** • Go to the centre/clinic for antenatal care • Use contraception to avoid/ space pregnancies • Seek medical advice and information, especially when in pregnant • Deliver at the hospital because "*when they deliver at home they could end up with many complications"* • Register at the clinic in the first three months of pregnancy including women who miss a period • For those who live far away, come early to the clinic [before the time for delivery] and stay in the maternity waiting shelter. • Attend for HIV testing, "So *that the baby does not become infected"* • Ensure they are not overworked or lifting heavy objects and encourage women to take care of themselves and not get stressed • Learn about breastfeeding and family planning • Generally, SMAGs are there "t*o encourage pregnant women to come to the clinic as soon as she knows she is pregnant and she should come with her partner*".	Safe Motherhood Action Groups, Luvuzi and Lishuwa, FGD, 12th and 13th July 2016.
52	H4+ does not meet with SMAGs but SMAGs meet among themselves, reviewing monthly reports, register review etc. District meets health volunteers quarterly but frequency reduced through the project and now meet once or twice to review progress and talk about challenges. Volunteers from different parts to compare notes etc.	Health Officials, Lukulu District Health Office, KII, 11th July 2016.

53	**Community Based Volunteers play a role in addressing priority issues:** Volunteers from the SMAGs in Tafteransoni summarised the role and responsibilities of SMAGS: The SMAGS sensitise the community on the danger signs [for women] during in pregnancy. For example, pregnant women should not have persistent headaches when in labour. Also, SMAGS teach the community that the placenta should not remain in the womb or birth canal for more than 30 minutes after labour and that labour should not exceed more than twelve hours. "*I speak with the community about HIV and do role plays about antiretroviralS. I educate [the community] about elements of transmission of HIV. I include education about how a baby can get the HIV virus in women and explain that HIV can be transmitted through breastfeeding and when giving birth*."	Safe Motherhood Action Group and Community Based Distributors, Tafelansoni Health Facility, FGD, 19th July 2016.
54	**The SMAGs in Tafelansoni further summarised their role:** • Sensitising the community about safe motherhood • Encourage women to go to the health facility early and accompanying them • Educate the community on 'danger signs' • Educate the community on family planning and encourage women to visit the facility after giving birth. • Helping to register the deaths although this was in the past, before H4+, when more people were dying in the community Meetings with men and women to change the behaviour and traditional beliefs amongst men…	Safe Motherhood Action Group and Community Based Distributors, Health Facility, FGD, Tafelansoni 19th July 2016.
55	**The SMAGs in Chadiza described their roles and responsibilities:** *"We implement activities in line with our moto that 'no woman should die while giving life' and also sensitise and encourage pregnant mothers in communities to deliver at the health facilities. Before the SMAG was formed, the catchment area used to experience a lot of maternal and neonatal deaths and unnecessary abortions were common. They [the SMAGs] were trained in community mobilisation, educating communities on how to care for a pregnant woman and newborn babies. They conduct hospital visits to educate mothers at the shelter and those in the wards and encourage caregivers to take care of and maintain the maternity infrastructure at the hospital."*	Chadiza Rural Health Hospital, Safe Motherhood Action Group, FGD, Chadiza, 18th July 2016.
56	*"The role of SMAGs is to education the community, identify high risk identification and escort mothers to the clinic. They also encourage them to make early bookings*." (Lukulu)	Lukulu District Health Office, KII, 11th July 2016.
57	**Distance to be covered and enabling environment:** *"I walk four hours to reach the communities."* *"Transport issues came when we had to come to the centre."*	Safe Motherhood Action Group (SMAGs), Luvuzi and Lishuwa, FGD, 11th and 12th July 2016.

	"To come from where we live, here to the health centre, is very far. It is difficult for women to make the journey and sometimes the woman experiences tears [for example, a cervical tear during delivery]. We are still challenged to address the tears that happen to women." *"To come to the clinic they walk but for those in far flung places they are still encouraged to come when the baby is small."* *"We are still challenged to reach the masses."* *"The only transport I use is cows, but for those I have to pay (Scotch cart)."* *"We were given bags, umbrella, t-shirts, raincoats and some equipment but these are all torn [worn out]."*	
58	**SMAGs:** They are not provided with incentives as their work is purely voluntary. Community and family members sometimes discourage SMAGs to volunteer: "S*ometimes it could be my wife discouraging me, she would always ask, how I am going to take care of material needs of my family if I continue my work as a SMAG since I do not get paid?…but we are not discouraged.*"	Safe Motherhood Action Group, Chadiza Rural Hospital, FGD, 18th July 2016.
59	What will continue when the H4+ ends is unclear but there is funding to train one midwife per district. The EU programme (MDGi) has adopted the Mama kits and the government will also incorporate into the next budget it says.	Provincial Medical Office, KII, 11th July 2016.
Assumption 1.4 *Capacity development efforts in RMNCAH are supported with well-sequenced supervision and required equipment, supplies and incentives to allow service providers the ability, opportunity and motivation to improve service quality and access.*		
	Information/data:	**Information sources:**
60	H4+ offered chairs, table, delivery bed, equipment for newborn resuscitating (such as neonatal ambu-bags, penguin suckers), manual foetal scope to listen to the baby's heart-beat.	Health Staff, KII, Tafelansoni Rural Health Centre, July 2016
61	They still have challenges with infrastructure which include: inadequate staff, lack of electricity connection to the maternity waiting shelter, and lack of water connection to the toilets "*which has resulted in them being in a bad state*".	Community Advisory Committee, Luvuzi Health Facility, 12th July, 2016.
62	**Drugs and commodities:** *Pull system* and not much trouble with stockouts. Facilities can estimate how much of their main commodities they will need. Some stockouts of magnesium sulphate but not for long. Main stockouts are for condoms (male and female).	Lukulu District Health Office, 11th July 2016.

63	The provincial medical officer mentioned the concept of '**talking walls'** which consisted of the public presentation of targets, achievements, and information. The clinics displayed 'talking walls' and worked with communities to engage them in using them. Talking walls are used to transmit and discuss information with communities in an open way and to promote decision making.	Provincial Health Office Staff, Western Province, KII, 11th July, 2016.
64	There were **a number of hand written job-aids** around the clinic. **Stocks were good although there was no IV fluid (just dextrose) and no in-date magnesium sulphate or condoms (male or female).**	Lishuwa Rural Health Care Facility, Visit/Observation Note 13th July, 2016.
65	**Procurement of goods and supplies by UNICEF:** With the last tranche of funding, UNICEF used about USD 150,000 on the equipment for labour ward to procure delivery beds, obstetric care kits, suction machines, wheelchairs, weighing scales, Ambu-bag, incubators (in some health facilities), blankets, mama packs (which contain a blanket, baby bag, nappy, bath, chitenge).	UNICEF, KII, 11th July 2016.
66	**Funded inputs at district level** In Chadiza District, the capital projects at district level included one kitchen refurbishment, three labour wards, three maternity waiting shelters, one placenta pit, and solar panels for three facilities altogether costing Kwacha 1.5 million. Also, there was the purchase of two ambulances, five motorbikes, water reticulation and other smaller improvements.	Chadiza District Health Office, KII, 18 July 2016.
67	**The Flying Squad:** Asked about an innovation, the medical director said that he would choose his own innovation: The *Flying Squad*. In this approach, when an emergency occurs, depending on what it is and where it is, the doctor goes in the ambulance with the theatre nurse or the midwife and a set of supplies. The woman is attended at her home if at all possible. This saves time if it is a big emergency and it means the family can stay in the home which saves them a lot of money and effort and time. Recently, they managed a cervical tear and post-partum haemorrhage at an 80 Km distance. The woman is doing very well and was able to stay home. This is the medical director's own idea and his own innovation.	Lukulu General Hospital, KII, 12th July 2016.

68

Health facility name	Power Grid? Solar Panels?		Water Inside? H4+ support		Sanitation (maternity ward)	VHF Radio	Transport (motorcycles)	Waiting mothers' shelter (WMS)	Delivery ward furniture and equipment	Other
Luzuli in Lukulu District	N	Several. One connected to the delivery room installed by H4+ and shared with the vaccines. Disconnect fridge to use lights at night for delivery.	N	Water currently taken from a shared pump on site; UNICEF will install a water system based on borehole, pump, water tower and gravity fed piping for health facility and WMS	Toilet fitted in labour room and WMS but not connected to water.	Yes. Working and battery in order and functioning.	One motorcycle in working order; 20l fuel per month from district to support outreach.	Refurbished structure. Six beds with mattresses/ blankets. Two toilets but not connected. No handwashing facilities; outdoor kitchen;	Privacy curtains Foetal Scope Aspirator Scale Delivery bed Emergency drugs all seen/ verified.	No fence.
Lukulu District Hospital	N	Uses the town wide generator so off from 24h to 6h. Solar panels for lights in theatre and delivery. Babies removed from incubators; Call GenSat to switch on during an emergency.	Y	Water in and functioning. New hospital design will include toilets and showers in the WMS and labour wards.	New hospital design will include toilets and showers in the WMS and labour wards.	No radio at the hospital; VHF base station is at the DHO where the ambulance is parked	A couple of vehicles.	Brand new 12 bed WMS going up; indoor kitchen; toilets and showers. No beds or mattresses, blankets or kitchen equipment yet but the facility is not completed.	Incubator; beds including delivery beds; equipment and furniture for the waiting mothers shelter.	Fenced
Lushuwa Rural Health Clinic	N	Yes more than 12 but no longer working and not connected to anything. Delivery room lights and fridge connected to a dedicated panel (H4+ installed).	Y	Water inside; Water pump with submersible; windmill, water tower and gravity fed system.	One toilet in the maternity unit. Latrines along the back.	Yes, working. Staff use mobile phones instead though.	Yes, one motorcycle. In use by the midwife for routine trips to the district head office and for outreach.	Yes, with space for six mothers. Outdoor cooking but an indoor facility to store food. One toilet. No beds or mattresses, blankets or kitchen equipment yet.	Old beds; new delivery bed. Equipment was seen; Sterilisation and cleaning not 100%. The only functional vaccine fridge is in the delivery room making difficult to move around.	No fence

Infrastructure inventory, Lukulu District Health Facilities, Western Province, July 2016.

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Health facility name	Power Grid? Solar Panels?		Water Inside? H4+ support		Sanitation (maternity ward)	VHF Radio	Transport (motorcycles)	Waiting mothers' shelter (WMS)	Delivery ward furniture and equipment	Other
Chadiza District Hospital	Y	No, but there is a generator attached to the hospital which it kicks in when there is no mains power.	Y	No problems with water recorded.	Yes one bathroom for patients	Yes connected and operational	Yes – 5 in the district but unclear how many at the hospital.	Yes – quite new/ 12 beds, toilets and a shower.	Some furniture but delivery beds are old, autoclave not working, incubator with an unknown issue. Medicines largely in stock.	Equipment maintenance requested. Also a wall around the hospital to deter thieves.
Taferansoni Rural Health Centre	N	Yes. Three panels for the vaccine fridge; panels for the maternity annex, main building and the maternity waiting shelter.	N	Water is pulled by hand using a manual pump outside the health facility. The facility will get a borehole with submersible pump, water tower and windmill from H4+ (still to be installed)	One shower in the maternity annex located in the antenatal room. No other sinks, toilets or showers.	Yes connected and operational and used.	Yes one Yamaha motorcycle used for outreach and for admin. 30L of fuel from the DHO every month.	Yes. Newly constructed with 12 beds. Four showers and sinks but no toilets. The kitchen is being used as an education room and a new kitchen has been constructed. There are no beds or mattresses or blankets yet.	Obstetric equipment is limited and incomplete although penguin suckers, ambu-bag and foetal scope is there. No manual aspirator. Post-natal beds in poor condition; delivery bed old. No privacy screens.	

Infrastructure Inventory, Chadiza District, Eastern Province, July 2016.

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Problems with the H4+ equipment and infrastructure support

- The equipment has not covered all the needs and midwives are going back to their facilities with skills but not the right equipment
- Some of the equipment is faulty or has never worked; for example, the autoclave at the hospital and the incubator

District Health Office, KII, Chadiza District, Eastern Province, 18th July 2016.

	▪ The water systems have not been installed in all the facilities. The district thought it would get five facilities equipped with water but there is one now and another one coming still. But not five. ▪ Some of the equipment at the hospital that has been procured by the H4+ includes an autoclave, incubator, delivery beds, baby warmers, midwifery kits, mattresses, trolleys, penguin suckers etc. However, on a tour of the hospital, it was evident that one of the incubators does not work properly (the alarm goes off) and the provincial technical guy cannot figure it out. Then also the autoclave makes everything warm and moist, creating the perfect environment for bacteria so it is not used (was brand new from UNICEF).	
71	**Equipment given to Lukulu hospital:** Maternity equipment, blankets, incubator, theatre table, mama packs and other supplies. Also the H4+ helped construct the maternity waiting shelters.	Staff at Lukulu General Hospital, KII, 12th July, 2016.
72	"*Equipment has not been as comprehensive as it could/ should have been. So midwives are trained in EmONC but then return to the facility without the equipment they've been trained to use."*	District Health Office Staff, KII, Chadiza District, Eastern Province, 18th July 2016.
73	Sometimes **condoms are unavailable** (male and female). This is a worry to them because young people are likely to have unprotected sex and also be discouraged from visiting the centre if commodities are not reliably available. The volunteers felt strongly that **basic tools and equipment would help them to be more effective in their work**. They need transportation (bicycles) as they are walking to the villages to do outreach (as they are sometimes walking 2 hours or more to reach villages outside of town). ID cards and T-shirts would ensure "*that we are known*" in the community as working for the Ministry of Health.	Youth and Adolescents, FGD, Lukulu District, 12th July 2016.
74	*"There is need for more ambulances so that they can be stationed in zonal health centres to quicken the referral system."*	Chadiza District Hospital Staff, KII, PowerPoint Presentation 18th July 2016.
75	▪ The solar panels on the main part of the RHC are not working (but did work at one time) therefore, there is no electricity ▪ The solar panels on the maternity ward are working, and the vaccine refrigerator is also running on same solar panel. The fridge is jammed into the maternity ward so that access to/space around the delivery bed is very narrow) ▪ *"In some ways, one can feel that the services are getting worse; for real improvements, one can only talk of the maternity shelter."*	Community Health Advisory Committee, Lishuwa Rural Health Centre, 13th July, 2016.
76	**The ambulance** The ambulance has contributed significantly to improving referral to the hospital. They said they needed transport in form of bicycles, and at times they can use bicycles to take pregnant mothers and children to the hospital.	Safe Motherhood Action Group, FGD, Chadiza District Hospital, 18th July 2016.

77	There is a **lack of transportation services**. There is an ambulance but sometimes when they call, the single ambulance is already elsewhere. In addition, the ambulance is to be used for maternity cases only (leaving other needs of the community unattended).	Community Health Advisory Committee, Lishuwa Rural Health Centre, 13th July 2016.
78	The hospital has an ambulance and a utility vehicle. The ambulance base station is in the old hospital.	Health staff, Lukulu District Hospital, KII, 12th July 2016.
79	**Procurement:** *"Procurement was slow at the beginning with delays (as much as one year in the beginning of the H4+ programme). We went through the effort so that there was harmonization between the government and UNFPA procedures and trained the districts on UNFPA procedures so that when funds are distributed they don't go outside of this. They use their own financial procedures but make sure they are aligned (to UNFPA). They each had a financial health assessment and audit."*	WHO, KII, 8th July 2016.
80	**H4+ support to Transport and Communications:** UNICEF procured ambulances for three districts and UNFPA procured for two districts. UNICEF installed high frequency (HF) radios in all the districts. Radios were operated from mains and solar power sources and maintained through a UNICEF project budget line for radio maintenance. Funds remaining in that budget line would be used for other procurement before the project ended. UNICEF officials explained what they had learned about communications at health facilities: "*When we were doing RMNCAH Trust Fund application they told us they used cell phones as they were more reliable. Cell phones, being hand held, are preferred but the cost is greater because of airtime expenses. The radios are all working but members of staff use their own phones for communication*." The radios are housed next or near the main nursing station but apparently, the staff said they were not always on or not always answered.	UNICEF, KII, 11th July 2016.
81	**Gaps and challenges: Staff** Staff houses to motivate the health workers; a water connection at the health facility; the health facility needs to be stocked with beds and mattresses; staff should be supported with transportation (e.g. bicycles); the Neighbourhood Health Committee would like more members to be trained since only a few have received training in community mobilisation; the provision of food stuffs to the maternity waiting shelter, mostly during hungry season; they think also that the facility needs more staff, as the current establishment is not adequate to cater for current demands.	Neighbourhood Health Committee, FGD, Tafelansoni Rural Health Centre, Chadiza District, 19th July 2016.
82	**Staff accommodation** The staff accommodation is apparently not very good at the facility and there were several complaints about that. There is no running water, no power, no entertainment, no light etc. It is difficult to be comfortable. H4+ said the programme could cover patient care only and not staff salaries or staff related infrastructure like accommodation. The officer in charge said he had to go to the health facility at night to use the power there to use his computer.	Health Staff, Luvuzi Rural Health Centre, KII, 12th July 2016.

83	The facility staff mentioned that they need staff houses and that those houses need basic facilities and power so the staff can cook and study at night.	Health Staff, KII, Tafelansoni, Rural Health Centre, 19th July 2016.
84	**Gaps and Challenges: SMAGs** • More training. *"Even a little training would help. We would like our training to continue especially for family planning. Small amount of training would enable us to do much more in the community (such as give oral and injectable contraceptives)"* • Poor accommodation for staff and nowhere at the facility for the SMAG to stay if he or she needs to stay • Blankets for the beds – women feel cold and they need blankets to protect the baby • No water at the facility. *"We are drawing the water from the far end and often there is no water at all. People are walking three kilometres to fetch water."* • Spare parts and maintenance tools for the bicycle (pump, spanner, spare part like [bicycle] tires. An ambulance is needed at this facility. When it comes it is sometimes just too late and the problem has become worse.	SMAG and CBD, FGD, Tafelansoni Rural Health Centre, Chadiza District, 19th July 2016.
85	**Do you work with the district authorities?** "*For the first boreholes, the districts were asked to go through the provincial procurement system. But according to UNICEF regulations, they said no, they must go through the UNICEF WASH system. WASH team in UNICEF was overlooked in the first round – which was cheaper and faster – and in the second round they said we must go through WASH according to UNICEF policy*." So although it is cheaper, faster, more efficient and more empowering to work through the district, they now have to go through an implementing partner and contractor. They will go through the district medical office and the WASH will assist. UNICEF is meant to be doing procurement for WASH equipment, as well as capacity building. UNICEF also does the training for nurses, clinical officers (and SMAGs) to cover HIV, Integrated Management of Childhood Illness (IMCI), and PMTCT. UNICEF also provides training in treating children in three common childhood illnesses: diarrhoea, malaria and respiratory illnesses. Mostly neonatal care/ care of the newborn.	UNICEF, KII, 11th July 2016.
86	Three of the five H4+ facilities have **maternity waiting shelters** as well as the hospital. The maternity waiting shelters at the clinics were refurbishments. At the hospital, it was a new build.	Senior officials, KII, Provincial Health Office, Eastern Province, 11th July 2016.
87	District staff are motivated and know their clients and can identify each death. Engaging with the issues. Major issue is HRH and transport. Birth attendants are classified as midwife, doctor, clinical officers. Direct midwifery training and hiring retired midwives. Distances are long and difficult.	INESOR, KII, 14th July, 2016.
88	**The Maternity Waiting Shelters** were valued where they were installed. In Chadiza hospital, it is a pre-fabricated type of building. There are toilets, two showers and a kitchen with no facilities. There are no solar panels in the waiting shelter.	Chadiza District Hospital Staff, KII, Eastern Province, July 18th 2016.

89	**Why are more women coming to the maternity waiting home?** More women are coming to the maternity waiting home because of the SMAGs; they now have an understanding about coming. The mama packs they are getting also have an influence. The maternity waiting shelter is almost ready for commissioning. There will be beds for 12 mothers in two rooms with two toilets and showers. There is another room accessed by a covered walkway for a kitchen which will have cooking facilities. There is already a solar panel connected to the lights. The shelter will be up and running in a month. The H4+ will provide beds, mattresses, blankets, cooking facilities.	Safe Motherhood Action Group, Luvuzi and Lishuwa, FGD, 12th and 13th July, 2016.
90	**Maternity Waiting Shelters** were made to cater for a certain population but people have been coming from far off places to use them. Also, there is "spill-over" to other districts (people coming from other districts), so it is not possible to say what the improvement has been with precision (in terms of baseline). It is the same with midwife training. Midwives have been trained to serve the facility but also the whole district. Plus, they have trained other midwives from within the same district and some have been transferred to new facilities.	H4+ and Evaluation Reference Group, KII, 7th July 2016
91	"*By 2014, **nine delivery rooms and nine maternity waiting shelters** were rehabilitated and equipped with essential maternal and newborn survival equipment. The procurement of high frequency radios, ambulances, boat engines and motorcycles has improved referral system*."	H4+ (2015) Annual Narrative Progress Report, Lusaka, January 1 – 31st December 2014, pg. 6.
92	Improvements include: "*The H4+ built a **mothers' shelter, refurbished maternity w**ard, including toilets and showers."*	Community Health Advisory Committee, Luvuzi Health Facility, 12th July 2016.
93	**Maternity Waiting Shelter at Lishuwa**: The maternity waiting shelter was refurbished but very busy and quite crowded. No handwashing facilities were seen in or near the latrines, or in fact anywhere. One room was used for storage and one room for sleeping. An old informal shelter like the old one at the hospital is still standing as well and was used by relatives for sleeping and for cooking.	Lishuwa Rural Health Care Facility, KII, 13th July, 2106.
94	**Staff focus on maternal health quality** District staff are motivated and know their clients and can identify each death. They engage with the issues. Major issue is HRH and transport. Birth attendants are classified as midwife, doctor, clinical officers. Direct midwifery training and hiring retired midwives. Distances are long and difficult.	INESOR, KII, 14th July, 2016.
95	**Initial challenges implementing the H4+ programme** "*Key gaps highlighted in the implementation process were: delays in receiving funds at the beginning of the project, lack of a focal person at district or provincial level to help with follow up, slow tendering processes with other ministries, reliance on EmONC interventions with few family planning interventions included, weak coordination mechanism from the government, human resource shortages and geographical access problems."*	H4+ (2014) H4+ Canada Supported activities: Mid-term review in Zambia Country Report, 2012-2013.pg 32.

96	UNICEF staff pointed out that the whole activity should have been planned at the beginning of the programme instead of towards the end. Once the planning was underway, they were advised not to drill bore holes during the rainy season as the water table would be high and it might lead to shallow non-yielding boreholes during the dry season. Costs increased because specifications were added to include extension to staff houses for staff motivation, installing bigger capacity reservoir tanks and the need for larger solar panels to be able to be able to handle increased need.	UNICEF, KII, 11th July 2016.

Assumption 1.5

The combination of improved quality of services in RMNCAH, increased trust and understanding between service providers and users, and increased capability and opportunity for service users to effectively demand care is sufficient to produce a notable increase in the use of services and to overcome barriers to access which existed in the past.

	Information/data:	**Information sources:**
97	**Setting up/ reinvigorating the referral system** The hospital staff recognised the role of the CBDs and SMAGs in communicating with women to encourage attendance at the facility. They valued the investments that the H4+ supported because they helped build the referral system and in those facilities the number of deaths has dropped significantly. They would like to extend it to more places, increase the number of trained staff working in the hospital and in the clinics.	Lukulu District Hospital, KII, 11th July 2016
98	**Maternal Referral: Lukulu District** **Maternal Referral: Lukulu District** **Total deliveries discharge** / **Referred to 2nd level hospital** / **Maternal deaths** / **Fresh still birth** / **Macerated still birth** / **Neonatal deaths** Q1 2015: 237 / 1 / 2 / 5 / 3 / 7 Q2 2015: 281 / 0 / 1 / 2 / 3 / 0 Q3 2015: 265 / 0 / 1 / 3 / 5 / 14 Q4 2015: 262 / 3 / 2 / 9 / 1 / 10 Q1 2016: 278 / 1 / 0 / 2 / 3 / 6 Q2 2016: 211 / 0 / 0 / 1 / 4 / 1	Lukulu District Health Office, KII, PowerPoint Presentation, 9th July, 2016 .
99	**Results:**	Lukulu District Health Office, KII, 11th July 2016.

<table>
<tr><td></td><td>“Before the H4+ programme, there were lots of maternal deaths (even 10 one year in the recent past). None this year or last now.”</td><td></td></tr>
<tr><td>100</td><td>“Community mobilising is being initiated in all project districts through existing community base volunteer groups specifically the Safe Motherhood Action Groups (SMAGS) and community based distributors (CBDS). Funds have been disbursed to support training of 100 SMAG volunteers and 100 CBDs in the second half of 2012.”</td><td>H4+ (2012) Progress Report for April 2011 – June 2012, Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia, Lusaka, Pg. 4.</td></tr>
<tr><td>101</td><td>“Community involvement and having a committed Health Centre Advisory Committee has improved uptake of maternal and child health service.”</td><td>Luvuzi Rural Health Centre Staff, KII, 12th July 2016.</td></tr>
<tr><td>102</td><td>District Commissioner supports the work of H4+
“The District Commissioner appreciated the work and support of the CIDA H4+ in the district and indicated that he was keenly following up all the activities being implemented in the district.”</td><td>Mission Report, UNFPA, to Chipata, Chadiza, Chama and Serenje (to participate in the Mid-Term Review for H4+ Districts, 7-17th October (2013).</td></tr>
<tr><td>103</td><td>Maternal Health: Attended births
The following data was presented in the power point presentation by the Chadiza District Health Office.
<table>
<tr><th></th><th></th><th>2015 Q1</th><th>2015 Q2</th><th>2015 Q3</th><th>2015 Q4</th><th>2016 Q1</th></tr>
<tr><td rowspan="2">Deliveries with skilled attendants
% of all births</td><td>No.</td><td>776</td><td>793</td><td>793</td><td>839</td><td>924</td></tr>
<tr><td>%</td><td>64 %</td><td>65 %</td><td>80 %</td><td>69 %</td><td>75 %</td></tr>
</table></td><td>Chadiza District Health Office, KII, PowerPoint Presentation, July 2016.</td></tr>
<tr><td>104</td><td>Demand, including community ownership and participation
The community leaders were sensitized on pregnancy related maternal deaths, sexual and reproductive health and gender issues to promote their role as RMNCH change champions. 160 community volunteers were trained as members of the safe motherhood support groups and community-based distributors of family planning contraceptives.</td><td>H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 6.</td></tr>
<tr><td>105</td><td>“Many more women come for delivery and accept referral than before. There has been some resistance to family planning, especially long acting reversible methods.”</td><td>Chadiza District Health Office, Eastern Province, KII, July 18th 2016.</td></tr>
<tr><td>106</td><td>On the demand side, H4+ partners and district health services sensitized the community using the UNICEF Safe Mother Campaign involving door to door activities encouraging women to book antenatal care.</td><td>Evaluation Reference Group, 7th July 2016.</td></tr>
<tr><td>107</td><td>“They need to do more to improve uptake of family planning services among women, as most women do not accept condoms due to shyness.”</td><td>Health Facility Staff, Luvuzi Rural Health Centre, KII, 12th July 2016.</td></tr>
</table>

108	"*The attitude of health personnel at the hospital has improved; they have not heard of negative comments about them from mothers being attended. The construction of the maternity shelter motivates pregnant women to deliver at the hospital. Before the shelter was done, pregnant women used to deliver in their own homes which resulted in a high number of deaths. For instance, during the rainy season it was difficult to get to the hospital*."	Safe Motherhood Action Group, FGD, Chadiza District Hospital, 18th July 2016.
109	"*I would like to tell them to continue the good work! They should not stop here. If possible they should build more shelters in other clinics which don't have one. I would also like to urge them to provide us with running water, beds, flushing toilets and bathrooms which are currently the only things missing from the shelter. For me, I can say the maternity home encouraged me to come and deliver at the clinic, and when I go back home, I will encourage other women in my village to also come and deliver their babies here.*"	H4+ (2014) Human Interest Stories, UNFPA, Zambia, 2014.
110	**Influence on maternal survival:** The SMAGs believe they have had a strong influence on community thinking and behaviour relating to safe motherhood. They believe they have played a critical role in the reduction of maternal death. SMAGs reported a big change in the health facility in recent years and that this change has also changed the community perception of the health facility and what it can do for them. **What methods do you use to influence people's decisions? What kind of activities do you do in your community?** Role play, "*for example, this can be about someone who lost a baby because of late antenatal*"; meetings with the household (visiting each family); meetings with all the community – both men and women together; follow-up visits; offering to accompany the women to the health facility.	Safe Motherhood Action Group and Community Based Distributors, FGD, Tafelansoni Rural Health Centre, Eastern Province, 19th July 2016.
111	SMAGs believe all the activities of the H4+ have contributed to the increased survival of women and newborns said the result is a combination of rehabilitation of the clinic, maternity waiting shelters, SMAGs work in the community using the pictures in the community and in role play/ drama.	Safe Motherhood Action Group (SMAG), FGD, 12th and 13th July, 2016.
112	**Perceptions about staff treatment of the community** • There has been one problem – when they bring a patient at night, there is a lack of responsiveness/delay on the part of the midwife (only trained health worker at the RHC); he may see them quickly and then go back to his home. They have made a complaint to the District Commissioner about this • Overall, they feel that there are too many people for the facility to service; drugs are too few and there are repeated stockouts; very often they are waiting 3-4 weeks for restocking • The solar panels on the main part of the RHC are not working (but did work at one time) therefore, there is no electricity • The solar panels on the maternity ward are working and the vaccine refrigerator is also running on solar • In some ways, one can feel that the services are getting worse; for real improvements, one can only talk of the maternity shelter.	Community Advisory Committee, FGD, Lishuwa Rural Health Centre, 13th July 2016
113	**Use of Partograph for quality assurance**: During the visit of the evaluation team, a prima gravida was in labour and nine cm dilated when we arrived and advanced to second stage. In the course of our time there, the midwife Jan	Luvuzi Health Facility, KII, 12th July, 2016.

	said that it was a difficult labour with the second stage exceeding an hour and not much progress. She would give her another 30 minutes before referring her to hospital. She was using the partograph. In the end, the young woman delivered her first child, a boy, Jacob, 3.5 kg at about 11am and within the acceptable timeframe. Grandma and Grandpa were there with her when we visited the recovering mother and baby before leaving the clinic.	
114	**Successes**: Skilled birth attendance has increased from 48 to 64 percent since the H4+ started. There has been a change in culture and people seem to expect to deliver in the health facility now. There have been some maternal deaths but far fewer. Some have been exacerbated by the lack of infrastructure, e.g. no lighting at night.	Lukulu District Health Office, KII, 11th July, 2016.
115	There have been no **maternal deaths** so far this year. Chadiza was selected because it was a poor performer but now is well ahead of others. There were 10 stillbirths in Quarter 4/2015 and 4 in Quarter 1/2016. Most were macerated. Between Quarter 1/2015 and Quarter 2/2016 (18 months) there were 1361 maternity cases referred to the district hospital from around the district (including H4+ facilities).	District Health Office: Chadiza District, Eastern Province, 18th July, 2016.
116	**Views of staff: best results from the H4+** Infrastructure, maternity waiting shelters, staff development, paediatric ART/ EmONC, SMAGs, infection care, capacity building, financing for outreach. The results include reduced maternity crises, referred on time, and the engagement of the community. **Maternal and Neonatal Death Surveillance and Response (MNDSR):** engaging community in meetings to help discuss with them why a death occurred and how it could be avoided; help identify how to address delays. 2015: no maternal deaths at their clinic; 2016: no maternal deaths so far.	Health Staff, Tafelansoni Rural Health Centre, KII, 2016.
117	**Since the project started, have services improved?** The H4+ has provided infrastructure. Home deliveries have significantly reduced in the catchment area and there have been no maternal deaths recorded in 2016. There is general improvement in the uptake of MCH services. They have seen improved male involvement in MCH. "M*en have been educated and most of them attend the first ANC with their wives. Before that, women used to attend alone and were scared to test for HIV.*"	Tafelansoni, Neighbourhood Health Committee, FGD, 19th July, 2016.
118	**Main causes of maternal death:** According to the WHO key informants, post-partum haemorrhage accounts for about 25 percent. MoH developed technical guidance with support from H4+. Also trained at the national level and H4+ districts so H4+ active on this issue (maternal deaths). WHO trained national counterparts. As of 2015, the information system can catch stillbirths and intrapartum deaths. UNFPA are printing the first national policy on MNDSR. They started collecting the data for 2014 report. H4+ product (with UNFPA additional resources) combined the resources for printing the MNSDR report (so it's a product of a joint effort).	WHO, KII, 8th July 2016.
119	**Performance:** Indicator 2011 2012 2013 2014 2015	Chadiza District Health Office (2016) Progress report to the evaluation team, Power Point Presentation, Eastern Province.

	% Institutional Deliveries (National)	58	64	68	72	73	
	% Institutional Deliveries (Chadiza District)			54	77	83	
	Maternal deaths (Chadiza District)	3	2	10	4	6	
120	**When patients were asked how they feel they are treated at the Health Centre** The community have confidence in the services provided. The attitude of staff has improved, they are more friendly and are approachable. The community is happy with initiative to engage a retired midwife. "*People are happy that a female midwife has come to help them. This has led to more health facility deliveries, unlike before due to pregnant women not being comfortable with a male service provider*."						Staff at the Luvuzi Rural Health Centre, KII, 12th July 2016.
121	"*In some ways, one can feel that the services are getting worse; for real improvements, one can only talk of the maternity shelter.*"						Community Advisory Committee, Lishuwa Rural Health Centre, FGD, 13th July 2016.
122	**Maternal death monitoring (infrastructure)** **MNDSR**: "*We are doing maternal death reviews and trying with the responses. However, the solutions are not always under health but in the enabling environment. Sometimes the response needs other line ministries. Not always able to engage other ministries."*						Senior Ministry of Health Staff, KII, 8th July 2016, Lusaka.
123	**Reduction of Maternal Deaths:** The hospital has two doctors, one of whom arrived two days ago. He did his first caesarean section the day the evaluation team visited. The medical director talked about the importance they place on maternal health including the symposium they held a week earlier to discuss approaches to Emergency Obstetric Care. They have had two maternal deaths this year. Both were PPH and one was with infection. In the first, the woman stayed at home too long and by the time she arrived at the hospital it was difficult to save her. In the second, she had post-abortion complications, bleeding, Hb of 6.6 but also an infection and she succumbed despite receiving a transfusion. The medical director said they are trying to ensure these are the only two this year. Haemorrhage (ante and post-partum) is the most common complication followed by delayed/ obstructed labour, and sepsis he said.						Lukulu District Hospital, KII, 12th July 2016, Western Province.
124	**What has affected maternal deaths reduction?** "*Unlike in the past many women used to die*" • Quick referral using the partograph and supported by mentoring and technical support • Meetings with gate-keepers (the traditional leaders and community elders, mothers in law etc). There were four in 2015 and so far two in 2016 • The referral system enabling women to be transferred quickly to hospital						Chadiza District Health Office Staff, KII, Eastern Province, 18th July 2016.

	• EmONC training • Hospital support through mentorship • Maternity waiting shelters	
125	**MNDSR**: There is something set up for each district but there are not many funds to do meetings. Post-partum haemorrhage causes 45 percent of all maternal deaths followed by infection and eclampsia.	Senior Officials, Provincial Medical Office, KII, Eastern Province, 11th July, 2016.
126	**Community views** Many more women come for delivery and accept referral than before. There has been some resistance to family planning especially long acting reversible methods. They hope to get further information/ do some research to help identify the causes. Also some people still practice traditional medicine, for example using herbal medicines to accelerate labour. The programme includes a component to sensitise and train teachers to enable them to teach young people about HIV, pregnancies, abortions, STIs etc. The SMAGs are seen as important contributors to helping increase institutional deliveries.	District Health Office Staff, KII, Chadiza District, Eastern Province, July 18th 2016.

Area of Investigation 2: Expanded Access

2. Question Two: To what extent have H4+JPCS investments and activities contributed to expanding access to quality integrated services across the continuum of care for RMNCAH, including for marginalised groups and in support of gender equality?

a. **How have H4+ interventions contributed to strengthening the quality and appropriateness of care in RMNCAH provided to marginalised and excluded (encompassing skills and attitudes of staff, availability of equipment and supplies and timing of services)?**

b. **To what extent have H4+JPCS interventions contributed to expanding access to marginalised and excluded groups, especially adolescents, youth, and poorest women?**

c. **How has H4+ contributed to strengthening the integration of services across the RMNCAH continuum of care?**

d. **To what extent do H4+JPCS investments and activities (alone or in conjunction with other programmes of support) contribute to developing trust between service providers and users of RMNCAH services and are these efforts sustained?**

Assumption 2.1

H4+ JPCS supported initiatives are targeted to increasing access for marginalised group members (rural poor women, families in geographically isolated areas, adolescents/early pregnancies, pregnant women living with HIV, women/adolescents/children living with disabilities, indigenous people).

	Information/data:	**Information sources:**
1	*"The National Health Strategic Plan (NHSP 2011-2015) has prioritised **adolescent** health. This led to the development of the Adolescent Health Strategic Plan 2011-2015 by the Government, which was a great landmark in the promotion of Adolescent Health in Zambia. It set the basis for strategic approaches to promoting the planning, organisation and delivery of appropriate, accessible, efficient and effective adolescent-friendly health services, aimed at addressing adolescent health problems in a comprehensive and consistent manner."*	Adolescent Health Communication Strategy in Zambia, 2013-2015, Ministry of Community and Development, Mother and Child Health, Republic of Zambia.
2	The programme has engaged with **youth and adolescents** through sexual health education and through training of teachers and nurses. With young people and the peer educators train young people. Youth friendly health service policy in Zambia is being improved. [See assumption 2.1 for a fuller exploration of H4+ investments into youth and adolescent services, demand and access.]	WH0, KII, 8th July 2016.
3	**Privacy at Youth Friendly Spaces** (treatment, attitude, support, advice): The youth-friendly corners have provided safe spaces to obtain information. Even 14 year old girls are now able to come to the youth friendly centre and are given chance to be heard and can speak freely.	Peer Educators, Youth and Adolescents, Lukulu District, FGD, 12th July, 2016.

4	**Challenges for Peer Educators** There are **not enough peer educators:** *"We are only ten for the whole of Lukulu, so others [in areas where there are no peer educators] are missing out."* If there were other peer groups in other communities, there would be a platform but for now, the work is just done centrally [in and around Lukulu town). More peer educators and a system of 'peer-to- peer exchange visits, to spread the concept and learning would be good. Need for **blood testing supplies** and equipment at the Youth Centre. Further training is needed for peer educators (refresher and follow up training). They have basic IT skills but no computer. A computer would help in developing more materials and messages.	Youth and Adolescents, FGD, Lukulu District, 12th July 2016.
5	**According to the peer educators there is a very strong demand** from young people seeking information about sexual health and also access to the commodities including condoms (male and female). Sometimes, however, condoms are not available, which they see as a serious problem because of the risks of unprotected sex and also because an unreliable supply may discourage young people from approaching them for sexual health education and supplies in the future. On average, there are about 10 treatments per day at the centre, with young people seeking condoms, family planning and treatments for STIs (mainly syphilis). Some HIV awareness is provided by schools through Civic Education, starting at age ten or eleven although the girls in this focus group discussion were not certain about its content or level of detail. **Quality and access to SRH services in the health facility.** Peer educators said that staff at the health facility welcomed young people and provide a good and friendly service. Staff always make them welcome at the facility. However, young people prefer not to go because of shyness (or fear of being seen by people who know their parents). Therefore, young people prefer to approach the peer educators or seek assistance at the youth centre.	Youth and Adolescents, Peer Educators, FGD Lukulu, 12th July, 2016.
6	The group said they had learned about STIs, teenage pregnancy, early marriage, the dangers of getting married early and also HIV and AIDS. The group said they learn about comprehensive sexuality education in school do although no one could offer any specific information about what they themselves had learned. Later on, they mentioned what out-of-school youth learn about sexuality and reproductive health.	Adolescents and Youth, FGD, Tafelansoni Rural Health Centre, 19th July 2016.
7	Girls can get married at 14, 15 or 16 years. Some girls can get pregnant at 13 or 14 years of age. No one in the group said they go to or had ever been to the centre although they may have been hesitant to disclose this within the group because the centre offers advice about sexual health and family planning. The CBD working at the centre mentioned that the youth friendly space offers a private space for youth to learn about the dangers of teenage pregnancy, HIV and family planning. There are ten peer educators attached to the centre who were trained in 2012.	Adolescents and Youth, FGD, Tafelansoni Rural Health Centre, 19th July 2016.
8	**The role of the H4+** Before the project, young people had no space to talk about the issues that concern them on reproductive health, sexuality and family planning. Comprehensive Sexuality Education "*is a good innovation brought by the project and*	Youth and Adolescents, Peer Educators, FGD, Lukulu, 12th July 2016.

	should be replicated in other locations."Services that can be accessed through the **youth centre** in Lukulu include comprehensive sexuality education, Family Planning, STI, voluntary medical male circumcision, HIV counselling, gender based violence, girl empowerment, safe abortions and unplanned pregnancy services.	
9	**Awareness and knowledge of gender based violence amongst female youth** Female peer educators in Lukula believe there has been an increase in knowledge amongst the youth of Lukulu in preventing gender based violence and as a result, there has been a reduction in gender based violence in the area. They believe that before the H4+ project, the level of knowledge about gender based violence was very low.	Youth and Adolescents, Peer Educators, FGD, Lukulu, 12th July, 2016.
10	**Youth awareness** The youth in this focus group appeared to have a limited understanding of gender issues, particularly gender based violence. The group were asked if they had discussed gender based violence in school or through the youth centre and did not appear very familiar with the term. One boy gave an example of how he thought the hospital helps prevent gender based violence. One girl in the group showed some understanding of gender bias and explained how parents prefer to support boys in education because "*girls soon get pregnant and are then unable to go to school – she can get pregnant at any time*." This girl was a member of the HIV AIDS prevention club.	Youth and Adolescents, FGD, Tafelansoni, 19th July, 2016.
11	**Addressing the needs of adolescents and youth** Following focus group discussions in the districts, it was clear that the needs of adolescents and of the youths are yet to be fully addressed. There is no objective focussing solely on adolescents/youth in the H4+ programme. However, one of the programme's operational strategies i.e. communication for development to promote girl child education to discourage early marriages and promote institutional deliveries somewhat targets the group. In addition, only one activity i.e. *"Reproduction of IEC materials or posters on FP targeting teenagers and the youth"* is the only one targeting adolescents and youths. Strengthening of adolescents' community involvement, mentorship and use of youth friendly services is much needed, as well as **strengthening family planning interventions** to prevent early or unplanned pregnancies.	H4+ (2014) Mid Term Review in Zambia, Country Report, 2012-2013, 24th April 2014 pg.11.
12	There has been an **increase in knowledge among youths** in preventing gender-based violence (GBV) (anecdotally) and there has been a reduction in GBV in the area. Before the project, knowledge levels were very low. Girl empowerment has been arranged around knowledge and life skills to girls.	Youth and Adolescent Peer Educators, FGD, Lukulu, 12th July 2016.
13	**Adolescent and Youth Services** • Youth friendly services means they can choose who they want to talk to, can come at any time, can receive all the services, are entitled to privacy, can get peer to peer counselling • UNFPA is funding teacher training in youth sexuality education and also teacher – nurse joint training so nurses and teachers can support each other to support the youths. Ideal result will be fewer youth dropouts, fewer pregnancies, more knowledgeable youth.	Provincial Medical Office, Western Province, KII, 11th July 2016.

14	**HIV/ AIDS services** The clinic is a HIV zonal centre. It managed and supports patients out of its own catchment area. There are a number of services delivered together to support quality patient care and privacy: STIs, HIV/AIDS, TB, family planning. At the time of our visit there were stockouts of male condoms and IV fluid. "*Some members noted that there were no male condoms at the moment. Most people expected/ accepted dual protection for family planning and for sexually transmitted infections/HIV. They complained that there were not enough drugs or supplies and when the drugs were delivered, they were used really quickly. They wanted bicycles to do their job better*."	Health Staff, Luvuzi Health Facility, KII, 12th July 2016.
15	**Reaching out to men for HIV prevention** UNAIDS and the government implemented radio campaign in Lukulu about the importance of male circumcision for reducing the risk of heterosexually and acquired HIV infection. The peer educators felt the radio show is making a difference [about the importance of male circumcision and HIV] although they believe that peer educators also play an important role.	Youth and Adolescents, Peer Educators, FGD, Lukulu, 12th July, 2016.
16	**Hard to Reach** (vulnerable, people with disabilities): According to the key informant from the Ministry of Health H4+ has not achieved much in terms of supporting minority groups and in particular mentioned people with disabilities. "*We haven't done too well on supporting minority groups, for example, the disabled who were vulnerable, we haven't taken advantage of the linkages*." H4+ is however working in the most remote and hard to reach and underserved areas.	Senior Officials, Ministry of Health, Courtesy Call, KII, 8th July, 2016.
17	**The group gave three examples of how they have helped change behaviour** *"A couple who had tested HIV positive in the catchment did not want to go back to the hospital for medication. Their health condition started to deteriorate and I went there to encourage and educate them the importance of treatment. I personally persuaded and brought them to the clinic. Until now they are on medication and their health conditions have improved,"* male SMAG. *"Another mother had an abortion but did not want to go to the hospital, but after I counselled her she came to the hospital and now has been able to get pregnant again and delivered her baby,"* female SMAG. *"An 18 year-old in-school girl with HIV was pregnant and did not know what to do. I encouraged her to go to the hospital for medication. Her health condition started to deteriorate and I went there to encourage and educate the family about the importance of treatment. I personally persuaded and brought them to the clinic. Until now they are on medication and their health conditions have improved. A female SMAG encouraged her also to go to the hospital where she enrolled in ANC, delivered and was then admitted back into school," male SMAG*	Safe Motherhood Action Group, FGD, Chadiza Rural Health Hospital, 18th July 2016.
Assumption 2.2		

H4+JPCA support to capacity development, and to effective demand by community members has adequate reach to effect access to quality services for marginalized groups. H4+JPCS support addresses the three dimensions of sustainable capacity improvement: capability, opportunity and motivation for sustained provision of quality care.		
	Information/data:	**Information sources:**
18	**Quality of care** There is a midwife (male) and two CDEs (Cleaners, both male). Two women had given birth before we arrived; one in the night (4.4 Kgs and a boy); and one in the early morning. Another woman was in the postnatal ward already from earlier yesterday. Three anecdotes from the visit to Lishuwa: A woman from the waiting shelter was carried over to the clinic after we arrived. She had had a spontaneous abortion and had been bleeding continuously since the day before. (*Why had the midwife not addressed her case when she arrived the day before?)* She had six children and was probably 2 months pregnant so it is likely it was a spontaneous abortion. The midwife was unable to insert a line as her veins had collapsed. She was given oxytocin. Her BP was 80/60 but the sphygnometer was not working well so difficult to be sure. Neither the UNICEF paediatrician nor the MCH coordinator for the district were able to insert the line. She was transferred to hospital in the district vehicle (and later reported to be recovering but very weak). Ten minutes later, a Scotch cart came into the clinic yard bringing another woman with her family. She had been intending to come to the waiting mother's shelter from their home 20kms away but had delivered on the road. She was transferred to the delivery room and given oxytocin and a check-up before being admitted to the post-natal unit. Within 30 minutes, the woman who had delivered in the early morning before the evaluation team arrived was found collapsed on the floor with a post-partum haemorrhage. She was assisted to the delivery room again. Her womb was massaged and she was given more oxytocin. The womb contracted she expelled a significant amount of birth material. Thus, the morning's visit to the clinic was thus peppered with these maternal health incidents and borderline emergencies reinforcing how quickly and how frequently maternal health needs arise.	Lishuwa Rural Health Centre, KII, 13 July 2016.

19	**Community engagement/ governance for health** At the community level, the Neighbourhood Health Committee (NHC) plays an integral role in strengthening service delivery. **What does the Neighbourhood Health Committee do?** • The NHC acts as a link between the community and the health facility; they report cases and refer mothers and other community [members] to health services • They conduct community sensitisations and create demand for health services • They educate traditional and other community leaders on maternal and child health issues like on the importance of institutional delivery, WASH • They promote adherence to antiretroviral therapy (ART) for HIV+ clients • They mobilise the community in the maintenance of the health facility **Who provides the services, costs and integration?** • The health facility has 7 trained staff, (1 clinical officer, 1 environmental health technician, 3 nurses, and two Classified Daily Employees • In terms of costs, Antenatal Care (ANC) cards are provided for free	Neighbourhood Health Committee, Rural Health Centre, Meeting Note, FGD, Tafelansoni, 19th July, 2016.
20	**Skilled Birth Attendance** About two thirds of women delivering at health facilities are attended to by skilled personnel. This means about a third of women are not attended to by skilled health personnel despite delivering at health facilities. Chadiza had the highest proportion of deliveries by skilled personnel and had the highest number of skilled staff (39) compared to Lukulu (3)	Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia, Highlights of Achievements on Selected Core Indicators, March 2014, INESOR in partnership with WHO, UNICEF and UNFPA. Pg. 7.
21	**Skilled birth attendance** If the single trained provider is on leave or travels to town, then there is no one here to provide care and the cleaner does the deliveries. The advisory committee members feel that there should be three trained providers and two cleaners.	Community Advisory Committee, FGD, Lishuwa Rural Health Centre, 13 July 2016.
22	There are 13 health posts but they do not work well; there are no medicines there. "*The health posts are only monuments and staff housing is very poor."*	Community Advisory Committee, FGD, Lishuwa Rural Health Centre, 13th July 2016.
23	**Improving maternity services** The Senior Provincial Coordinator reviewed the level of service expected in the province and the specific focus of the H4+ including:	Senior Officials, Provincial Medical Office, KII, 11th July 2016.

	▪ Focused ANC (FANC) including the four ANC visits, Hb injection, HIV and syphilis testing, information on health promotion, the danger signs, intermittent prophylactic therapy. PMTCT is also started during antenatal care ▪ Weighing scales, suction of newborn, drugs including IV fluids, magnesium sulphate, oxytocin, misoprostol should be in the hospital and all except iv and miso in the rural health facilities. No forceps or manual vacuum aspirator except at the district. The H4+ provided an infant incubator at the Lukulu district hospital.	
24	***Challenges (as noted within INESOR Report)*** • *Delay in funds being disbursed* • *Staff were not oriented on H4+ reporting format* • *Delay of reports from health facilities due to various forms introduced* • *Activities not implemented according to [planned] schedule* • *Inadequate number of motorbikes in some facilities* • *[Limited] availability of antenatal, family planning and under-five cards as a result data is compromised.* • *Inadequate commodities for family planning and antenatal care e.g. (long acting family planning commodities, lignocaine, RPR kits, urine test kits, etc)* • *Inadequate technical support and mentorship for health facilities and communities.* ***Discussions about solutions to the challenges*** *"Progress has been made in implementing various programmes aimed to improve mother and child health in the district. Measures are being undertaken to sensitize women on the importance of attending antenatal care (ANC) early. The challenges still remain with the distances that women have to cover to access ANC services.* • *There were suggestions during the workshop meeting that pregnant women should be encouraged to move to areas where they can easily access health services to avoid complications.* • *It was also suggested that there is need to have more functional mothers' shelters so that women can be waiting from there.* • *Safe Motherhood Action Groups (SMAGs) have worked well, it was suggested that there is need to incentivize active members of SMAGs.* • *It was also discussed that there is need for funds to be disbursed on time for continuity of programme implementation.* • *Health staff brought up suggestions that the H4+ should harmonise the tools with that of the HMIS to reduce on the amount of work that has to be done.* • *It was also discussed that there is need for MNCH commodities to be made available to the district because most of the times the commodities were in short supply district.*	H4+ Field Mission to Build Capacity for Monitoring and Evaluation of Maternal and Child Health Activities in H4+ Districts and Indicator Harmonization, University of Zambia, Institute of Economic and Social Research (INESOR) October, 2013.

	• *There is also need to strengthen technical support and mentorship to facilities as well as to the communities."*	
Assumption 2.3 *H4+JPCS support at national and sub-national level has been sequenced appropriately with support to RMNCAH from other sources. H4+JPCS supported investments and inputs do not conflict in timing or overlap with those provided by other programmes. Further, H4+JPCS support combines with other programme inputs to allow services to be scheduled and delivered in manners appropriate to reaching vulnerable group members and building trust between providers and users.*		
	Information/data:	**Information sources:**
25	"***Drugs supplies*** *are inadequate, stocks only last for a few days. Here we are using a kit system and sometimes we have 2 months stock outs as supplies only last for 30 days.*"	Luvuzi Rural Health Centre, FGD, 12th July 2016.
26	**UN systems use slow processes**: "*We were not happy with the UN because we want to see them scale up – and we have wanted help in scaling up ourselves. We see the UN as the second government, so we want to see good things replicated. However, there is too much red tape in UN processes. We find that every project has to fit with their processes and we have to follow them, i.e.: we can't fast track when we need to in order that the procurement keeps pace with the rest of the project. The RMNCAH Trust Fund project is an example. It goes through the UN system. You find the funds hit only after a very long time. Then their procurement processes are also very long. Certain things should be fast tracked. For example, there are practical processes getting the timing right but they're just very, very long. They really clog up situations where people are ready to go and then there are no funds/ no products*."	Senior Ministry Officials, Ministry of Health, KII 8th July 2016.
27	**Sequencing of activities and coordination** Where the H4+ is supporting the construction of a maternity waiting shelter, the equipment and furniture is arriving much later and the building is being used without beds or mattresses. Another example is the SMAGs who only getting initial training. As a very important group in terms of driving improvement, they need additional/ on-going training, supervision and follow-ups.	The Institute of Economic and Social Research (INESOR), University of Zambia, KII, 14th July 2016.
28	**The Community Health Advisory Committee supports and extends H4+ achievements** "*They have been trained to maintain the facility and the health posts; they have been trained to recognise danger signs (e.g. referral for pregnant women, malaria; HIV+ positive individuals and follow-up); they have been trained to refer any form of bleeding (and to avoid the use of traditional medicines); they were trained in July 2015 and again in 2016.*" The committee has met twice in 2016. The issues discussed in the last meeting included the health centre's human resources needs. They would like to have a Clinical Officer to join the staff; they have prepared a	Community Health Advisory Committee, FGD, Lishuwa Rural Health Centre, 13th July 2016.

	list of items that they would like to purchase for the facility and have raised donations within the community for this purpose. They have only been able to purchase wooden poles needed to build a temporary shelter outside of the maternity shelter for cooking.	
Assumption 2.4 *The combination of improved quality of services in RMNCAH, increased trust and understanding between service providers and users, and increased capability for service users to effectively demand care is sufficient to contribute to a notable increase in the use of services and to overcome barriers to access which existed in the past.*		
	Information/data:	**Information sources:**
29	There used to be more community concerns about **long-acting reversible contraception** (LARC) such as that it would cause cancer, it would make you infertile etc. but now staff said that these **concerns are lessening** and more women accept contraception implants.	Tafelansoni Rural Health Centre, KII, Eastern Province, July 19th 2016.
30	**Views from the SMAGS on the utilisation of the clinic** "*H4+ actually changed things because now every delivery happens at the facility. I brought many, many women here. Before they were all resisting but now we are assisting them to come and everything turns out alright*," Juliette "*Before so many women used to deliver in the villages. This was the problem, but since we started this work, things have changed a lot. The bicycles have made a difference because we can get about to see people… the bicycles help us a lot*," Gaynor "*Now there are no women dying in our community. This year there were no deaths. Yes, it is because we are telling them and bringing them ourselves*," Faressman	Safe Motherhood Action Group and Community Based Distributors, FGD, Tafelansoni Health Facility, 19th July 2016.
31	**Results in Lukulu** Skilled deliveries: Increase from 48 percent in 2012 to 64 percent in 2015 Facility deliveries (absolute numbers): Luvuzi: 2011 (112) 2015 (210); Lishuwa: 2011 (111) 2015 (382) Confirmed maternal deaths: 2012 (1); 2014 (6); 2015 (2) Percentage of women attending for four or more ANC visits: 2012 (50); 2013 (52); 2014 (49); 2015 (64) Percentage of mother-baby couples getting a post-natal check within 48 hours: 2012 (34); 2013 (26); 2014 (43); 2015 (49).	Implementation of CIDA H4+ Initiative, Power Point Presentation, Lukulu, 9th July, 2016.

32	**Appreciation of the staff** The service users interviewed at Luvuzi really liked the midwife and were happy to have a trained midwife, especially one that is a woman.	Luvuzi health Facility, Health Centre Advisory Committee, FGD, 12th July 2016.
33	**Increased utilisation** Male involvement (measured by accompaniment on the first ANC visit) has increased from 8 percent to 91 percent and facility delivery are now 89 percent in 2016 (from a baseline in 2013 of 60 percent.	Health Staff, Tafelansoni Rural Heath Centre, KII, 19th July 2016.
34	**District staff are motivated** and know their clients and can identify each death. They are engaging with the issues that affect maternal and newborn health. The major issue is human resources for health (HRH) and transport. A skilled birth attendant is classified in Zambia as a trained midwife, a doctor, or a clinical officer.	Institute for Economic and Social Research (INESOR), KII, 14 July 2016.
35	Vast catchment area for the health centres still creates a demand for more SMAGs to be formed and trained. Luanchuma, Namayula, Simakumba, Ngimbu, Tumbama, and Kasheke. These are sites outside H4+.	Senior officials, Western Province Medical Office, KII, 11 July 2016.
36	**Attendance at the clinic** "*It is difficult for girls to come for family planning. The group said girls are 'too shy' to collect them. Condoms are not always available in all communities. Supply is insufficient and not even enough for SMAGs to show the community all the options available. If female condoms were available more girls and women would come to the clinic for family planning."* "*Some girls don't come so we give only the males the condoms. Some girls are shy to come to the clinic and ask for family planning. Shyness is the biggest issue and so women would rather come for injectables*." "*Women come very quietly to the clinic*." However, "*another challenge is that we don't have female condoms."* "*The supply of condoms and family planning is not enough even for the SMAG to show the community. We need to show them what is available but we can't always find them."* *"Sometimes we cannot find them at the health centre.*"	Safe Motherhood Action Group, Luvuzi and Lishuwa Districts, FGDs, 12th and 13th July 2016.
37	**Traditional customs and ideas about maternity as barriers** One of the challenges to progress is the barriers created by traditional practices and obstacles created by customs. For example, in some places there are conventions about women not leaving home for some weeks following the birth of their babies. Elsewhere, there are ideas that if a woman goes to hospital too early she may be considered weak in some way or she will be considered by the hospital as incapable of delivering and will have a caesarean section.	District Health Office, KII, Chadiza District, Eastern Province, 18th July 2016.
38	"*The mothers feel okay about coming to the maternal shelter and since the SMAGs have educated them on the importance of delivering at health facilities, and how to identify danger signs and dangers of delivering at home, like bleeding, they prefer to come to the facility. Male involvement mostly by their husbands has played a bigger role helping to ensure pregnant women deliver at health facilities.* Most husbands accompany their pregnant wives to the hospital and ensure they hand them over to care…*"*	Safe Motherhood Action Group, FGD, Chadiza Rural Health Hospital, Eastern Province, 18 July 2016.

39	**How do you feel that you are treated at the RHC?** Members of the Neighbourhood Health Committee at Tafelansoni RHC said they thought that the attitude of staff has improved and they are friendly to patients and approachable. Mothers are happy to deliver at the facility	Neighbourhood Health Committee, Tafelansoni Rural Health Centre, Eastern Province, FGD, 19 July 2016.
40	See also line 88 in Area of Investigation 1.	
41	**Enabling environment affects outcomes** Contextual factors identified include poor road infrastructure, rain and climate issues which make some areas inaccessible for a time period.	H4+ (undated) Minutes, Debrief of the H4+ JPCS programme to MoH, Lusaka.
42	**Causes of maternal deaths** The main causes of maternal deaths are post-partum haemorrhage and hypertension followed by septicaemia. Post-natal check-up should be within 48 hours. Efforts are made to keep women for 48 hours in order to do the post-natal check. It depends if the facility has space and resources for food.	District Health Office Staff, KII, Chadiza District, Eastern Province, 18th July 2016.
43	**Facilities at Lishuwa:** The maternity waiting shelter was refurbished but very busy and quite crowded. No handwashing facilities in or near the latrines. One room for storage and one room for sleeping. An old hand made shelter like the old one at the hospital is still standing as well and was used by relatives for sleeping.	Lishuwa Rural Health Care Facility, KII, 13th July, 2106.
44	Three of the five H4+ facilities have maternity waiting shelters as well as the hospital. The maternity waiting shelters at the clinics were refurbishments. At the hospital, it was a new build.	Senior officials, KII, Provincial Health Office, Eastern Province, 11th July 2016.
45	**Maternity Waiting Shelters** See Line 90 in Area of Investigation 1 above.	
46	See Line 91 in Area of Investigation 1 above.	
47	See Line 89 in Area of Investigation 1 above	
48	**Contribution of SMAGs***: "We thank the hospital management for training us as SMAGs and for their coordination, and for the reflective vests since they serve as identification as we do our work*." The SMAGs said they still needed bags to carry tools, rain coats, umbrellas, gloves and safety boots. And they wanted support to help pregnant women and caregivers who are at the mother's shelter to access sufficient food*. "Due to high poverty levels, sometimes pregnant women and their care takers do not bring along adequate food and some have been there for two months."*	Safe Motherhood Action Group, FGD, Chadiza District Hospital, 18th July 2016.
49	See Line 89 in Area of Investigation 1 above	
50	**Sustained engagement and commitment**: The SMAGs working with Lishuwa health facility were recruited in 2012 and all but one (who died) have remained in the role. They believe that the selection process was good and helped identify people who would be committed and dedicated to the role. They were identified by community leaders. They see it as a very important role in the community and recognise that it helps save lives.	Safe Motherhood Action Group, FGD, Luvuzi and Lishuwa , 12th and 13th July, 2016.

51	**Successes/ trust/ increased demand** • Skilled birth attendance has increased from 48 to 64 percent since the H4+ started • There has been a change in culture and people seem to expect to deliver in the health facility now • There have been some maternal deaths but far fewer. Some have been exacerbated by the lack of infrastructure e.g. lighting at night.	Lukulu District Health Office, KII, 11th July, 2016.
52	**SMAGs are volunteers** SMAGs said how difficult it was to survive as volunteers. They believe they should be compensated (paid a salary or receive an incentive) because they are carrying out a vital role, essentially that of a health worker.	Safe Motherhood Action Group, FGD, Luvuzi and Lishuwa , 12th and 13th July, 2016.
53	**What would you have changed/added/improved?** *"I would add an income generating initiative, like growing cassava, for the SMAGs themselves to help sustain their work*." "*Doing the work voluntarily, we often pay for transport out of our own pocket. We are not paid for this important job*." "*Maybe extend the clinic, bringing some water, a borehole – a water supply*." "*Provide shelter for the relatives when the women come to the maternity waiting shelter*." "*Station an ambulance at the clinic as at the moment, they have to call for one to come, pick up and then go back to the hospital. It all takes time.*" "*Things have completely changed. We need this support to continue yet be more than this.*"	Lukulu District Health Office, KII, 11th July, 2016.
54	**Factors underpinning success**: Features contributing to increased deliveries in the centre included the fact that women are coming to the maternity waiting shelters and delivering at the health facility more regularly. The understanding that people now have (partly as a result of the work of SMAGs in educating and raising awareness across the community) access to improved conditions of the maternity waiting shelter, people value the items in the mama and baby packs were all important.	Safe Motherhood Action Group, FGD, Luvuzi and Lishuwa , 12th and 13th July, 2016.
55	**Future concerns especially as they are to be 'abruptly weaned':** The hospital would prioritise an ultrasound machine, more training: EmONC, IMCI, Paediatric ART, essential newborn care, family planning LARC. There is no maintenance plan for equipment (such as the autoclave which is broken etc.) There are some stockouts of key maternal drugs although at the moment all in stock.	Chadiza District Health Office, Eastern Province, FGD, July 18th 2016.
56	**Incentives for women to attend the health facility:** Community support from SMAGs, maternity waiting shelters, privacy and space, referral system when needed, trained staff. H4+ investments have improved health indicators in all the districts as support was catalytic. They wanted the H4+ programme to continue and were optimistic that more progress could be made. The project has been motivating for the district and the facility staff. Regular mentorship is helpful for building capacity.	Senior Officials, Provincial Medical Office, FGD, Eastern Province, 18th July 2016.

<table>
<tr><td>57</td><td>
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<tr><th></th><th>Admissions</th><th>Deliveries/ discharge</th></tr>
<tr><td>Quarter 1 2015</td><td>12</td><td>11</td></tr>
<tr><td>Quarter 2 2015</td><td>52</td><td>52</td></tr>
<tr><td>Quarter 3 2015</td><td>24</td><td>24</td></tr>
<tr><td>Quarter 4 2015</td><td>2</td><td>1</td></tr>
<tr><td>Quarter 1 2016</td><td>22</td><td>22</td></tr>
<tr><td>Quarter 2 2016</td><td>14</td><td>11 (2 still waiting)</td></tr>
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Status of Maternal admission at Mother's Shelter, 1st Quarter 2015 to 1st Quarter 2015. Note that in this period there were three women who self-discharged reportedly because of lack of food.
</td><td>Senior Staff, Chadiza District Hospital, KII, PowerPoint Presentation, July 2016.</td></tr>
<tr><td>58</td><td>Sustainability
An example of activities that H4+ initiated and supported, but are now supported by the government budget or other donors include the training of midwives for the five districts. This was taken up by the H4+ first but, as the H4+ ends, the training will continue using government funds. However, if before there were six midwives being trained under the H4+, and now, under the government budget may only train two unless other donors are found to support it. The government are training midwives and contracting retired midwives in reduced numbers. Comprehensive Sexuality Education (CSE) is now recognised by government and is being scaled up. It is policy now but the scaling up is slow.</td><td>UNFPA, KII, 8th July, 2016.</td></tr>
<tr><td>59</td><td>Sustainability What will happen when this project ends? "We will have to look for further funds". The government has "taken it up but it remains a problem. We plan to advocate as much as possible."
"Sustainability is not a big problem as such because all of the activities the H4+ embark upon come from the government's midterm work plan. Activities are not isolated; they are part of the activities the government has already been planned. Some will be incorporated into the government budget.
Some of them may have other donors who will take it up. So there is a budget line already for all the activities."</td><td>UNICEF, KII, 11th July 2016.</td></tr>
<tr><td>60</td><td>Sustainability
"In general, the H4+ activities being implemented were perceived to be sustainable because:
i) There was ownership of the programme at the district level
ii) Some H4+ activities were seen to be self-perpetuating, thus sustainable by themselves
iii) There were positive signs from the ministry indicating that replication of pilot models was possible and also scalable</td><td>H4+ (2014) Mid Term Review on Canada supported H4+ activities in Zambia, Country Report, Period 2012-2013, 24th April 2014.</td></tr>
</table>

	However, for some it was too early to tell if the results would be sustainable or not and there were uncertainties about the Millennium Development Goals (MDGs) beyond 2015."	
61	**What will continue?** Training, infrastructure and transport: Project funding is now gone so they will have to reduce funding of activities. Activities have been integrated into the action plan so the number will be reduced as funding is more constrained. Nevertheless, funding from government budget will be used for: - Retention of retired midwives: the government funding cannot be used for retired midwives (or salaries outside the agreed salaries) but there is a discussion going on in Lusaka about how to re-hire the retired midwives using government funds - Training: some health facilitates do not have any trained staff at all and so training will continue but at a slower rate. - Infrastructure, including for the health centre, staff accommodation and more transport will continue to be supported.	Lukulu District Health Office, 11th July 2016.
Assumption 2.5 *Demand creation activities and investments have sufficient resources and are sustained enough over time to contribute to enduring positive changes in the level of trust between service users and service providers in RMNCAH. Investments and activities aim to change service providers' attitude and behaviour toward users in an effort to build mutual trust. Improvements in service quality, equipment and supplies of crucial commodities in RMNCAH. H4+JPCS support is not subject to disruptions, which can weaken trust and reverse hard won gains.*		
	Information/data:	**Information sources:**
62	**Services have improved** "*Services have improved in that women can now come for deliveries rather than delivering at home; woman are also coming because of the maternity wing and the maternity waiting shelter.*"	Community Health Advisory Committee, Lishuwa Rural Health Center, FGD, 13th July 2016.
63	**SMAGs reported a big change in the health facility** in recent years and that this change has also affected the community perception of the health facility and what it can do for them. Strong influence on maternal and newborn health survival: the SMAGs believe they have had strong influence on community thinking and behaviour relating to safe motherhood and generally the health of the community. One SMAG member said: *"H4+ actually changed things because now every delivery happens at the facility. I brought many, many women here. Before, they were all resisting but now we are assisting them to come and everything turns out alright."* Another said: *"Before, so many women used to deliver in the villages. This was the problem, but since we started this work,*	Safe Motherhood Action Group, Tafelansoni Rural Health Centre, FGD, 19th July, 2016.

	things have changed a lot. The bicycles have made a difference because we can get about to see people… the bicycles help us a lot."	
64	See Line 88 in Area of Investigation 1 above	
65	See Line 92 in Area of Investigation 1 above	
66	See Line 108 in Area of Investigation 1 above	
67	**Late disbursement of funds** Funds arrive late (at the end of February in the first quarter and a month in during the other quarters) and there are challenges getting the funds on time. As a result, the programmes have to be readjusted constantly as the funds are not available. The funding hiccups and irregularities slow down the programme delivery.	Chadiza District Health Office, KII, Eastern Province, 18th July, 2016.
68	**Late disbursement of funds** In the first quarter of the year, funds were disbursed in March and had to be fully spent within a month (by the end of the first quarter). In other quarters, funds were disbursed in the first half of the second month. This was confirmed by the district health planner in a separate interview.	Lukulu District Health Office, KII, 11th July 2016.
69	**Stockouts of medicines** for mothers and newborns are being monitored and steps taken to prevent them. For example, in Zambia, H4+ Canada provided strategic guidance to the national forecasting, quantification and decentralised supply chain management processes for all essential medicines in order to ensure the availability of commodities at all levels.	H4+ (2015) Annual Narrative Progress Report January 1 – 31st December 2014, Lusaka, 2015, pg. 1.
70	**Stockouts of mama packs** Mama packs encouraged attendance for ANC, delivery and PNC. No more mama packs in stock.	Health Staff, Tafelansoni Rural Heath Centre, KII, 19th July 2016.
71	**Delayed water systems**: There were a range of delays around installing the improved water supply. The clinic was due to get the same system as Lishuwa (a windmill-powered water reticulation system with storage tower and gravity fed bowsers). UNICEF has issued the contract and the installation should begin within a month. It was more efficient, more empowering and cheaper to deliver the water system through the district authorities themselves. Where this was done, the water supply is still working well. District procedures required consultation with the ministry of public works and the provincial water authorities while in UNICEF, there are rules requiring the use of a contractor according to the UNICEF technical officer. This approach (the requirement to use a central contractor) does not encourage ownership, leads to delays and is more expensive.	Luvuzi Health Facility, KII, 12th July, 2016.
72	**Accountability** H4+ has "taught us how to be accountable not just to with H4+ but also with others". Also, an improvement in terms of focus – more focus on delivery. Undertaking the Bottleneck Analysis was important – now need to do this with our own funding.	Senior Officials, Ministry of Health, KII, 8th July 2016.

Area of Investigation 3: Responsiveness to National Needs

3. Question Three: To what extent has the H4+JPCS been able to respond to emerging and evolving needs of national health authorities and other stakeholders at national and sub-national level?

a. **Is the basic structure of the H4+JPCS (decision making structures, management processes, approval mechanisms, disbursement rules and procedures) able to respond to evolving and changing contexts and situations in a timely and appropriate manner? Does the structure place countries at the centre of the programme?**

b. **As the programme has evolved over time, has it become more flexible in responding to changing contexts and events, for example the Ebola Viral Diseases or to changing national plans and priorities?**

Assumption 3.1

H4+ partners supporting RMNCAH in JPCS countries have been able to establish effective platforms for coordination and collaboration among themselves and with other stakeholders (including work plans, activities and investments, and results monitoring frameworks and systems) using H4+ JPCS funds and with technical support from the global/regional H4+ teams.

	Information/data:	Information sources:
1.	**The H4+ are aligned with national priorities/plans. The 2011 – 2015 National Strategic Plan includes the following objectives:** to support the National Health Strategic Plan 2011-2015, the following four national human resources objectives have been developed: 1. Increase the number of employed and equitably distributed health workforce with appropriate skills mix 2. Increase training outputs harmonised to the sectors needs 3. Improve performance and productivity of health workforce 4. Strengthen systems and structures to support HR expansion and performance	Zambia National Strategic Health Plan, 2011-2015, Lusaka, 2011.
2.	**Resource allocation:** The UNFPA key informants described the allocation of funds: "*We look at the activities and the building blocks – usually under leadership and governance, UNICEF will get something. Then under human resources, UNFPA will get more as we are recruiting and also train the midwives as well as doing rehabilitation but sometimes would get less. Of course, UNICEF got more this year because they have the coordinator to pay. Another year, UNFPA got slightly more than WHO, but this year less so; it depends on the activities completed. Funding is relative to the need.*" **Funding flows:** "*Usually, they do not have much of a problem because UNFPA Headquarters gets funds, once we have the approved budget although sometimes there are delays. Delays can happen in the first quarter for example. Government are supposed to give money to the districts every quarter for activities but because money is scarce*	UNFPA, KII, 8th July 2016.

	they don't always do that. Where they are supposed to give four grants in a year they may give only two. So the districts are very happy to receive a little money from the H4+. One example: They were supposed to train forty traditional leaders in SRH but because they didn't have the grant, they only trained twenty."	
3.	**What made the H4+ work is the availability of catalytic funding**. One Head of an H4+ Agency said "*We need the funds 'to gel'. The funding helps us mobilise to do the work – to 'gel as a movement together'. A little funding helps us to work well together. With H4+ funds coming to an end we may rely again on our own funding which may not have the same 'gelling effect'*." Another said, "W*e are making sure that the funding is going to the right places and at the same time, coming together in terms of our thinking*."	Heads of Agency Meeting, KII, 7th July, 2016.
4.	**"***Late receipt of H4+ money*" was a key finding of the field visit to the districts during the annual review and planning meeting in 2013.	H4+ (2013) Annual Review and Planning Meeting, Gonde Lodge, Kabwe, 4-8th November, Pg. 2.
5.	**Key gaps highlighted in the implementation process** included: (1) delays in receiving funds at the beginning of the project, (2) lack of a focal person at district or provincial level to help with follow up, (3) slow tendering processes with other ministries, (4) reliance on EmONC interventions with few family planning (FP) interventions included, (5) weak coordination mechanisms from the government, (6) human resource shortages and (7) geographical access problems.	H4+ Canada Supported Activities: Mid Term Review in Zambia, Country Report, Period: 2012-2013, 24th April 2014.
6.	**The H4+ was considered successful by MoH**: Ministry of Health senior staff said, *"H4+ has been the best in terms of coordination with the UN. It has also done well through its promotion of government ownership – starting at the central level and all the way to the districts. The districts where the H4+ is working are progressing very well.*" **Coordination** needs the right kind of person. Specialist technical skills are being used for project management and procedural jobs. "*As a government we are really feeling this is a gap. The technical assistance that senior UN technical advisers used to provide is missing because the people are running the H4+ project. A coordinator was appointed for a while, and now it is an existing UN staff member rather than a consultant or special appointment. The coordinator was already doing a senior post and now has added H4+ coordination to her portfolio. It is not possible to do everything and project management is not the best use of expertise*." **What has not gone so well with the H4+:** Visibility of UN organisations is variable. For each funding stream there is a UN organisation that is stronger than others in the MoH view. Some have much more visibility than others. Some UN organisations seem to have more people and capacity than others. "*It doesn't matter how good a project it is, they shouldn't take over projects."*	Senior Officials, Ministry of Health, KII, 8th July 2016.

7.	"*However, it was often mentioned that funds had been released with delay, hampering a timely start of activities. Under-spending of allocated funds was reported ranging from a utilisation of as low as 42 percent of funds in Burkina Faso to 80 percent in Zambia.*"	H4+ Canada Supported Activity, Mid-term Review, Vol. 1, Global Report, Period: 2012-2013, Pg.38.
8.	**What has the H4+ achieved in terms of how H4+ agencies work together?** ***"****We are transitioning from delivering of projects; only in the last year or so are we looking at the results. The H4+ is [a] wonderful concept in terms of bringing UN organisations together. Each one of us is bringing our own comparative advantage. UN Women will be joining us as they started to work in the country recently. The World Bank works directly with the government and is not directly engaged with H4+. UNAIDS have not engaged much. They do not get funding from H4+. So it is just the three agencies (WHO, UNICEF and UNFPA) that receive funding."*	Heads of a H4+ Agency, KII, 7th July 2016.
9.	**M&E** *"There were several challenges articulated in M & E. These included; lack of capacity from the ministry to collect data on H4+ indicators (due to staff shortages), lack of a focal person from the ministry to liaise with and inconsistency of people from the ministry being assigned to the H4+ project resulting in weak coordination from the ministry."*	H4+ (2014) Mid Term Review, Zambia Country Report, Period: 2012-2013, 24th April 2014.
10.	**Health Information systems, monitoring and evaluation**: *"The joint UN/Government team in collaboration with INESOR conducted one monitoring visit to the five supported districts to assess implementation, validate reports and to inform 2015 planning. In 2014, the initiative continued to support districts on the conduct maternal death surveillance and response at facility and community levels. Findings revealed that main contributing factors for maternal deaths are delay in decision making in community and reaching the facility. In response, the districts have strengthened sensitisation of the community on the importance of institutional delivery/skilled delivery and use maternity waiting shelter. The H4+ in collaboration with other partners supported government to conduct the national EmONC assessment in 397 sampled health facilities (122 hospitals and 275 health centres) of which 33 of them (5 hospitals and 28 health centres) are in five H4+ supported districts. The objective of the EmONC needs assessment was to assess the status of EmONC services in Zambia to inform a national plan of action towards the reduction of maternal and newborn mortality and data analysis is currently in progress."*	H4+ (2015) Annual Narrative Progress Report January 1 – 31st December 2014, Lusaka, 2015, pg. 1.
11.	**Indicators:** "*INESOR identified 10 indicators but the District Health Office (DHO) has an issue with some of them. For example: The third indicator is 'Number of births taking place in the health facility'. This is essentially institutional births. However, INESOR has identified a complex denominator involving number of live births. This eliminates any mothers with a stillbirth. Why not use the DHIS2 indicator which is 'Number of institutional births'? Also, number is not percentage or proportion. Another indicator challenge was an indicator about eligibility for ART: 'Number of women eligible for ART'. With the coming of Option B+, every woman is eligible for ART. At the Kabwe meeting, they talked it all out and apparently there has been some progress.*"	Chadiza District Health Office, KII, Eastern Province, 18th July 2016.

12.	**Overview of H4+ Core Indicators** • Proportion of deliveries by skilled birth attendants • Proportion of live births at a facility among women living in the district • Proportion of newborns who received a postnatal care contact in the first two days of delivery • Proportion of mothers who had a postnatal care contact in the first two days after delivery • Contraceptive prevalence rate • Proportion of women who received four ANC visits or more • Adolescent birth rate (birth per 1000 women aged 15-19) • Availability of Emergency Obstetric Care (EmONC) services • Proportion of infants age 0-5 months who are exclusively breastfed.	Professor Mubiana Macwan'gi, PowerPoint Presentation, H4+ CIDA Zambia, Institute of Economic and Social Research (INESOR), University of Zambia of Zambia (undated).
13.	**General barriers** (documented in H4+ Global mid-term review) • Lack of capacity from the ministry to collect data on H4+ indicators (due to staff shortages), • Lack of a focal person from the ministry to liaise with on M&E. • Inconsistency of people from the ministry being assigned to the H4+ project resulting in weak coordination from the ministry.	H4+ (2014) Mid-term Review, Vol. 1, Global Report, Period: 2012-2013, New York, 2014 pg. 36.
14.	To assist with effective and efficient monitoring and evaluation, an indicator reference guide was developed. The guide details each H4+ indicator, a description of the indicator and further detail about that specific indicator.	H4+ (2012) Monitoring and Evaluation, Indicator Reference Guide, Lusaka, September 2012.
15.	Key results across core H4+ programme indicators Indicator 1 Skilled Health Worker at Delivery: "There are inadequate skilled health workers (Doctors, Clinical Officers and Midwives) to attend to women during delivery. HMIS 2011 data shows that all the five (5) intervention districts less than 50.0 percent were attended to by a skilled health worker. Serenje district had the lowest proportion (5.4 percent) while Kalabo district had the highest proportion (45.0 percent)." Indicator 2 Proportion Live Births at Facility: "The majority over (90 percent) of births at health facilities in all the intervention districts were live. However, four percent non-live births is still a concern in the selected districts." Indicator 3 and 4 Proportion of Babies and Mothers within 2 days: "There are differentials in coverage of postnatal care for babies and mothers within two days by intervention districts. The proportion of babies and mothers who received postnatal care is lower (less than (12 percent) in Chadiza, Serenje and Chama and higher in Kalabo (66.7 percent) and Lukulu (80.2 percent). These differentials can be partially explained by the finding that there were more mothers' shelters which support provision of postnatal care in Kalabo and Lukulu districts compared to the other three districts Chadiza, Serenje and Chama."	H4+ Maternal, Neonatal and Child Health Baseline Survey in Selected Districts in Zambia (INESOR), Preliminary Results for Quarter One and Quarter Two (2013), Lusaka, 2014.

	Indicator 5 Contraceptive prevalence among women who do not want to become pregnant: "Two thirds (66.7 percent) of respondents did not want to become pregnant at the time of the survey. Of those who did not want to become pregnant (54.5 percent) were not using modern contraceptives. Kalabo had the lowest proportion (25.3 percent) of those that did not want to get pregnant and at the same time not using modern contraceptive while Chama had the highest proportion (44.7 percent). The most commonly used contraceptives were injectable (56.6 percent) followed by a pill (34.0 percent) and the main reasons for currently not using contraceptives are "do not want" (39.9 percent) and fear of side effects (24.5 percent)." Indicator 6 Number of ANC Visits: "ANC attendance is almost universal in the intervention districts (97.0 percent) but, only a third (31.1 percent) of the women were making the first ANC visit in the first three months. Despite majority of women starting ANC after 3 months, over 50 percent of mothers made (4) or more ANC visits. Kalabo had the lowest proportion (50.9 percent) while Chama had the highest (80.6 percent)." Indicator 7 Birth to Adolescent (15-19): "Births to adolescents aged 15-19 ranged from (9.2 percent) in Kalabo district to (17.0 percent) in Lukulu district, while for the overall sample it was 11.6 percent. This is not surprising considering that about two thirds (68.6 percent) are sexual active. More females, (70.0 percent) were sexually active than boys (66.7 percent); of those who were sexually active, 36.1 percent had more than one sexual partner. Despite being sexually active and having more than one sexual partner, about 60.0 percent of the adolescents were not using condoms. Of all the 866 adolescents in the sample, about half (46.2 percent) did not know where to get condoms and only 15.7 percent were using contraceptives. Furthermore, the data showed that 10.1 percent of the adolescents reported that they had ever been forced to have sex." Indicator 8 Exclusive Breastfeeding Under 6 Months: "About two thirds (65.5 percent) of respondents initiated breastfeeding immediately (within first hour after delivery) for their last child. Chadiza had the lowest proportion while Chama had the highest. Over half (59.5 percent), of the respondents exclusively breastfed their infants when they were under six months of age." Indicator 9 Availability of EmOC services: "Four out of the five districts recorded at least one facility providing EmOC services. These were mainly district hospitals. Chadiza district was reported to be not officially opened at the time of the survey. Furthermore, examination of the district populations for the areas surveyed showed that these districts satisfied the UN Guidelines of at least four basic EmOC facilities and one comprehensive EMOC facility for every 500,000 people in the population. However, despite this few people are access these services due to long distances to the facilities that are scattered over a large space and lack of an efficient public transport system in the intervention districts." Key Recommendations related to M&E: • … Strengthen the HMIS to capture data on breastfeeding and postnatal care for both the baby and the mothers within two days.	

	• Capture all core indicators to enhance M & E process.	
16.	<table><tr><th>INDICATOR</th><th>2007 Baseline</th><th>2015 Target</th></tr><tr><td>Contraceptive Prevalence rate</td><td>41 %</td><td>50 %</td></tr><tr><td>Met need for contraception</td><td>33 %</td><td>58 %</td></tr><tr><td>Antenatal care</td><td>60.3 %</td><td>80 %</td></tr><tr><td>Antiretroviral prophylaxis among HUV positive pregnant women to prevent vertical transmission of HIV</td><td>85 %</td><td>90 %</td></tr><tr><td>Antiretroviral therapy for women who are treatment-eligible</td><td>13.8 %</td><td>60 %</td></tr><tr><td>Antiretroviral therapy for women who are treatment</td><td></td><td></td></tr><tr><td>Skilled attendant at birth from baseline of 47 % to 70 %</td><td>47 %</td><td>70 %</td></tr><tr><td>Postnatal care for mothers</td><td>39 %</td><td>55 %</td></tr><tr><td>Postnatal care for babies</td><td>39 %</td><td>55 %</td></tr></table>	H4+ (2016) Minutes of Heads of Agencies Meeting, PowerPoint presentation, Lusaka, July 2016.
17.	**Indicators**: They are following DHIS2 indicators but also aware of the H4+ indicators. All districts are reporting on the same indicators as set by MoH**.** The PMO suggested that the collection of data at the facility level is not fully reliable. There are no data associates (as with CDC funded projects). There is missing data as well.	Provincial Medical Office, KII, Eastern Province, 18th July 2016.
18.	From the **HMIS data** attained, key gaps noted were in missing data and data inconsistencies. There were also gaps in general service readiness in availability of protocols, training manuals and IEC materials for post-exposure prophylaxis (PEP), adolescent reproductive health, rape counselling, neonatal kangaroo approach and child growth monitoring which were missing or unclear if available in most health facilities.	H4+ (2014) Mid Term Review, Zambia Country Report, Period: 2012-2013, Lusaka, 24th April 2014.
19.	**Monitoring and Evaluation** Tool 2 includes a checklist to administer at the district hospital and also two district health facilities. It also includes a checklist to monitor the 'enabling environment' (aspects of management and coordination, level of human resources, availability of commodities, etc.)	H4+ (undated) Joint Monitoring Field Checklist Two.
20.	**Improve the HMIS and quality data collection:** The Ministry of Community Development and Maternal and Child Health, the MoH, the UN H4+ agencies and monitoring and evaluation partner (INESOR) should ensure that appropriate data are being collected to establish evidence of best RMNCH implementation practices in H4+ districts. There were some inconsistencies found in the data collected, where some were missing data while for other indicators, these were inconsistently recorded casting doubts on the reliability of the data. For example, in the H4+ districts there were two streams of data recorded; (i) the regular HMIS data for the ministry, and (ii) a separate form completed for the H4+ indicators only. When these two data were compared, there were some inconsistencies found. There will be a need to identify	H4+ Canada Supported Activities: Mid Term Review in Zambia, Country Report, Period: 2012-2013, 24 April 2014 Pg. 55.

	what are the main gaps in the health management information system and how they should be best addressed during the post-mid-term review period.	
21.	**Monitoring** One joint assessment for partners undertaking jointly with USAID. Indicators: they are following DHIS2 indicators but also aware of the H4+ indicators. All districts are reporting on the same indicators as set by MoH. Assessment of stock and equipment: H4+ undertakes assessment of stock and equipment jointly with the MoH at least once a year in collaboration with ministry. System for checking stock, using a checklist developed by INESOR (adapted from global standards)	Chipata Provincial Medical Office, KII, Eastern Province Chipata, 18th July, 2016.
22.	**PNC within 48-hours has not been fully integrated into HMIS** What data is gathered to monitor past natal care? Data is collected for the 6-hours, 6-days, 6- weeks care. However, the '48 hours' care is monitored at the facility (rather than at the district or provincial level). Aside from the H4+ facilities (which has a separate form), there are logistical challenges' in gathering the data – logistical challenges have not enabled effective monitoring of '48 hours' across all the districts. 'While it is desirable (and government policy?), on the ground we're not able to collect it. We need to invest in capacity to enable that'.	Chipata Provincial Medical Office, KII, Eastern Province Chipata, 18th July, 2016.
23.	**Factors that have contributed to improved outcomes** "*Retired midwives are filling in for nurses sent to be trained. Regular supervision and mentorship has improved the quality of care. Maternity waiting shelters have particularly helped. The H4+ also supported outreach activities, medical equipment for the hospital, support for the engagement of communities (for example, the SMAGs were given bicycles) and staff training in EmONC, nutrition, Option B+. Nurses are supported to convert from Enrolled Nurse to Enrolled Midwife.*"	Chipata Provincial Health Office, Eastern Province, KII, 18th July 2016.

Assumption 3.2:
Established platforms and processes for coordination of H4+ (and other RMNCAH initiatives) are led by the national health authorities and include as participants the H4+ partners, relevant government ministries and departments (including at the sub-national level) and key non-governmental stakeholders.

	Information/data	**Information sources**
24.	WHO commissioned report on health expenditure which shows there is a US$ 93 spending per capita in Zambia but it must be very inefficiently spent as there is still such poor results. The UN has gone into service delivery but in doing so has left the national policy field wide open. The experience of working with the H4+ (and the UN health agencies in general) has therefore been a little disappointing and there is still an absence of consistent quality policy leadership and support. The existence of the H4+ TWG was news and although a technical group,	DFID, KII, 14th July, 2016

	"*there is a much needed interface with the larger policy processes*". Major NGOs need to be folded in to build a common approach. To do this, the H4+ could start with producing more information and proactively share the results and gains from the JPCS, communicating evidence, experience or even anecdotes that would enable others to build on it or adopt a similar approach. Some UN agencies are weaker than others, for example, in collaboration with government or in communications. Little is done in writing; all very verbal and the institutional memory, the visibility of the policy process is weak. Thus, the H4+ has little impact on others and gains little traction.	
25.	**Continue strengthening the H4+ Coordination** "*The overall coordination of the H4+ programme is commendable, where nearly all the UN agencies (except the World Bank) are 100 percent involved and the leadership from the Ministry of Community Development and Mother and Child Health is committed. Nevertheless, there is always room for improvement and continued strengthening of the H4+ coordination, planning and implementation of the programme including M&E."* [To note: at the time this report was written, (a) UN Women was not present in Zambia and (b) responsibility for MNCH was located in the Ministry of Community Development and Mother and Child Health.]	H4+ Canada Supported Activities: Mid Term Review in Zambia, Country Report, Period: 2012-2013, 24th April, 2014, Pg. 12.
26.	**USAID officials said they invited H4+ to collaborate** and share their advice when they developed their Saving Mothers Giving Life programme. Saving Mothers Giving Lives is in 19 districts shared between CDC and USAID. However, they said it was difficult to get a contribution from the H4+ even when directly approached. Also, USAID has not seen much evidence of H4+ coordinating, sharing products, reaching out to donors or providing much assistance to the Ministry of Health. USAID would like to see H4+ to be an effective convener of RMNCAH and to provide high-level strategic and technical assistance to the government. The Ministry of Health has not taken advantage of opportunities to convene all agencies together on RMNCAH. Sida has followed the H4+ approach to channelling resources through the district health system for RMNCAH. Donors are coming together on RMNCAH contributing with their comparative strengths. USAID will channel funds for district implementation through Sida (as will DFID) so that in effect there will be a pooled fund. Gaps: Early childhood development and social protection both of which USAID is interested in (DFID mentioned this as well). USAID is presently putting together a framework with UNICEF for future work on social protection.	USAID, KII, 15th July, 2016.
27.	The district gets regular visits from the centre including senior MoH officials, UNFPA and other H4+ agencies. The most recent one was May 2016.	Chadiza District Health Office, KII, Eastern Province, 18th July 2016.
28.	**Project orientation** "*The Ministry of Health launched the planning exercise for 2013-2015 and the consolidated district action plans for 2013 are currently being finalised to ensure allocation of needed resources. In the five project districts additional resources from CIDA will support the resource needs and are envisioned to help promote more effective and efficient services …*"	H4+ (2012) Progress Report for April 2011 – June 2012, *Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality*

		Reduction in Zambia, Republic of Zambia, Pg. 4.
29.	INESOR provided the evaluation team with the monitoring tools. The methodology within the tools shows how communities were involved in monitoring and evaluation. For example, the joint monitoring field checklist includes the following questions presented to community leaders: • Have there been any changes to the operations of your group as a result of the H4+? • Have there been any MNHC related benefits to the community that have resulted from the H4+ project? • Going forward what would you like the H4+ project to improve upon in terms of MNCH service delivery in the community?	H4+ Joint Monitoring Field Checklist One, Accelerating Progress towards Maternal and Neonatal Morbidity and Mortality Reduction (undated).
30.	**Food in maternity waiting shelters** Provision of food to pregnant women and their relatives in maternity waiting shelters is a significant constraint and is not sustainable. Community and SMAGs need to be sensitized on their involvement for birth preparedness and need to consider income generating activities to support the mothers in the maternity waiting shelter.	Lukulu District Health Office, KII, 11th July 2016.
31.	Senior officials in the Western Province Health Office thought the H4+ was a good initiative and enabled the district to do trainings, renovations, supervision and monitoring at the facilities. They also said they thought the H4+ programme targeted issues of real concern.	Senior Health Staff, Provincial Medical Office, KII, 11th July 2016.

Assumption 3.3 *Programme work plans take account of and respond to changes in national and sub-national needs and priorities in RMNCAH as expressed in plans, programmes, policies and guidelines at national and sub-national level. H4+ partners consult and coordinate with stakeholders at both levels.*		
	Information/data:	**Information sources:**
32.	"*H4+ is delivered through the districts and the district health offices are the implementing partners. Priories have come from the districts; they develop their action plans. H4+ has been very responsive to this from the start and very responsive to what the districts wanted*."	Senior Officials, Ministry of Health, KII, 8th July, 2016.
33.	"*There were also country specific challenges that are worth noting, such as the … leadership changes in the Ministry of Health in Zambia, and competing priorities in all countries, which have sometimes compromised the timely implementation of activities. However, all countries are on track in the implementation of the programme, as described in the following pages, and no major delays are expected at this point."*	Interim Progress Report, H4+/CIDA Collaboration, Accelerating Progress in Maternal and Newborn Health, August 1st 2012, Reporting period: April 1st 2011-June 30th 2012, pg.8.

34.	"*In Zambia, support to increase institutional deliveries in 76 health centres has been provided, with the exception of activities involving planning for MNCH with other government sectors. Most activities focusing on increasing skilled attendance have been implemented as well as activities targeting improved family practices… The distribution of contraceptives has been improved as have supportive activities regarding functionality of DHIS2 to a large extent*." The completion rate of activities was noted as 63 percent in Zambia at the end of 2013.	H4+ (2014) Mid-term Review, Vol. 1, Global Report, Period: 2012-2013, Lusaka, 30th April 2014 pg. 33-34.
35.	How coordination of H4+ was established, initially: *"…The 2012 interim H4+ progress report states that a project coordinator for H4+/CIDA collaboration was appointed to provide technical and programmatic support and to liaise with the UN for project oversight. The coordinator was to be supervised by the Deputy Director of Public Health and the UNICEF Chief of Health and Nutrition.*"	Interim Progress Report H4+/CIDA Collaboration, Accelerating Progress in Maternal and Newborn Health, 1st August 2012. Reporting period: April 1st 2011-June 30th 2012 Pg. 10.
36.	The H4+ has been successful in the view of the senior Ministry of Health official in charge of MNCH. "*H4+ has been the best in terms of coordination with the UN. It has also done well through its promotion of government ownership – starting at the central level and all the way to the districts. The districts where the H4+ is working are progressing very well*." **Human resources to manage the H4+:** "*Coordination needs the right kind of person. Specialist technical skills are being used for project management. As a government we are really feeling this is a gap. The technical assistance I'm not getting because the person is running the project. The coordinator was already doing a senior post and now has added H4+ coordination to her portfolio. She cannot do everything in the end though. It is not the best use of expertise."*	Senior officials, Ministry of Health, Courtesy Call, KII, 8th July 2016.
37.	The first Zambia Integrated Systems Strengthening Program (ZISSP) training was in 2012. The programme was funded by USAID and closed in 2014. It worked mainly on systems strengthening and a little on community. ZISSP supported the development of action plans, training to the SMAGs, and other systems support. H4+ has been doing more on SMAGs and infrastructure but less on systems. ZISSP did not provide funds for communities to undertake activities.	Lukulu District Health Office, KII, 11th July 2016.

Assumption 3.4

Platforms and processes for coordination of H4+JPCS do not duplicate or overlap with other structures for coordinating activities in RMNCAH. Further, they provide a strong RMNCAH focus to national and sub-national health sector coordinating platforms.

Information/ Data	Information Sources

38.	"*In terms of sufficiency of funds to attain expected results, most respondents felt that the H4+ funds were sufficient … because the funds were supposed to be catalytic in nature. There was no duplication of activities reported in the H4+ districts*."	H4+ (2014) Mid Term Review in Zambia, Country Report, Period 2012-2013, Lusaka, 24th April 2014.
39.	Evidence of coordination of the UN H4+ activities, limited overlap with other funding agencies, there was knowledge of the H4+ initiative, inequities regarding access to institutional deliveries.	Minutes – Debrief of the CIDA UN H4+ MNCH initiative 2013 to MCDMCH (undated).
40.	"*Why is the training a shared activity? It depended on the number of staff the agency had (the pairs of hands available). But PMCTC and HIV was only UNICEF – including early diagnosis for children (for HIV). Later on it involved the community for 'development mobilization', which was about training the districts to demand the services in maternal and neonatal health. The community health office went to the districts to organization trainings. The Nduna (community leader) then organized the SMAGs. UNICEF trained people in the districts to train for Communication for Development. So UNICEF did the training in the districts. The districts then organized others to go out and train the community. The preparation for the training was done by a UNICEF officer, at the district level."*	UNICEF, KII, 11th July 2016.
41.	"*The Ministry of Higher Education established a three-year, direct-entry Midwives Education Programme. In Zambia, the H4+ advocated for increased investments in MNCH through its participation in National Health SWAPs and policy dialogues."* "*The orientation of 75 community leaders on SRH and gender issues has empowered them to be game changers on advocacy for the use of reproductive health services*."	H4+ (2014) Annual Narrative Progress Report 2013, Accelerating Progress in Maternal and Newborn Health, 1 January 2013 to 31 December 2013, Lusaka. Pg. 15.
42.	"*Main weakness is in the use of the senior people. I expected them to work but not only to support the funding of H4+. I want us all to be thinking and working on another level, at a higher policy level so that the H4+ informs the national level*."	Senior Officials, Ministry of Health, KII, 8th July, 2016.
43.	**Procurement processes not responsive to government needs:** The way the H4+ buys equipment for the districts is not yet fully in line with Zambian needs. UNICEF decides on the make/ model of the motorcycles since they only procure from two suppliers. They are the wrong kind for the sand and the conditions in the west of the country according to the Director of MCH Services, but they were not procured with detailed specifications. The government could have tailored certain specifications, however they [UNICEF] bring their own preferred type according to officials. *"Yes, when we let UNICEF do it, they procure whatever they want. Resources go through the UNICEF procurement group in Copenhagen and they have an arrangement with Yamaha. But they should have three vendors who would offer equipment that is suitable and then the MoH can choose. The issue is mainly with the procurement of motorbikes. Most of the Yamahas are not working now in some areas of the country [the West]. In other places they are still working. There are no problems with solar panels or other equipment. But the outreach indicators are not very good in some areas because of the wrong motorbikes."*	Senior officials, Ministry of Health, KII, 8th July 2016.

44.	**Collaboration with other donors:** DFID and Sida designed a maternal newborn programme focusing on implementation across the continuity of care, with a vision to scale across four provinces. Cooperating partners are considering setting up a new pool fund to support the RMNCAH continuum of care beyond the financial aid to districts (the technical support component).	DFID, KII, 14th July 2017.
45.	**Advocacy and Health financing**: "*In Zambia, the RMNCAH Roadmap was disseminated to ensure prioritisation of public financing for high impact RMNCAH interventions in the five supported districts. In addition, as part of the fiftieth independence anniversary of Zambia (24 October 2014), a local fund raising initiative coined 50-4-50 was undertaken to raise additional funds for rehabilitation of a labour ward at Kalabo district hospital*."	H4+ (2014) Annual Narrative Progress Report 2013, H4+ Canada Initiative, Accelerating Progress in Maternal and Newborn Health, Reporting period: 1 January-31 December 2014, Zambia P.6.
46.	The minutes describe an H4+ JPCS activity to support advocacy for more public financing for MNCH. The activity was focused on the sensitisation of 38 parliamentarians about MNCH so that they would be able to effectively participate in health sector budget debates and understand their role related to improving MNCH in their constituencies.	H4+ (2014) Minutes of Meeting, H4+ Heads of Agency Meeting, Lusaka.

Area of Investigation 4: Innovation

4. Question Four: To what extent has the programme contributed to the identification, testing and scale up of innovative approaches in RMNCAH (including practices in planning, management, human resources development, use of equipment and technology, demand promotion, community mobilisation and effective supervision, monitoring and accountability)?

a. **How do H4+JPCS partners and health authorities and other stakeholders at national and sub-national level recognized potentially effective innovations in RMNCAH?**

b. **How is information on the success or failure of innovations supported by the programme gathered and made accessible to decision makers within and across H4+JPCS countries?**

c. **What evidence indicates that successful H4+JPCS supported innovations have been replicated across districts, at national level or in other programme or countdown countries?**

Assumption 4.1

H4+ JPCS partners, in collaboration with national health authorities, are able to identify potentially successful and innovative approaches to supporting improved RMNCAH services. These innovations may be chosen from examples in global knowledge products supported by H4+ JPCS, from practices in other H4+ JPCS countries or from the expertise and experience of key stakeholders at all levels

	Information/data:	**Information sources:**
1.	**Service delivery innovation** They practice 48-hour retention after birth. They have about 26 deliveries a month on average. During the PNC period they give oral polio vaccine to the baby and Vitamin A and post-natal family planning for the mother. They watch for post-partum haemorrhage and ensure the baby is latching on correctly. They also assess the baby for congenital malformation and show the mother how to do cord care, infection control, educating her about nutrition, exclusive breast feeding, and the importance of immunisation etc.	Health Staff, Tafelansoni Rural Heath Centre, KII, 19th July 2016.
2.	"*The scaling up plan for the mobile phone technology (mHealth) to remind pregnant women and newborn babies for follow-up services through community workers is completed and includes the five project districts. Discussions are ongoing to define the roll-out of mHealth including the training plan*."	Progress Report for April 2011 – June 2012 , *Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia,* Submitted to the Government of Canada through Canada International Development Agencies, by United Nations in Zambia and the Ministry of

		Health, Republic of Zambia (2012), Pg. 3.
3.	"*In Zambia, the district plans are mainly funded and implemented by government which provides monthly operational grants for service delivery, capital expenditure, as well as paying salaries for staff. The H4+ catalytic accomplishments the following:* *1. Successful mama kits study outcomes of increased demand and utilization of delivery services has resulted in national policy formation for institutional deliveries.* *2. Provision of scholarships for midwifery training has increased the workforce for skilled Birth Attendants at birth.* *3. Refurbishment of maternity waiting shelters is addressing challenges associated with geographical barriers that hinder institutional deliveries* *4. The orientation of 75 community leaders on SRH and gender issues has empowered them to be game changers on advocacy for the use of reproductive health services."*	H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 15.
4.	**Mama Packs:** Successful mama packs study outcomes: Increased demand and utilisation of delivery services has resulted in national policy formation for institutional deliveries.	H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 15.
5.	**Mama Pack Results**: This randomised evaluation revealed that "*a modestly priced non-monetary Mama Pack incentive was a cost-effective intervention to improve rural facility delivery rates in Africa. Our primary analysis estimated a USD4 mama kit increased facility deliveries by 44 percent (statistically significant at the 1 percent level) in poor, remote areas of Zambia. Cost-effectiveness modelling estimates the mama kits cost effectiveness at USD3,490 per death averted, a figure that is comparable to other public health interventions, such as insecticide-treated bed net distribution, anti-retroviral drugs for HIV, and other established maternal and child health interventions*."	Measuring the Impact of Mama Kits on Facility Delivery Rates in Rural Chadiza and Serenje Districts in Zambia. End of project technological report, 28th April, 2014.
6.	Provision of scholarships for midwifery training has increased the workforce for skilled birth attendants at birth.	H4+ (2014) Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 15.
7.	**Refurbishment** of maternity waiting shelters is addressing challenges associated with geographical barriers that hinder institutional deliveries.	H4+ (2014) Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 15.

8.	*"All the identified intervention facilities from the five countries reported progress in this Output Area, particularly in terms of the development and implementation of innovative approaches to financing, subsidization, voucher schemes, in-kind packages, and mutual healthcare insurance. National costed RMNCH plans (including human resources) were developed in two countries (Burkina Faso and Zambia) based on a comprehensive situation analysis that highlights priorities and gaps."*	H4+, (2014) Annual Narrative Progress Report: Accelerating Progress in Maternal and Newborn Health, Reporting period: 1 January 2013-31 December 2013, June 2014.
9.	**Government/ MoH treats UN funding as their own.** H4+ was able to look at a wider range of needs for the mother, child, adolescent but other districts (integrated approach) across the continuum of care. The H4+ introduced post-natal care within the minimum of 48 hours. Serenje District started to plot the data within the district and H4+ helped speed this up.	H4+ Evaluation Reference Group, KII, July 7th 2016.
10.	They are not always able to do the 48-hour post-natal check (keeping women in the facility for 48 hours after birth) to ensure there are no complications and that the baby is suckling and has no infections (15 percent of newborns die on their birth day). When the facility is crowded they are unable to keep the women in for so long.	Lukulu General Hospital, KII, 12th July 2016.
11.	**Innovation** • Increased use of results by districts for planning and identifying priorities • Platforms were created for annual presentation of results, which motivated innovation and creativity among districts • Developed "talking walls": these were dashboards developed through a self-assessment process at supported health facility • Joint monitoring resulted in inclusion of all players in the districts • Introduction of the Mama-Baby Pack to improve health facility deliveries. The government adopted this initiative • Training of midwives in the midst of few resources. • Phased EmONC trainings helped achieve targets with few resources. • 48 hours post-natal services to care for mothers after delivery.	WHO, KII, 8th July 2016.
12.	**Factors that have contributed to improved outcomes** • Retired midwives filling in for nurses sent to be trained • Regular supervision and mentorship has improved quality of care • Maternity waiting shelters have particularly helped • Outreach activities • Medical equipment for the hospital • Engagement of communities • SMAGs given bicycles	Chipata Provincial Medical Office, Eastern Province, KII, 19th July 2016.

	• Staff training: EmONC, Nutrition, Nurses converting from Enrolled Nurse to Enrolled Midwife.	
13.	Health seeking behaviour for institutional delivery has improved through provision of baby layette ("mama kits" which contain nappies, hitenge (wrapper), a blanket, a baby vest, baby booties, Vaseline, a baby hat and soap) to women post-delivery in a health facility.	H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 6.
14.	The SMS intervention is facing challenges as there is no telephone network in some areas -- e.g. Chipundu RHC in Serenje districts. The community is generally active and involved in health programmes. (Example of tried and tested innovation).	Minutes, Debrief of the CIDA UN H4+ MNCH initiative 2013 to MCDMCH (undated).
15.	The provincial medical officer mentioned the concept on **'talking walls'**. The clinics displayed 'talking walls' and worked with communities to engage them in using them. Talking walls are used to transmit and discuss information with communities in an open way and to promote decision making.	Provincial Health Office Staff, Western Province, KII, 11th July, 2016.
Assumption 4.2 *H4+ country teams have been able to access required technical expertise to assist national and sub-national health authorities to support the design, implementation and monitoring of innovative experiments in strengthening RMNCAH services*		
Information/data:		**Information sources:**
16.	An innovative strategy being supported by the project is the re-engagement of retired midwives to increase the number of trained healthcare workers available to the sector. Ten contracts have so far been singled out of the planned 25. Funds for remuneration packages for these retired midwives will be disbursed to the provincial health offices on a quarterly basis).	H4+ (2012) Progress Report for April 2011 – June 2012, *Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia,* Lusaka, Pg. 3.
Assumption 4.3 *H4+ partners and national health authorities agree on the importance of accurately and convincingly documenting the success or failure of supported innovations and put in place appropriate systems for monitoring and communicating the results of these experiments.*		
Information/data		**Information sources**
17.	**Cooperation with the H4+** DFID officials said they looked to the H4+ agencies to strengthen this approach and "t*ake their place*" in the development process. They appear to work privately with government and don't appear to invest time in	. DFID, Lusaka, KII, 14th July 2015.

	supporting the broader cooperating partner processes. Regarding their collaboration, the H4+ agencies have their jobs to do and may even do their jobs well but there isn't evidence of collective thinking at least not through their expression, documentation, or presentation of their H4+ work at the level of the cooperating partners' forum.	
18.	**Key activities the H4+ has done to support results and to document according to INESOR** Increasing space for the 48-hour postnatal check; midwifery training/ contracting retired midwives; community involvement (community workers); bringing health services closer to the community (to do ANC); building maternity waiting shelters. One impact was that **more men escort partners to the facility and there is more family engagement.**	Institute for Economic and Social Research (INESOR), KII, 14th July 2016.
19.	**Documenting the experiment:** Yes, INESOR has done human interest stories. WHO asked for more human interest stories, and they are documenting innovations according to UNICEF. UNICEF innovations originated with some funding from H4+. As an example, early infant diagnosis for neonates (H4+ districts with H4+ funds plus additional UNICEF money) was first identified in a UNICEF-funded programme in Zambia. INESOR might be duplicating the national health system. Yes, because some of the indicators are outside of the national system and INESOR travels to the districts to collect the data. Then they go to the MoH and compare the data with the DHIS 2 system. But they also do quality reviews (which show the quality is good). Some of the indicators that H4+ had were not in the HMIS. The so-called 'Global Indicators' as proposed by the UN at HQ level were not consistent with Zambia Health System indicators. As an example, the Zambian Government insists on measurement of postnatal at six hours, six days, and six weeks. But the H4+ is 48-hours. Another difference is with institutional deliveries rather than births.	UNICEF, KII, 11th July, 2016.
20.	**The TORs of INESOR** include the requirement to conduct research, document progress, including innovation, and to write and prepare all of the H4+ JPCS material. The TORs are under Assumption 5.2. There is also reference made to the lack of funds for the whole contract. Once the baseline study was done (using a household survey methodology) priority was given to monitoring H4+ delivery at facility level and to documenting successes.	Institute for Economic and Social Research (INESOR), KII, 14th July 2016.
Assumption 4.4 *National health authorities are willing and able to adopt proven innovations supported by H4+ JPCS and to take them to scale. They have access to required sources of financing (internal and external).*		
	Information/data:	**Information sources:**
21.	**Innovation and new ideas in H4+ JPCS**	Provincial Medical Office, Western Province, KII, 11th July 2016.

	In terms of what was new or really memorable, the senior officials at the provincial medical office said: (1) the mama packs were really appreciated; (2) involvement of the community in and upgrading the facility such as through the training of SMAGs, the construction of the maternity waiting shelter, the new equipment, etc.; (3) 'Talking Walls' at the clinics and working with communities to engage them; transmission and discussion of information in an open way to promote decision making; (4) retired midwives contracted to fill the place of nurses gone for training.	
22.	**Funding in the public budget to hire retired midwives while the nurses are in training** For the government, there is no budget for hiring midwives (public funds cannot be used to pay salaries for *ad hoc* or temporary staff according to statements made by UNFPA and confirmed also by the district health authorities), but the government has extended the retirement age to 62 instead of 55 years. So all those who reach 55 years are not going to retire. If they opt to retire the package will come later. In the Eastern Province, Sida is beginning to fund the same kind of H4+ package of RMNCAH interventions, and through the districts. They recently advertised contracts for retired midwives. The midwives are invited to apply and Sida will provide the funding to support the contracts for five years. Government will continue training one new midwife per district (so H4+ will carry on in the East Province at least). In years to come there will be less need for the retired midwives. The Government looked at the model of H4+ and knew the impact and achievements so far.	UNFPA, KII, 8th July 2016.
23.	**Successful innovations in the view of UNFPA include:** Training of midwives; contracting retired midwives; training teachers alongside health workers in sexuality and reproductive health so they can support adolescents together. UNFPA trained teachers on their own to take adolescents through sexual education. But then the training of teachers was combined with training health workers in pairs based on district or location (rather than separately). It was apparent their roles reinforced one another so teachers call upon health providers when needed. The impact was significantly better. They got to know each other and teachers could refer the pupils to the healthcare provider. UNFPA had supported this in the North Western districts prior to H4+. Then, they started doing this in the H4+ on a wider scale (i.e. the five H4+ districts) and it has now been extended to other parts of the county. It is not as yet national policy but this may happen ("*they are starting to look into it*"). In addition, they are working together with UNESCO on an initiative to support a curriculum development centre for trainers. Asked if there were any data on it or whether and how is success monitored, UNFPA said they go back to schools to monitor outcomes. They are also monitoring the number of pupils visiting the health facility for family planning. Also monitor how many girls drop out of school as a result of early pregnancy.	UNFPA, KII, 8th July 2016.
24.	**What has been different in the H4+ Districts?**	H4+ and Evaluation Reference Group, KII, 7th July 2016.

	"1. Mama - Baby Packs: Postnatal pack (with H4+ advertising on it for every women and newborn child). This had been delivered through the facility (so trying to motivate women in different ways but mainly to attend the facility for delivery). *2. Chlorhexidine: Yes, but not the gel. It has not been rolled out as yet.* *3. Misoprostol and guidelines: Scaled up to district hospital level although it depends on the location. We expect the rural population to fully engage especially due to the [rate of] those bleeding after birth. The guidelines have been developed and we expect to distribute the guidelines to all districts. They should start requesting misoprostol.* *4. Kangaroo Mother Care will be funded in some facilities. KMC is taught during EmONC although it is still at an early stage (even though the training has been done).* *5. Integrated management of communicable diseases (IMCI) in Chadiza, Lukulu and Serenje.* *6. Sexuality education and health training of peer educators has been done although they all said they had not done well enough around adolescents and youth especially at the national level.* *There was an example of a community health assistant in Chama district who ran a programme for youth but on their own initiative. Little mention of innovations or the Maternal Newborn Death Surveillance and Response process."*	
25.	**"***The EU MDGi programme has adopted the Mama kits and the government will also incorporate into the next budget it says."*	Senior Ministry of Health Officials, KII, 11th July 2016.

Area of Investigation 5: Division of Labour and Value Added (Country Level)

5. Question Five: To what extent has the H4+JPCS enabled partners to arrive at a division of labour which optimises their individual advantages and collective strengths in support of country needs and global priorities? **a. Has the H4+JPCS programme contributed to the development of effective and robust platforms and operational systems for coordinating support to RMNCAH at country level by the partners? Will these platforms and systems persist in one form or another beyond the period of programme funding?** **b. Do the resulting programmes of support to RMNCAH at country level make best use of the individual strengths of H4+ partners? Is there a distinguishable value added over the existing programmes of the H4+ partners?** **c. Do efforts at coordination result in collaborative programming which is more effective than separate initiatives?**		
Assumption 5.1 ***H4+ teams at country level in collaboration with key stakeholders have established*** *forums for coordinating programme action and division of labour* ***in H4+ JPCS financed and supported activities in particular and in RMNCH generally.***		
	Information/data:	**Information sources:**
1.	H4+ partners have **monthly meetings**.	H4+ (2014) Mid-term Review, Vol. 1, Global Report, Period: 2012-2013, Lusaka, 30th April 2014, page 39.
2.	**Process of collaborative planning:** "The government made the Maternal Health Plan, and the UN and all agencies (UNDAF) together identified joint programming opportunities. We mobilised resources together. This resulted in the building of H4+. Together we undertake joint monitoring missions." KII couldn't identify challenges to working together, though neither could they specify what was unique/ better about working together.	H4+ Evaluation Reference Group, KII, 7 July 2016.
3.	How is success monitored? UNFPA goes back to schools to monitor. However, the Ministry of Health did not have sufficient funds and was unable to assess progress in supporting community health workers to improve their care for newborns after their course (in Central Province, Serenje district).	UNFPA, KII, 8th July 2016.
4.	**The Division of labour:** *UNFPA:* maternal health; UNICEF: newborn care; WHO: standards and guidelines on EmONC and child survival; UNAIDS: HMIS and HIV/AIDS communication and standards. UN Women: only just arrived in country and not part of the H4+ JPCS; WB: no one had a comment and no one mentioned anything about what they did in the country (which actually is a lot in the way of health systems strengthening support and human resources for health). But all agencies raised a challenge that the *"senior UN colleagues were now spending their time organising trainings and writing letters."*	H4+ and Evaluation Reference Group, KII, 7th July 2016.

5.	**Continuous support** received from the heads of UN agencies, and working as a team (UN respondents)	H4+ (2014) Mid-term Review, Vol. 1, Global Report, Period: 2012-2013, 30th April 2014, pg. 39.
6.	**UNICEF main activities:** **Procurement**: To procure equipment, supplies (including neonatal supplies), motor vehicles, VHF radios and commodities. **WASH**: Procure boreholes and water/ sanitation systems for 25 facilities. The idea was initially to put boreholes in every facility according to the money available. As of June 2016, only five boreholes had been sunk, with solar panels installed to keep the pumps working, one each in Lukulu, Chama, Serenge, Kalabo and Chadiza. These were installed by the districts themselves. In the second round, UNICEF was told to use an implementing partner contracted through their (UNICEF) procurement office. UNICEF also undertook training for nurses, clinical officers (and SMAGS) to cover HIV, IMCI, and PMTCT.	UNICEF, KII, July 11th 2016.
7.	**WHO** saw their role as providing leadership and guidance in the development of guidelines related to RMNCAH at national level using its expertise in human resources and M&E strengthening for health. In the project, WHO was responsible for engaging the INESOR to provide M&E services and to ensure capacity building for planning and on-going monitoring. They also focused on skills strengthening and the improvement of RMNCAH service delivery -- e.g. training in EmONC, FP, PMTCT and IMCI targeting. The training was done in provincial capitals for most of districts. For example, in Western province, the training was done in Mongo. The distribution of H4+ resources was based on planned activities and the mandate and strengths of each UN partner.	WHO, KII, July 8th 2016.
8.	**UNFPA** highlighted that a good example of H4+ agencies working together was the building of the maternity waiting shelters. "For us to address these challenges of distances we saw that remote clinics needed a maternity waiting home. Also, the condition of the health facilities was such that women did not want to deliver there. The delivery rooms were just the floor or a bare mattress; there was no privacy. So we were expanding and improving the labour rooms and also needed to build maternity waiting shelters." **UNFPA** – dealt with rehabilitation and refurbishing of health facilities. **UNICEF** – procured beds, mattresses and other furniture and also supplied radios and ambulances to support the referral network. **WHO** – trained staff in family planning. So every agency does something on the supply side but each has a different approach. Further, UNFPA activities included convening and training Safe Motherhood Action Groups so as to create the demand for the services. UNFPA trained community-based distributors of family planning (CBDs). The communities were trained in their own locations to be their own distributors of family planning so there is no excuse for women not to access family planning because of the distance; usually just oral contraceptives and condoms. The government has also accepted that the CBDs can be trained to do injectables (Depo Provera) although this had not yet started	UNFPA, KII, July 8th 2016.

	everywhere/ in all clinics. Insertions and IUD will still be done by the health centre. Supported training of traditional leaders in sexual and reproductive health so at least to create demand. Traditional leaders are supportive of the programme and there is greater ownership amongst them around the health messages and also greater ownership of the project. UNFPA also supported the training of Adolescent and Youth Friendly Services including Peer Educators and also trained peer educators in oral contraception.	
9.	**UNAIDS** described their role as to strengthen information management. While mainly done through INESOR (which is developing tools for mission monitoring and capturing progress), UNAIDS has a small role regarding the HIV/AIDS component. UNAIDS has been developing a number of indicators with INESOR to measure the HIV component. Now that the project is over, they are reviewing this experience and seeing how/ whether some of these indicators can be absorbed into the national DHIS2 system.	UNAIDS, KII, 8th July 2016.
10.	**World Bank** said that although they didn't receive funds to spend on H4+ programmes, they actually do a lot of similar work and should be engaged on a policy level. They say they attend meetings in Lusaka but as they do not have funds from H4+ they cannot get engaged in the supervisory trips. They need a charge code to start using resources like a car/ driver, hotels, per diems etc. It suggests that the H4+ has been about delivering a project and that the policy dialogue and working across different projects to deliver a coherent whole has been less successful. Regarding the representation of the UN in the donor coordination group, they suggest WHO should be a permanent member although the WHO seems passive about this.	World Bank, KII, 14th July 2016.
11.	"*The role of the World Bank in H4+ needs to be looked into because they have not been active thus far.*"	H4+, (2015) Minutes from the Debrief to MoH H4+ MNCH initiative 2013 to 2015, Lusaka.
12.	**H4+ meetings** The Evaluation Reference group provided the evaluation team with minutes of the various Heads of Agency and Technical Working Group meetings and annual review planning meeting documentation. The documentation provided shows that 21 meetings in total took place between 16/07/2012 and 15/10/2015. For example: • Heads of Agency Meeting at Protea Chisamba, 11, October, 2012 • Mother and Child Health Intervention Discussion Meeting, 13th March, 2013 • H4+ Heads of Agency Meeting, June, 2013 • H4+ Heads of Agency Meeting, 19th August, 2013 • Heads of Agency Meeting, 4th February, 2014 • UN Technical Monthly Meeting, 4th March, 2014 • Heads of Agency Quarterly Meeting, 6th May, 2015	Assembled from minutes of meetings and other documentary evidence.
13.	**Experience of coordinated delivery**	WHO, KII, 8th July 2016.

	▪ The UN agencies have always worked together since the first UNDAF of 2011-2015 ▪ The H4+ project was commissioned at the same time as the first UNDAF, therefore, there was combined effort to develop the H4+ proposal together. Initially some agencies wanted to be more visible. ▪ Recently, the H4+ agencies came together to support the development of the GAVI proposal.	
14.	**How have the division of tasks and funding been affected by H4+?** • According to the WHO, the division of labour between H4+ members has been crystallised and more organised. WHO said there are templates for H4+ to draw upon that can help mobilise resources. At the start of the H4+ programme, funding was a challenge as 'there was one pot'. Also, now, the H4+ members are sharing tasks based on the comparative advantage of each agency. UNFPA said the proposal writing process for the RMNCH Trust Fund is a good example of how the agencies are working together. They received 7 million USD (from the RMNCH Trust Fund) for one year. • **H4+ achievements as a result of working together?** • They are transitioning from the mode of delivering projects individually to working together on the H4+ programme. According to the group, they have begun to see the results of working together [under H4+] over the past one year. "*The H4+ is [a] wonderful concept in terms of bringing UN organisations together – each one of us bringing our own comparative advantage*." UNWOMEN will soon be joining H4+ in Zambia. The World Bank works directly with the government and "*is not directly engaged with H4+*". • UNAIDS has had limited engagement and does not receive any funding from H4+. Therefore, the agencies that have been most active in H4+ are WHO, UNICEF and UNFPA. These agencies have received funding from the JPCS. • According to the group, the agencies see funding as critical to their ability to "*do H4+ work*". They are unable to hire people without it because of the way funds are managed in the UN now. The group also believes that the H4+ mechanism forces them to come together. H4+ partners said they would still be doing what they do now without H4+ funding but it would take more time and would not deliver the same product and would not be shared as easily.	Heads of Agency Meeting, KII, 7th July 2016.
Assumption 5.2 *The assigning of activities and investments in support of H4+JPCS programme goals in participating countries is* ***based on both the distinct capacities and advantages of each H4+JPCS agency*** *in that country and the national and sub-national context for support to RMNCAH.*		
Information/data:		**Information sources:**

15.	**INESOR was contracted by WHO to provide**: (1) M&E support through undertaking quarterly reviews. They go to districts each quarter with a joint visit with the H4+ organisations. Other part of the role was to understand what works. Sending documents to WHO including the original baseline survey, quarterly reports, joint monitoring reports, biannual Newsletters; (2) Provide documentation of progress and what is working and then; (3) as researchers, their mandate was also to undertake research if issues of particular interest were identified in the quarterly visit. But the funding was too limited. **Implementation:** Indicators and data collection: In terms of organising the programme, it was to review evidence based interventions delivered through the Ministry of Health and the district services. Used the HMIS data. Aligned the indicators with the data the government routinely collected in order to do the monitoring based on routinely collected data. **Capacity building:** Data collected indicated that there was not a good link between the facility data and the community data. No reporting framework for the community agents. Information is only collected based on what the facility does not what the community agents do.	Institute for Economic and Social Research (INESOR), KII, July 15th 2016.
16.	**Funding flows to the district office (from the district perspective)** UNFPA was late in sending the funding to the district office, especially in the first quarter of the year (every year) but in the other three quarters, the funds generally arrived by week one or two of the second month of the quarter. They had to send leftover money back to the UNFPA or they could carry it over to the next trimester but said they could not start using it until the new money arrived. In a nutshell, they said they had no funds for the first month of every quarter. They have to get VAT waived by suppliers, and local suppliers find it difficult to do this, so tend to order cement and fuel from Lusaka. Transport added to the cost; local economy suffered.	District Health Office, KII, Lukulu, 11th July 2016.
17.	**Funding:** H4+ did not provide any support for national level policy analysis or development. Only project delivery focused support was offered. "*We thought there should be funds at the central level as well so that we could decide what we should do in the way of monitoring of the H4+ programme. Financial support is at the district level only. All the money is held by the UN organisations but there should be another pot held by the government. This is being discussed. It all stems from previous mismanagement of funds (in 2003 which led to a radical change in donor behaviour). UNFPA gives us money for other programmes but not for H4+.*" **Performance Based Funding is** "*just starting with the World Bank and we have no real experience yet.*" **Regarding H4+ fund management, to "***move money you need to get through processes. H4+ had a dedicated H4+ coordinator before. Now we are not getting what we need either in the H4+ or in the senior technical advice because the same people are running the project*."	Senior Officials, Ministry of Health, KII, 8th July 2016.
18.	**Management of funds for H4+**	UNICEF, KII, July 11th 2016.

	There is agreement with other agencies on how money is to be spent. "*Before the money comes, you all sit around the table and look at all the activities that are to take place. Management fees are between seven and fourteen percent but for our office in Lusaka it is 10 percent. At Headquarters four percent is for operations/ procurement.*" In the first year, it was agreed that they would contract a consultant as H4+ coordinator. After a couple of years, when that person's contract ended, it was decided that UNICEF should take over rather than contracting another consultant. "*Money was insufficient in first tranche. In second tranche, work was delayed because of the late receipt of the money from UNICEF HQ. The last money received for example was close to USD3-400,000. It was supposed to cover until the end of March. However, we waited until the end of 2015 (November), which was about four months before the end of project implementation. We had allocated 130,000 for boreholes and wanted to drill about 10 boreholes. Finally, the companies are going to do it but now we are only going to do above 5 boreholes because now, some months later, the cost has increased. The cost of solar units, panels, convector etc. have all increased. Also, for the companies that dig the boreholes, fuel has increased as well. We have received and used all of the money now. By the end we would have done ten boreholes instead of about 25 (one in every health facility). The original five were working well at the last visit in April."*	
19.	**Lag in the disbursement of funds:** *GRZ only received in September last year. October to December funds arrived in January. Despite consistent requests and follow up, funds have been delayed by one month (for example, funding that should have arrived in November or December, arrives in January or February and this has resulted in delayed implementation of activities. Late disbursement of funds means that funds arrive at the last minute such as towards the end of February and we are expected to implement in just one month. If Quarter One funds are late, then Quarter Two is affected as well.*"	Provincial Health Office, KII, Eastern Province, 18th July, 2016.
20.	**Water and Sanitation:** In the end, one facility will get a borehole and pump. The district said that they "*were promised four. Then there was only money for three and now [we have] just one*."	Lukulu District Health Office, KII, 11th July 2016.
21.	**INESOR used district data**. There was no drop box or shared drive. Projects seldom genuinely try to use live information to make decisions. But in the H4+ programme, they really did use the data to inform the annual decision making process.	Institute for Economic and Social Research (INESOR), KII, 14th July, 2016
22.	"H4+ is providing modern equipment on labour wards and maternity waiting shelter, and mama baby packs. A lot of people knew them and grappled with them. H4+ showed how it should be done (listened to because it's the UN). Even in the UN they listen to the Troika – UNICEF, WHO, UNFPA. For a long time, UNFPA had the mandate of what H4+ was doing – maternal care. WHO does guidance and standards but can also do the training."	UNICEF, 11th July 2016.
Assumption 5.3		

H4+ JPCS agencies have used structures and processes established for programme coordination at country level to rationalise their support to RMNCAH and to avoid or eliminate duplication and overlap in support. This trend is reinforced by increasing levels of coordination contributing to improved operational effectiveness and strengthened advocacy.		
	Information/data:	**Information sources:**
23.	**Contracting and delivery issues:** INESOR had a contract with WHO. They passed their work to WHO to distribute it to others. But apparently that distribution did not happen. When the focal point – WHO – summoned them because they were under-performing, it became clear to them that it was not working well. In summary, there was a recognition that the way documents were moving from one agency to another (or not) meant the information was not being shared. Also, "*resources didn't stretch far enough to do research*. *There was enough for the initial baseline survey and documentation of Monitoring and Evaluation (M&E) reporting and the annual report. A team of four did the M&E in two groups of two. Human resources were adequate. But financial resources were not and the process wasn't systematic so reports were not regularly spaced. In terms of the dissemination of information, they could have done it better probably and been more systematic about it."*	Institute for Economic and Social Research (INESOR), KII, 14th July, 2016.
24.	"The WB health program is focused on the Zambian Health Systems Improvement Project (USD 50m) working in two provinces and the Health Results Innovation Trust Fund (HRITF) in 11 districts (USD 15m) in the pilot from 2012-14 and now scaling up to 39 districts going forward. The mid-term review of the current World Bank health systems strengthening programme is in 2017. The program's aim has been to increase numbers of health workers and quality of care. Donors participated in identifying the key interventions for the program."	World Bank, KII, 14 July 2016.
25.	"*Agencies worked together to develop Trust Fund Proposal Power point presentation with HoA included: (a) a proposal for UNFPA to be the lead facilitating agency for the RMNCH trust funds, (b) the use of the H4+ Model of implementation given its successes in Zambia*. *HoAs committed themselves to make available staff and resources if need be for proposal writing and submission by end of Feb 28.*" Regarding the division of labour amongst UN Agencies, this should be spelt out in terms of reference of the working group and reflect technical expertise needed for the proposal development, including communication and M&E experts.	H4+ (2015) Minutes of H4+ Heads of Agency Quarterly Meeting, Lusaka, 6th May 2015.
26.	**Evidence of division of labour for field visit** "*Confirmed support of government officials; DSA for four national level staff, two drivers and two provincial nursing officers. District staff will be given lunch allowance. WHO will also provide fuel allowance for two government Vehicles while UNFPA will provide fuel for the two district teams.*	H4+ (2015) Minutes of the H4+ Planning Meeting, Ministry of Health, Lusaka, 2nd September, 2015.

	Transport: the following number of vehicles where confirmed: two from MoH; two from WHO; one from UNAIDS; one from UNFPA; one from UNICEF. The teams agreed to start off from UN House at 09:00 hours on 6th September 2015. Central province team will go straight to Serenje, conduct a courtesy call on Friday 11th September 2015. Eastern province will pay a courtesy call to the PMO on Monday 7th September 2015 and proceed to Chadiza thereafter."	
27.	**Other donors collaborating with H4+:** USAID invited H4+ to collaborate and share their advice when they developed their Saving Mothers Giving Life program. However, there was no contribution of any note from them. Also, USAID has not seen much evidence of H4+ coordinating, sharing products, reaching out to donors or providing much assistance to the Ministry of Health.	USAID, KII, 15th July 2016.
28.	**Engaging Other Donors** Lessons learnt from the H4+ Canada implementation are shared with other cooperating partners in the health sector. Other modalities of engaging with donors include the MTEF planning meetings.	H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), pg. 6.
29.	**USAID Engagement with H4+** USAID officials said they were familiar with the H4+ in terms of coordination of its work and made sure there was no duplication or overlap with H4+ districts when they designed their Saving Mothers Giving Lives (SMGL) programme. However, they had not seen the H4+ reaching out to others for coordination or bringing donors and partners together around RMNCAH. Nor have they heard or seen any written material about the program. UNFPA has been the most active recently as they started a new coordination group which has met just once or twice. According to USAID, now is a good time for the H4+ to step up as a convenor of all the CPs and also to provide some high level assistance to the government (which has been lacking).	USAID, KII, 15th July, 2016.
30.	**DFID is stepping up its support for RMNCAH and switching focus from province to district** DFID recognises capability of the districts to manage their own resources and so funds will go directly to them (as opposed to the province). Provincial and district level will be supported to improve governance and management of health service delivery. A new Family Planning programme has been approved (£10 million over three years) and RMNCAH programme (£35 million over five years). Establishing and leading donor coordination around a Zambia wide FP2020 plan is a UN responsibility. They aim to work closely with other cooperating partners on the continuum of care and shift the dialogue/ support from occasional districts to whole provinces. So DFID will support Western and Central Provinces pushing 85 percent through district budgets and the balance for technical support and targeted investments. USAID is planning to use their USD 80 million to take two full provinces as well and Sida has already started spending their USD 60 million in Eastern and Southern Provinces. So about USD 200 million are going into RMNCAH in Zambia over the next five years led by three donors who are keen to cooperate with each other and build a common approach. The focus will be training midwives, maternity waiting	DFID, KII, 14th July, 2016.

	shelters, continuum of care, governance at provincial and district level, community based engagement and interaction.	

Area of Investigation 6: Value Added in Support of the Global Strategy

6. Question Six: To what extent has the H4+JPCS contributed to accelerating the implementation and operationalisation of the Global Strategy and the "Every Woman Every Child" Movement"? **a. To what extent has H4+JPCS contributed to more effective advocacy for international and national commitments to operationalize Global Strategy principles and accelerate actions to strengthen RMNCAH investments and systems?** **b. During the life of the programme, how well did the H4+ partners support existing global structures (for example, the PMNCH, the iERG, the Commission on Information and Accountability) for supporting action in RMNCAH?** **c. As programme funding ends, to what extent can the lessons learned in implementing H4+JPCS inform the work of the H6 partnership, allowing it to better contribute to energizing global structures and processes in support of the Global Strategy 2.0**		
Assumption 6.1 *The establishment of H4+JPCS in 2011 and its expansion in 2012 helped strengthen the rationale for and extent of policy support for coordinated action in RMNCAH at global, regional, national and sub-national level by the H4+ agencies.*		
	Information/date:	**Information source:**
1.	**Leadership and Governance**: In Zambia, 38 parliamentarians were sensitised on MNCH for more effective participation in health sector budget debates. Lessons learnt from the H4+Canada implementation are shared with other cooperating partners to inform programme design for new upcoming initiatives.	H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014).
2.	**HR success** The H4+ funding invigorated the district and had additional effects according to the district health office. There has been an increase in both institutional and skilled deliveries and an increase in the number of midwives from four to twelve. There are more midwives in health facilities including the hospital (8 trained by UNFPA) Post-natal coverage has increased from 36 percent in 2014 to 69 percent by October 2015. Fully immunised coverage increased from 71 percent in 2014 to 106 percent in October 2015.	Lukulu District, KII, PowerPoint Presentation, 9th July 2016.
3.	**Technical support from regional and global teams** In Zambia, the H4+ provided technical assistance to the revision of the Reproductive Health Policy, with a view to promoting safe motherhood. As part of this revision, it has been agreed that CIDA funds will support	Interim Progress Report, H4+/CIDA Collaboration, Accelerating Progress in Maternal and Newborn Health,

	the printing of family planning registers, safe motherhood training manuals and antenatal cards. The H4+ also supported the launch of the National Health Strategic Plan (NHSP 2011 - 2015) in March 2012, in line with Government commitment to achieve the MDGs articulated in the Sixth National Development Plan (SNDP, 2011-2015). *"In Zambia, an inception orientation and planning workshop was conducted in March 2012 to provide an opportunity for districts to have a common understanding of the goals and objectives of the H4+/CIDA collaboration. Participants included not only representatives of government and the H4+, but also CIDA officials from the country office and the focal person for Zambia from CIDA central office. This further enriched the articulation of aims and purposes of CIDA supporting the project."*	August 1st 2012, Reporting period: April 1st 2011-June 30th 2012, pg.8.
4.	**Donor support to RMNCH in Zambia** "*There are several donors in Zambia. One major donor is the EU. The EU provides General Budget Support (GBS) to Zambia to support the Government focus on accelerating progress to achieve the Millennium Development Goals and reforms in public finance management[8]. Zambia was allocated a six-year programme worth €225 million over the period 2009-2014[84]. An amount of €30 million was added in 2009 to help the country deal with the impact of the global financial and economic crisis. Examples of a few active EU grants in RMNCH include:* • *€44 million MDG Initiative targeting women, children and adolescents in the provinces of Lusaka and Copperbelt for 4 years (October 2013 – October 2017)* • Life Unlimited: Children and Youth for a Productive and HIV/AIDS-Free Generation (Bread for the World) grant worth €489,720 (March 2011 – February 2015) • *Promotion of MDG 5 strengthening in underserved rural communities (Marie Stopes International) worth €750,000 (December 2012 - December 2015)* • *DFID is another important donor in Zambia. Several projects are funded under DFID[85] e.g. malaria and child health programme (2011 – 2015) worth £35 million* • *Tackling maternal and child under nutrition in Zambia phase I (2011 – 2015) worth £3.8 million & phase II (2012-2016) worth £10 million,* • *Adolescent girls empowerment programme (2011-2017) worth £10 million* • *Intensifying HIV prevention in Zambia programme (2013 – 2016) worth £4 million* • *Saving Mothers Giving Life is another donor initiative. This is a five year public-private partnership between USAID, Merck for mothers, Norwegian Ministry of Foreign Affairs, Every mother counts, the*	H4+ (2016) Heads of Agencies Meeting Power Point Presentation, Lusaka, Zambia.

[84] European Union. The EU delegation to Zambia and COMESA. Factsheet cooperation with Zambia 2013.

[85] Department For International Development. Development Tracker. Zambia. Available at: http://devtracker.dfid.gov.uk/countries/ZM/projects/

	American College of Obstetricians and Obstetricians (ACOG) and project C.U.R.E. It is unclear how much is being invested in Zambia currently, but the main goal of the initiative is to reduce maternal mortality."	
Assumption 6.2 *By providing targeted funding for global activities (and funding the coordinating office) H4+JPCS programme funding facilitated the development of knowledge products and joint, coordinated advocacy in RMNCH by H4+ agencies which would not have otherwise been undertaken.*		
	Information/date:	**Information source:**
5.	**Ensuring the Sustainability of Results Achieved in relation to building joint working approaches** In Zambia, the H4+ is embedded in the district plans in accordance with the national framework and priorities. The government has prioritized the acceleration of high impact interventions for MDGs 4 and 5. The capacity strengthening of human resource ensures sustained provision of high quality MNCH services. The H4+ initiative is programmed in accordance with the national decentralisation process to strengthen the capacity of districts. The building of communities as change agents of maternal newborn and child survival is strengthening community ownership and participation leading to better health outcomes and sustainable development.	H4+ 2014 Annual Narrative Progress Report, H4+ Foreign Affairs, Trade and Development, Canada (January 1 – 31st December, 2014), Pg. 15.
6.	A set of new H4+ activities were implemented in 2013 that were not part of the original proposal. These included: - Technical and financial support for the mid-term evaluation of the National AIDS strategic framework and the national planning process - Support to the finalisation of the RMNCH Road Map (2013-2016) - Support to national health financing policy and planning - Support for the development and launch of the costed national eight-year plan for family planning - Technical support for the development of the national road map for maternal death surveillance and response (MDSR). - Support to supply chain management and essential medicines.	H4+ (2014) H4+ Canada Supported activities: Mid-term review in Zambia Country Report, 2012-2013, Pg. 11.
Assumption 6.3 *H4+ partners, assisted by programme funding, were able to be more effective in advocating for commitments to Global Strategy principles and priorities than they would have been without programme support. Their communications and advocacy work was made more consistent through collaboration on common products.*		

	Information/date:	Information source:
7.	**District staff are motivated** and know their clients and can identify each death. Engaging with the issues. Major issue is HRH and transport. Birth attendants are classified as midwife, doctor, clinical officers. Direct midwifery training and hiring retired midwives. Distances are long and difficult.	INESOR, KII, 14th July, 2016.
8.	**Working around the enabling environment: Generator power and the functioning of the incubator** The hospital is not connected to the national electricity grid (Lukulu town is not on the national grid at all). The town generator is turned off at midnight until 6 am. Solar panels provide light in the delivery room and theatre. In the event of a need, the medical director telephones the GenZam office and they switch the generator on (for the whole town) for the duration of the emergency (for example, a caesarean section). This happens weekly more or less, he said. Any neonate in the incubator is removed each night and treated with KMC (the "old-fashioned" incubator he called it). The hospital has an ambulance and a utility vehicle. But the ambulance base station is in the old hospital.	Lukulu General Hospital, KII, 12th July, 2016.
9.	*"In Zambia, the coordination mechanism is part of the Ministry of Community Development Mother and Child Health management structures under the MNCH Interagency Coordinating Committee (ICC) which provides programmatic and policy direction. There are several thematic technical working groups under the MNCH ICC. The provincial medical office (PMO) coordinates district level implementation. The country team under the leadership of the UN Resident Coordinator provides oversight for this Initiative under United Nations Development Assistance Framework (UNDAF) outcome 3 as a UN Joint Programme on MNCH with UNICEF as lead agency. The programme coordination meetings include: monthly technical UN specific meetings; monthly technical UN and government counterpart meetings and regular briefs for UN Heads of Agency by UN technical team."*	H4+ (2015) Annual Narrative Progress Report, H4+ Canada Initiative, Accelerating Progress in Maternal and Newborn Health, Reporting Period: 1st January-31st December 2014 Pg. 7.

Assumption 6.4

Where H4+ JPCS has contributed to improvements in service quality and access for RMNCAH these have in turn made a contribution to positive outcomes in RMNCAH including the targeted operational outcomes of the Global Strategy and "Every Woman Every Child".

	Information/date:	Information source:
10.	**Approach to sharing resources** The district aims to have a network of BEmONC facilities across the district. They follow the principle that if a health care worker has been trained, they need the tools to perform as trained. Some of the district facilities	Chadiza District Health Office, KII, 18th July 2016.

	are high volume Tafelansoni (largest catchment area) and Zaezu (largest workforce) for example, so these need to have the equipment and training as a priority. It is important to make decisions about how one can get the most impact for funds. They don't want to have centres of excellence in a context in which some facilities have nothing and some everything. However, they are also aware that a basic minimum for the largest facilities or busiest centres will pay off.	
11.	**Incentives, achievements and challenges by the H4+ project:** The researchers at INESOR suggested that there is insecurity among retired midwives as a result of having one year contracts. There is a whole department in the central ministry about facility establishments which takes a long time and is frustrating for upgraded staff. Midwifery posts were frozen some years ago. H4+ makes recommendations to the government. Messages to parliamentarians include these sorts of issues. Human resources for health is the main issue along with managing distance and dealing with the enabling environment. Community health workers should not be involved in delivery but do continue to provide the service because of facility distance. Public service commission manages salaries and staffing. But the MoH has to make a recommendation for changes to start happening. INESOR is planning to document these lessons learned and put together a short book on what the H4+ has helped to achieve and the results. [See also Assumptions 3.1 and 4.3].	The Institute of Economic and Social Research (INESOR), University of Zambia, KII, 14th July 2016.

ANNEX 2 FINANCIAL PROFILE OF H4+JPCS IN ZAMBIA

Table 1: H4+JPCS Expenditures in Zambia

US$	2011	2012	2013	2014	2015	Total	%
UNFPA	0	382,460	503,443	769,267	491,843	2,147,013	29%
UNICEF	0	905,574	530,381	1,021,498	356,746	2,814,199	39%
WHO	0	732,888	481,463	735,328	370,394	2,320,073	32%
TOTAL US$	**0**	**2,020,922**	**1,515,287**	**2,526,094**	**1,218,983**	**7,281,285**	**100%**

Figure 1: H4+JPCS Expenditures by Year and Agency in Zambia

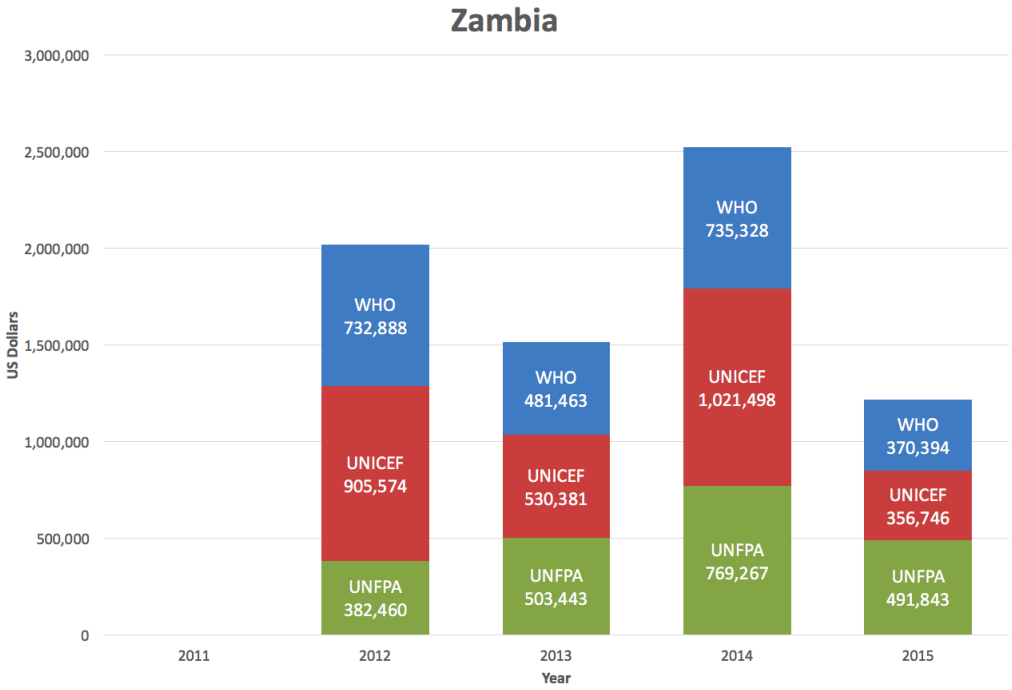
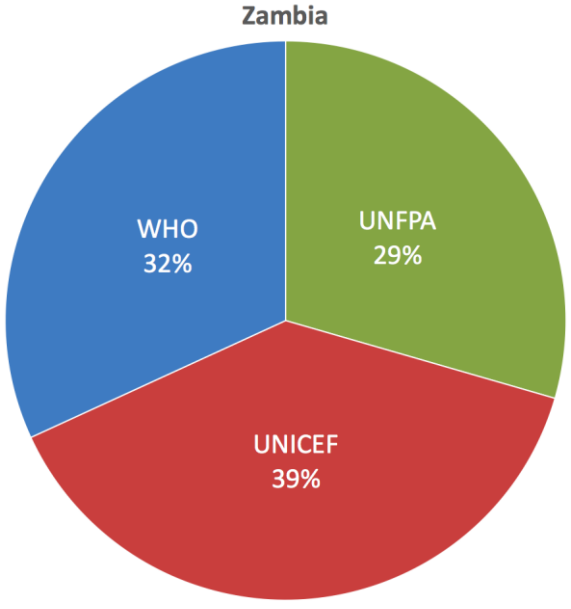


Figure 2: H4+JPCS Expenditures in Zambia: 2011-2015



ANNEX 3 OUTCOMES IN RMNCAH

Zambia

Table 1: Basic info

Country income level	Lower-middle-income	
Population 2014	14.5 million	(World Bank 2016i)
Literacy rate 2007	61.4	(World Bank 2016a)
Political/administrative system	10 provinces, 89 districts	

Table 2: Health Expenditures: 2010-2014

Health Financing	Type	Share	Percent	
Health expenditure	Private	% of GDP, 2012	2.3%	(World Bank 2015a)
Total expenditure on health	Public	% of GDP, 2012	4.2%	(World Bank 2015b)
Out-of-pocket health expenditure	Public	% of THE, 2012	23.9%	(World Bank 2015d)
Out-of-pocket health expenditure	Private	% of PHE, 2012	66.7%	(World Bank 2015c)

Table 3: H4+JPCS Profiling Indicators 1990-2015

Indicator	1994	1999	2006	2011	2014	Source
Demand for family planning satisfied, % women age 15-49	72%	76%	80%	80%	87%	(Countdown 2015a)
Indicator	**1997**	**2002**	**2003**	**2008**	**2013**	**Source**
Adolescent Fertility Rate, per 1,000, women age 15-19	108	103	101	112	120	(Countdown 2015a)
Indicator	**1996**	**2002**	**2007**	**2010**	**2015**	**Source**
Teenage mothers, % women age 15-19	30.7%	31.6	27.9%	...	...	(World Bank 2016j)
Indicator	**1995**	**2000**	**2005**	**2010**	**2015**	**Source**
Maternal Mortality Ratio, per 100,000	596	541	372	262	224	(Countdown 2015a)
Neo Natal Mortality Rate, per 1,000	...	...	...	...	21	(Countdown 2015c)
Infant Mortality, per 1,000 live births	...	...	...	...	43	(Countdown 2015c)
Under Five Mortality, per 1,000	181.1	163.1	111.7	82.1	64	(Countdown 2015a)
Indicator	**1995**	**1999**	**2002**	**2007**	**2015**	**Source**
Contraceptive Prevalence Rate, % aged 15-49	...	22%	34.2%	40.8%	...	(World Bank 2016c)
Indicator	**1997**	**2002**	**2007**	**2010**	**2015**	**Source**
Unmet need for contraception, % aged 15-49	25.2%	27.5%	26.6%	...	...	(World Bank 2016k)
Indicator	**1992**	**1996**	**2002**	**2007**	**2014**	**Source**
Antenatal care, rural, ≥ 4 visits, %	69%	71%	72%	60%	56%	(Countdown 2015a)
Indicator	**2005**	**2009**	**2010**	**2012**	**2014**	**Source**
Percent of HIV+ pregnant women receiving ARVs for PMTCT	<1%	62.9%	>95%	>95%	85.8%	(Countdown 2015a)
Lower bound	<1%	57.5%	>95%	>95%	79.8%	
Upper bound	<1%	68.8%	>95%	>95%	92.1	
Indicator	**1996**	**1999**	**2002**	**2007**	**2014**	**Source**
Skilled attendant at delivery, %	47%	47%	43%	47%	64%	(Countdown 2015a)
Postnatal care for baby, %	...	...	...	...	16%	(Countdown 2015a)
Postnatal care for mother, %	...	...	...	...	63%	(Countdown 2015a)
Exclusive breastfeeding (<6 months), % of babies age 0-5 m	19.3%	26.7%	40.1%	60.9%	72.5%	(Countdown 2015a)
Facilities providing BEMoNC, number	...	...	...	...	...	
Facilities providing CEMoNC, number	...	...	...	...	...	
C Section Rate, % of live births, women age 15-49	2%	...	2%	3%	4%	(Countdown 2015a)
Indicator	**1995**	**2000**	**2005**	**2008**	**2015**	**Source**
Community Health Workers, per 1,000 people	...	...	0.84	0.73	...	(World Bank 2016b)
Indicator	**1995**	**2000**	**2006**	**2010**	**2015**	**Source**
Nurses and/or midwives, per 1,000 people	...	...	0.71	0.78	...	(World Bank 2016f)

ANNEX 4 PERSONS MET

Name	Position	Institution
	H4+ Technical Working Group	
Bvulani, Sarai Malumo, Dr	National Programme Offier,	World Health Organisation
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ANNEX 6: KEY CAUSAL ASSUMPTIONS

We have identified a number of causal assumptions that we think link the theory of change. These are the most important result of developing a complete theory of change and they form the basis of what we then test through collecting and analysing available data. It is these causal assumptions which can be tested to determine the credibility of programme claims to contribution toward results. So for example, we will use available data to evaluate the degree to which an assumption is true and can be proven or demonstrated. Causal assumptions relate to the six areas of investigation which are:

Area of investigation one: Strengthening health systems for RMNCAH
Area of investigation two: Expanded access to integrated services along the continuum of care
Area of investigation three: Responsiveness to national needs and priorities
Area of investigation four: Innovation and scale up
Area of investigation five: Division of labour and coordination
Area of investigation six: Accelerated implementation of Global Strategy for Women's and Children's Health

Causal Assumptions H4+ Theory of Change

1. H4+ partners, in a process led by national authorities and encompassing key stakeholders, are able to develop and implement a coordinated process and platform for planning their joint support to RMNCAH while taking full account of the role of other relevant initiatives. The process is able, over time, to overcome barriers to integrated and coordinated planning which may have obstructed joint support in the past and enable joint support which is more integrated and coherent and provides more added value than the support normally provided by H4+ members individually.

   (*Relates to area of investigation three: Responsiveness to national needs and priorities and area of investigation five: division of labour and coordination*).

2. H4+ partners, in consultation with national health authorities and other stakeholders, are able to identify critical and unserved needs in the eight areas of health systems support (or seven in Zambia which has not focused on financing). These include needs which are not fully met by other sources of support and, importantly, where programme support can build on investments and activities already underway.

   (Relates to area of investigation one: Strengthening health systems for RMNCAH).

3. H4+JPCS support at national and sub-national level can be sequenced appropriately[86] with support to RMNCAH from other sources as needed or available. Support is timely and appropriate to conditions but not necessarily the full need.

   (Relates to area of investigation one: Strengthening health systems and two: Expanded access to integrated services along the continuum of care).

[86] Because H4+ JPCS support is meant to be catalytic and operates in conjunction with other programmes and investments in health systems support, it must provide resources in a timely way and take into account the planned and actual delivery of support from other sources. For example, support to training of clinicians by H4+ JPCS can have little effect if infrastructure support or commodities provided by other programmes is delayed.

4. H4+JPCS support to capacity development has adequate reach and is sustained enough over time so that it can affect access to quality services for marginalized groups. In combination with contributions from other programmes and sources of investment, H4+JPCS support addresses the three dimensions of sustainable capacity improvement:

   - capability in terms of skills and supportive supervision;
   - opportunity in terms of the availability of adequate facilities, equipment and supplies; and
   - incentives for provision of quality care.

   The reach of H4+JPCS support is extended by identifying and implementing experimental innovative approaches to health systems support and the provision of quality care in RMNCAH.

   (Relates to area of investigation two: Expanded access to integrated services along the continuum of care and four: Innovation and scale up).

5. Demand creation activities and investments have sufficient resources, and are sustained enough over time, to make enduring positive changes in the level of trust between service users (especially including youth and adolescents and other members of marginalised groups in the community) and service providers. These investments and activities are not limited to demand side interventions, but also aim to change the attitude and behaviour of service providers toward users in an effort to build mutual trust.

   This further implies that improvements in service quality and access are not disrupted by failure to provide adequate facilities, equipment and supplies of crucial commodities.

   (Relates to area of investigation two: Expanded access to integrated services along the continuum of care)

6. The combination of improved quality of services in RMNCAH, increased trust and understanding between service providers and users, and increased capability and opportunity for service users to effectively demand care is sufficient to produce a notable increase in the use of services, and to overcome barriers to access which existed in the past.

   (Relates to areas of investigation one: Strengthening health systems for RMNCAH; two: Expanded access to integrated services along the continuum of care; three: Responsiveness to national needs and priorities; and six: accelerated implementation of the Global Strategy for Women's and Children's Health).

The causal assumptions underpinning the innovation are listed below and correspond to the blue numbered boxes in figure 7.

1 H4+JPCS partners, in collaboration with national health authorities, are able to identify potentially successful and innovative approaches to supporting improved RMNCAH services. These innovations may be chosen from examples in global knowledge products supported by H4+JPCS, from practices in other H4+JPCS countries or from the expertise and experience of key stakeholders at all levels. They should respond to a pressing problem or challenge.

2 H4+ country teams have been able to access required technical expertise to assist national and sub-national health authorities to support the design, implementation and monitoring of innovative experiments in strengthening RMNCAH services.

3 H4+ partners and national health authorities agree on the importance of accurately and convincingly documenting the success or failure of supported innovations and put in place appropriate systems for monitoring and communicating the results of these experiments.

4 National health authorities are willing and able to adopt proven innovations supported by H4+JPCS and to take them to scale. They have access to required sources of financing (internal and external).

5 H4+JPCS mechanisms for promoting successful innovations across the 10 programme countries and among non-programme countdown countries are effective.

6 Global knowledge products produced with support of H4+JPCS incorporate examples of successful innovations for strengthening RMNCAH that can be adopted in non-programme countries.