

FAMILY PLANNING DEVELOPMENT IMPACT BOND

INITIAL SCOPING REPORT TO DFID – 18 MAY 2012

Executive Summary

Background

- Social Impact Bonds are a family of outcomes-based financing products in which social investors fully or partly pay for services to be delivered that improve social outcomes and the effectiveness of public sector spending.
- The first Social Impact Bond was developed and launched by Social Finance with the UK Ministry of Justice and was officially launched in September 2010. Social Finance raised £5m from 17 social investors to fund work with 3,000 short-sentence male prisoners leaving Peterborough prison.
- DFID is committed to the use of innovative, results-based approaches to improve the effectiveness and accountability of development aid and wishes to explore the applicability of the SIB model to development (the Development Impact Bond – DIB).
- This report summarises the initial findings of a scoping study to investigate how a Development Impact Bond could apply in the context of family planning.
- These initial findings are based on work undertaken by Social Finance and the Center for Global Development over a 6 week period in April and May 2012.

The case for Development Impact Bonds

- Social Impact Bonds are often mentioned in a context of achieving cost savings, but also offer an opportunity to achieve value for money by transferring implementation risk - the risk that poor implementation means interventions fail to achieve expected outcomes – to non-government investors and / or service providers.
- This risk transfer may be particularly valuable to government when innovation and flexibility of service provision is required to deliver the best possible outcomes.
- The inherent focus on impact measurement that is necessary for such contracts to work should also afford greater clarity around the outcomes that are achieved with donor funding.
- DIBs are not necessarily limited to models that involve the use of donor funds. However, they potentially offer improvements in terms of the efficiency and effectiveness of aid.
- Development Impact Bonds:
 - Create incentives to focus on achieving and measuring outcomes;
 - Enable donors to fund outcomes while leaving flexibility for service providers to experiment to find solutions that work;
 - Leverage support of private sector to increase innovation and efficiency in service delivery;
 - Transfer risk from public sector enabling earlier intervention and innovation;

- Create a mechanism for coordinating government, private sector investors and non-government service providers; and
 - Provide upfront funding to service providers enabling them to more easily participate in results-based contracts.
- Development Impact Bonds could also be used to improve partner government capacity to manage contracts, develop robust data systems and scale-up successful programmes.
 - In some cases, there may be potential for partner governments to co-fund outcomes payments with donor agencies and / or co-commission or contract manage.

Using Development Impact Bonds to improve family planning

- Family planning is a priority area for many developing countries, but for many access to family planning information, services and supplies is limited - over 200 million women worldwide want to use safe and effective family planning methods, but are not able to do so.
- Despite strong value for money arguments family planning interventions over the last two decades have not delivered results as quickly as anticipated.
- Our review of the literature indicates that funding for family planning has been decreasing and the gap between need and available resources continues to grow.
- Development Impact Bonds could be used to create stronger incentives to address current issues with family planning interventions including unpredictability of funding, stock outs, insufficient focus on service quality, lack of coordination, insufficient focus on marginalised communities, and insufficient flexibility in implementation.

Target group

- When defining a target location, country characteristics, cultural context, the domestic family planning targets of the partner government, and their role in the commissioning and delivery of DIB processes will need to be considered. We identify some high level considerations for selecting appropriate pilot countries in the main body of this report.
- Conversations with family planning experts suggested five priority subgroups of women with a high need for family planning services in many developing countries:
 - Women under 20 years old;
 - Women accessing emergency contraception;
 - Women post abortion and post-birth;
 - Women in urban slum areas; and
 - Women in rural areas.
- In order to establish a Development Impact Bond contract it will be necessary to objectively define the characteristics of target groups and locations - an initial evaluation of data sources indicates that this could be achieved through detailed country-specific feasibility work.

Outcome metrics

- Outcome metrics aim to create the right incentives for service providers to deliver whilst avoiding perverse incentives.

- Within a Development Impact Bond, the contracted outcome metrics determine whether payments are made - their definition is a critical factor in determining whether service providers and investors will participate in the DIB.
- Of particular importance in the family planning context is the need to ensure that outcome metrics do not create perverse incentives that would move service providers away from ensuring voluntarism and individual choice.
- Our initial scoping study has revealed a number of metrics in the family planning space that could potentially be used as the basis for a DIB, these include:
 - Contraceptive prevalence rate
 - Contraceptive continuation rate
 - Teenage fertility rate
 - Spacing between live births
- We recommend that this initial thinking is further refined through detailed feasibility work in relation to the specific needs, and measurement potential, in potential pilot countries.

Potential intervention approach

- In contexts where significant investment in family planning infrastructure is required, there may be value to using output metrics in addition to outcome metrics.
- Contracting for infrastructure or commodity delivery around input or output-based payments could potentially be used effectively as a driver for efficiency of implementation.
- A hybrid structure where activity based payments are made for sustainable infrastructure alongside outcome payments that incentivise service quality and targeting, could be used - this would reduce the risk premium and cost of capital that would otherwise be required for investors.
- In the event that there are a number of different ways of providing health coverage, using different potential levels of investment or innovation, then a fully outcomes-based model may be appropriate.
- Critical issues in determining the final blend of outcome and output metrics will be:
 - The level of service already in place, and therefore whether the expected intervention is going to be focused around roll out of core services or improvements in service quality and targeting; and
 - The availability of data and the cost of delivering a given set of measures - any bespoke measurement will need to be carefully designed to balance the potential cost with the need for accuracy.

Creating a compelling investment proposition

- The feasibility of a DIB approach depends on creating a compelling value case for both outcome funders and investors.
- The precise nature of the investor proposition will ultimately be determined by country-specific definitions of appropriate target groups, intervention models and payment metrics.
- Key considerations for investors are likely to include:
 - Contract duration
 - Outcome risk
 - Counterparty risk

- Within the time constraints of this scoping exercise we have not been able to assess investor appetite. However, we see no reason why the investor returns could not be reasonable. Formal investor discussions would need to be a part of the next phase of work.

Initial conclusions

- Our initial scoping study indicates that there is good potential to apply Social Impact Bond structures to improving family planning outcomes in developing countries.
- Appropriate measures appear to exist that could incentivise both the availability and quality of family planning services.
- There seems to be good potential to use variable tariff rates to incentivise work with high priority populations – potentially including rural women, women under 20 years old, women post-abortion and women post-partum.
- There are a range of geographies with differing but significant need. Thus pilots could be set up to test the model in quite different circumstances.
- There are a range of interventions that both point the way to effective implementation but also leave plenty of room for efficiency and effectiveness improvements to be incentivised using a DIB model.
- Likewise there seem to be a range of suitable and effective service providers who would be keen to participate.

Next steps

- A full feasibility analysis is now needed to build upon this scoping exercise.
- We recommend that the feasibility work has two phases:
 - The first to assess which countries would be the best fit for hosting pilots, in terms of need, country interest and outcome tracking.
 - The second to undertake detailed work to develop the appropriate governance, measurement, tariffs, legal structure, investor and donor offering in target countries.
- We envisage that such work would take 6 – 12 months to get to contract launch if undertaken by a specialist team with skills in structuring contracts for outcomes finance, developing family planning outcomes assessments, and delivering family planning services in the developing world.



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Background

A Social Impact Bond (SIB) is a payment for outcomes model that seeks to shift attention, incentives and accountability to results; transfer risk and responsibility for performance to private investors and implementers; and drive value for money and efficiency gains throughout the cycle.

The coalition government is committed to piloting the use of Social Impact Bonds (SIB) in a wide range of policy areas. DfID is committed to the use of innovative, results-based approaches to development assistance and wishes to explore the applicability of the SIB model to development (the Development Impact Bond – DIB).

A Development Impact Bond would provide external financing where investors only receive a return if good outcomes are achieved. It has the potential to improve aid efficiency and cost-effectiveness by shifting the focus onto implementation quality and delivery of successful results. It is envisaged that private investors would finance the cost of a multi-year development project and donor agencies would make payments to investors when agreed outcomes are achieved. Financial returns to investors are intended to be commensurate with the level of success. If the project fails to achieve agreed outcomes, outcome payments are reduced. This approach should incentivise the innovation and adaptation necessary to deliver successful outcomes.

Given the apparent cost-effectiveness of family planning interventions, and the DfID priority attached to scaling up access, DfID wishes to explore the concept of a DIB for family planning.¹

This report summarises the initial findings of a scoping study to investigate how a Development Impact Bond could apply in the context of family planning. It seeks to highlight strategic choices and design issues and outline next steps for implementation.

¹ Family planning is considered a “best buy” in global health due to its low cost and positive impact on other development indicators. DfID 2010: *Choices for women: planned pregnancies, safe births and healthy newborns*.

“A recent study calculated that by reducing fertility and pressure on services, one dollar invested in family planning saves \$2 to \$6 which can be used to provide other interventions such as health and education for fewer children, maternal health services, and improvements in water and sanitation”. DFID Malawi: *The Malawi Family Planning Programme Business Case*. November 2011.

Introduction to Social Impact Bonds

Social Impact Bonds are a family of outcomes-based financing products in which social investors fully or partly pay for services to be delivered that improve social outcomes and the effectiveness of public sector spending.

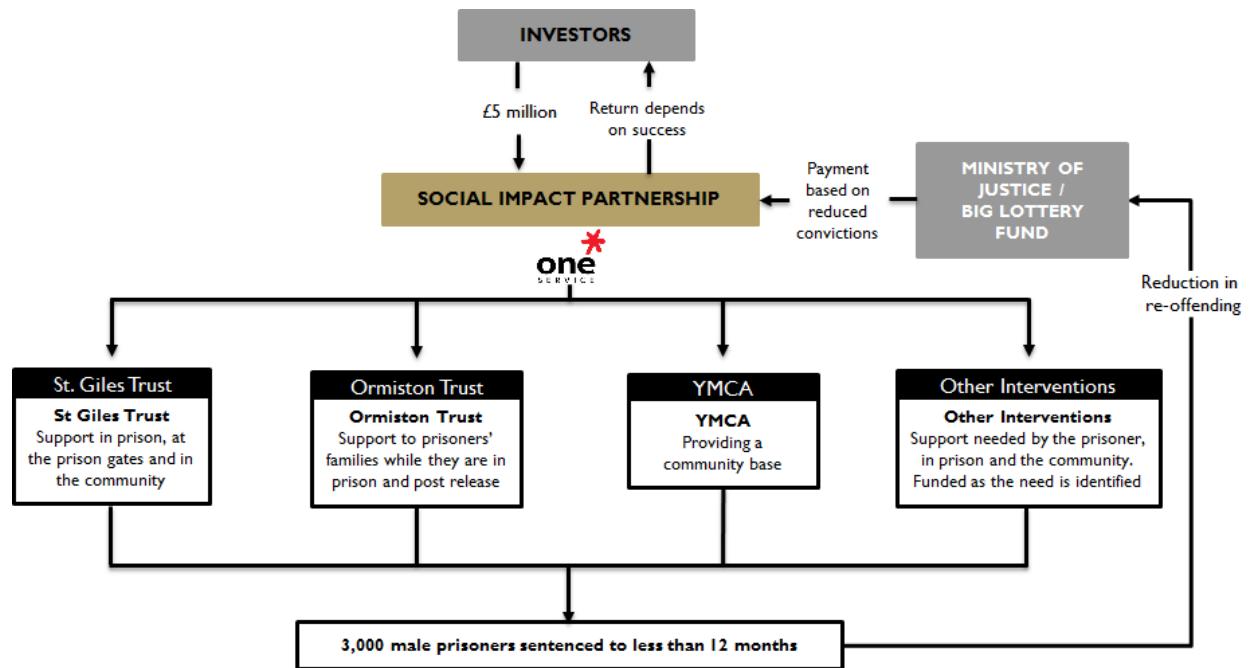
The first Social Impact Bond was developed and launched by Social Finance with the UK Ministry of Justice and was officially launched in September 2010.

Social Finance raised £5m from 17 social investors to fund work with 3,000 short-sentence male prisoners leaving Peterborough prison. Payments to investors are made in proportion to the programme's success at reducing offending among the prison leavers.

Investors make a financial return on their investment if the interventions are successful. SIB investment is not intended to displace other funding, but to supplement the money available to pay for a wider range of interventions than service users currently receive.

Since the launch of the Peterborough Social Impact Bond, Social Finance has explored the potential to use outcomes-based finance to support a wide range of outcomes for target populations with complex needs. These include rough sleepers, looked-after children, people with chronic health conditions, substance users and disadvantaged young people with poor employment prospects.

A simplified illustration of the Peterborough Social Impact Bond structure is shown below:



Since the launch of the Peterborough SIB, Social Impact Bonds have generated considerable interest from governments in a range of more developed countries including the US, Canada, Australia, Ireland and Israel.

At least some of this interest has been motivated by a need to make cost savings in the light of increasing budgetary pressure. As a result many of the SIB applications being explored in more

developed countries are focused on outcomes that would enable a shift away from ‘crisis’ services – like prisons and hospitals – by providing more funding for earlier interventions – such as community healthcare and behaviour change programmes.

However, the value of Social Impact Bonds as a mechanism to improve the effectiveness of existing spending has also been widely acknowledged by government in locations or social issue areas where the interventions that will achieve most impact are uncertain, or where there is considerable variation in the quality of implementation.

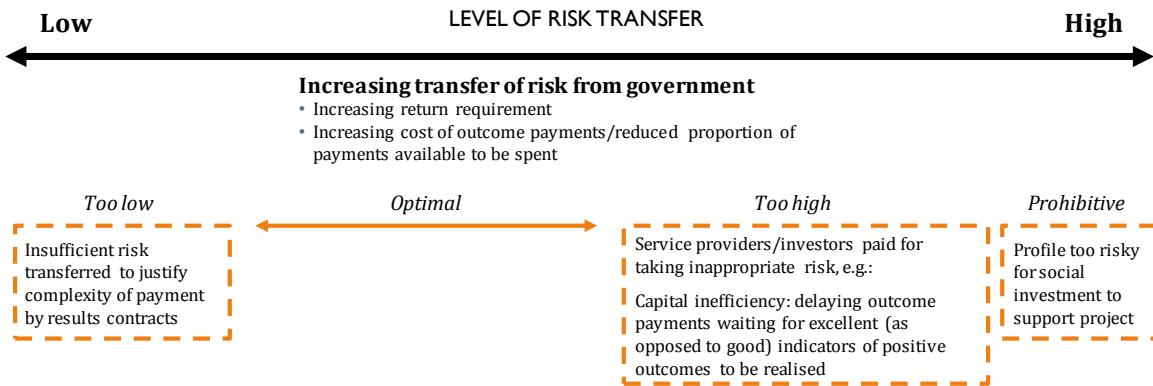
Demonstrating value for money

Social Impact Bonds are often mentioned in a context of achieving cost savings. This does not have to be the case.

Outcomes-based contracts offer an opportunity to achieve value for money by transferring implementation risk - the risk that poor implementation means interventions fail to achieve expected outcomes – to non-government investors and / or service providers. Experience in the UK demonstrates that this can be a risk, even with relatively well-tested and well-evidenced intervention models.² Services commissioned on the basis of outcomes enable DfID to transfer the financial risk associated with the achievement of outcomes to service providers and social investors.

Such structures can also create incentives towards innovation and flexibility of service provision in an attempt to deliver the best possible outcomes. Tying expenditure to outcomes could potentially enable a more effective method of ‘purchasing’ a wide range of target outcomes. The inherent focus on impact measurement that is necessary for such contracts to work should afford DfID greater clarity around the outcomes that are achieved with its funding.

The greater the risk that is transferred to service providers or investors, the greater the financial return those investors and service providers will require to compensate them for this risk. This cost will be reflected in a greater proportion of outcome payments being spent on costs of capital – this is illustrated in the diagram below.



The proportion of outcome payments spent on investor returns should reflect optimal – rather than maximum – risk transfer to ensure best value for money.

² An academic review of 500 quantitative studies of child/adolescent interventions notes ‘the level of implementation affects the outcomes achieved - Durlak and Dupre (2008). Meta-analysis of juvenile justice interventions found, ‘in some analyses, that the quality with which the intervention is implemented has been as strongly related to recidivism effects as the type of programme - Lipsey (2009).

Identifying strong opportunities for Social Impact Bonds

The Cabinet Office³ has recently identified a set of criteria that make opportunities good candidates for payment by results approaches in the UK⁴:

Suitability in theory

- Budgets cannot be devolved to individuals or neighbourhoods
- Commissioning is preferable to in house delivery
- Government is not quite clear how best to produce outcomes

Feasibility in practice

- Outcomes can be defined, and additional impact captured, accurately
- Commissioners' maximum ability to pay is greater than the provider's minimum price
- Up-front and transactional costs are reasonable

The Cabinet Office report rightly acknowledges that these criteria may be more or less important in different service areas and should not be considered linear or sequential. On the basis of our experience of shaping and developing Social Impact Bonds, we would add the following three criteria to this list in the development context:

- Issue area a policy priority for partner governments and donor agencies
- Issue area / geography a priority for potential investors
- Target group can be accurately defined and easily identified

We consider these criteria in relation to family planning later in this document.

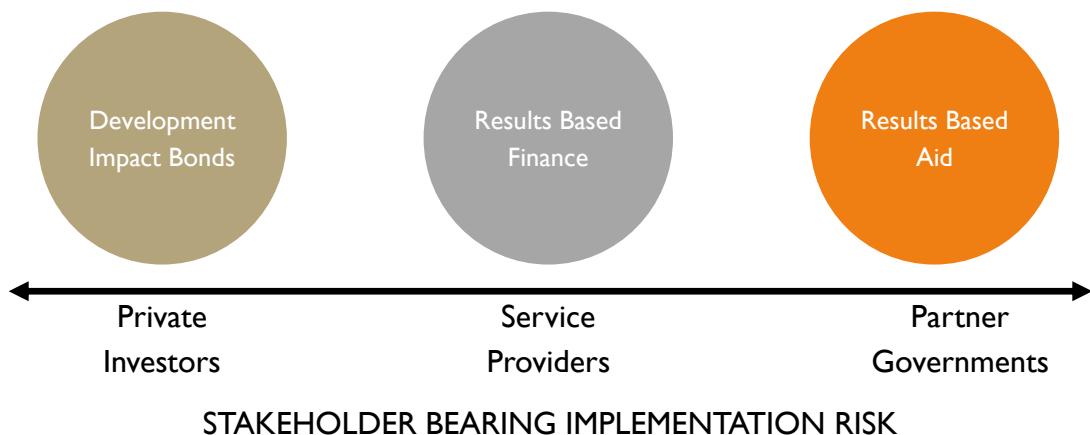
³ *Payment by Outcomes: What it is and when to use it*. Cabinet Office – Internal Draft (October 2011).

⁴ It should be noted that these criteria were not drawn-up with development applications in mind.

The case for Development Impact Bonds (DIBs)

In a context of budget pressure, there is inevitably an increasing demand for better information about the impact of development spending. Results-based approaches are increasingly being used to improve the effectiveness and accountability of development aid. Such approaches transfer implementation risk – the risk that funded interventions don't deliver the desired impact to a third party.

The diagram below shows the stakeholder bearing the majority of the implementation risk within different types of results-based contracts in development.



DIBs are not necessarily limited to models that involve the use of donor funds. However, given recent donor interest in the model, and the potential improvements DIB models could offer in terms of the efficiency and effectiveness of aid, this section compares DIBs to other aid models.

Development Impact Bonds offer several potential benefits compared to traditional aid approaches. DIBs:

- Create incentives to focus on achieving and measuring outcomes;
- Enable donors to fund outcomes while leaving flexibility for service providers to experiment to find solutions that work;
- Leverage support of private sector to increase innovation and efficiency in service delivery;
- Transfer risk from public sector enabling earlier intervention and innovation;
- Create a mechanism for coordinating government, private sector investors and non-government service providers; and
- Provide upfront funding to service providers enabling them to more easily participate in results-based contracts.

The table below shows a summary comparison of Development Impact Bonds against Results Based Aid and Results Based Finance.



Consideration	Results based aid	Results based finance	DIB
Clear role for partner government	✓		
Potential to implement without partner government involvement		✓	✓
Clear role for private investors			✓
Clear source of upfront funding for services			✓
High-level focus on outcomes	✓		✓
Need for independent verification of results			✓
Risk borne by service provider (government or non-government)	✓	✓	
Complementary to existing approaches	✓	✓	✓

Development Impact Bonds could also be used to improve partner government capacity to manage contracts, develop robust data systems and scale-up successful programmes. In some cases, there may be potential for partner governments to co-fund outcomes payments with donor agencies and / or co-commission or contract manage. We outline some key considerations when developing Development Impact Bonds in the table below.

Consideration
Role of partner government
<ul style="list-style-type: none">• Potential roles of partner governments include:<ul style="list-style-type: none">◦ Co-commissioner / contract manager◦ Funder / co-funder of outcome payments• Potential for partner government involvement in service provision dependent on investor confidence in delivery capacity• Perception of partner government credit rating by investors a consideration if outcome funder
Payment metrics
<ul style="list-style-type: none">• Availability of data to create baseline and track progress• Sensitivity of metric to DIB-funded interventions• Avoidance of perverse incentives• Potential for independent verification

Consideration

Value for money

- Balance between sufficient evidence of what works to attract investors, and sufficient variation in implementation quality to justify risk transfer
- Service provider working capital requirement to deliver to PBR contracts
- Value for money likely to result from optimum rather than maximum risk transfer due to cost-of-capital considerations
- Appropriate balance between outcome and output payments likely to be determined by nature of required interventions
- Careful thought required to value outcomes when not linked to cashable savings

Investor interest

- Likely to be determined by a combination of social issue, geography, level of risk transfer and implementation approach
- Some element of output-based payments may be required to raise substantial sums

As with Social Impact Bond structures in developed countries, many of the issues outlined above can only be resolved by applying the structure to a real example. In line with the aims of the current scoping exercise, we explore the issues in relation to family planning below.

Using Development Impact Bonds to improve family planning

Background

Family planning is a priority area for many developing countries, but for many access to family planning information, services and supplies remains limited. Reproductive health problems remain the leading cause of ill health and death for women of childbearing age; over 200 million women worldwide want to use safe and effective family planning methods, but are not able to do so.⁵

The Guttmacher Institute has estimated that scaling up services to provide family planning to all women would prevent:

- 52 million unintended pregnancies;
- 23 million unplanned births;
- 22 million abortions;
- 7 million miscarriages;
- 1.4 million infant deaths;
- 142,000 pregnancy related deaths; and
- 505,000 children from losing their mother.⁶

Despite strong value for money arguments for increasing investment in family planning interventions and systems, over the last two decades, efforts to enable women and girls to access modern methods of contraception have not delivered results as quickly as anticipated.⁷ Global progress towards Millennium Development Goal (MDG) 5 – Improve Maternal Health – is far behind that of many of the other MDG targets, with results in sub-Saharan Africa remaining particularly disappointing. While recent data indicates some progress around this goal,⁸ our limited review of the literature indicates that funding for family planning has been decreasing as the gap between need and available resources continues to grow. From 1994 to 2005, annual funding for family planning decreased by more than 60 percent, while the number of couples who wanted family planning increased. Funding for contraceptive research and development also dropped.⁹

The Department for International Development, in partnership with the Bill & Melinda Gates Foundation, the UNFPA and other partners, has recognised this global funding gap for family planning. A ground breaking international Family Planning Summit is planned to take place in London in July 2012, bringing much needed attention to this neglected area. The Summit will launch a global movement to give an additional 120 million women in the world's poorest

⁵ UNFPA; DfID 2010: *Choices for women: planned pregnancies, safe births and healthy newborns*.

⁶ Singh, S., Darroch, J., Vlassoff, M. & Nadeau, J., 2003. *Adding it up: The benefits of investing in sexual and reproductive health care*. UNFPA; Guttmacher Institute, New York

⁷ Family planning is considered a “best buy” in global health due to its low cost and positive impact on other development indicators. DfID 2010: *Choices for women: planned pregnancies, safe births and healthy newborns*.

“A recent study calculated that by reducing fertility and pressure on services, one dollar invested in family planning saves \$2 to \$6 which can be used to provide other interventions such as health and education for fewer children, maternal health services, and improvements in water and sanitation”. DFID Malawi: *The Malawi Family Planning Programme Business Case*. November 2011.

⁸ Maternal mortality has dropped 47% in the last 20 years.

http://www.unfpa.org/webdav/site/global/shared/documents/publications/2012/Trends_in_maternal_mortality_A4-1.pdf

⁹ Bill and Melinda Gates Foundation Family Planning Strategy Overview: <http://www.gatesfoundation.org/global-health/Documents/family-planning-strategy.pdf>



countries access to lifesaving family planning information, services and supplies by 2020. Increasing access to education and services should enable women and girls to choose whether, when and how many children to have, having a lasting impact on their lives.

Family planning need

The percentage of currently married women aged 15-49 who want to stop having children or to postpone the next pregnancy for at least two years but who are not using contraception (*Unmet Need*) is significantly higher in sub-Saharan Africa than the rest of the world. In 2007, unmet need in sub-Saharan Africa was recorded at 24% against 10-12% in South and Southeast Asia, North Africa and West Asia, Latin America and the Caribbean.¹⁰ Uganda for example, has the highest unmet need for contraception in East Africa at 41%, with only 18% of currently married women aged 15-49 using modern methods of contraception (*Contraceptive Prevalence Rate or CPR*).¹¹ The average CPR for sub-Saharan Africa is approximately 23%, whilst developed country CPR rates lie between 80-85%.¹² Use of contraception to avoid unintended pregnancies has been shown to significantly reduce the number of unsafe deliveries and unsafe abortions¹³ – two of the main causes of maternal deaths.

Young and poor women suffer disproportionately from unintended pregnancies, unsafe abortions and maternal mortality. In Ethiopia, the poorest women, on average, have more than twice as many children as women who live in the wealthiest households (6.0 versus 2.8 children per woman).¹⁴ Women living in rural areas and those with little or no education are more likely to have unmet need for contraception and as such commonly have children earlier in their lives, with little spacing between births, putting themselves at high risk of complications and future health problems.¹⁵ Access to high quality family planning services can provide both men and women with choice creating healthier families and communities.

In the course of this scoping study we have identified three issues that pose significant barriers to addressing the family planning need in many developing countries:

Lack of basic healthcare infrastructure

Lack of basic healthcare infrastructure is a significant problem in many developing countries. The availability and reliability of trained service providers and health centres varies between and within countries, but is recognised as key to the reduction of maternal mortality rates.¹⁶ Such access is particularly low in rural sub-Saharan Africa. In Uganda, for example, the percentage of births attended by a skilled provider is 90% in urban areas, but only 54% in rural

¹⁰ Sedgh, G., Hussain, R., Bankole, A. & Singh, S. 2007, *Women with an unmet need for contraception in developing countries and their reasons for not using a method*, Occasional Report, Guttmacher Institute, New York. Developed countries estimate taken from

¹¹ *Uganda Demographic and Health Survey 2006*.

¹² UN DHS surveys 2006-2010 source: *State of the World's Children*, UNICEF. The optimum level for contraceptive prevalence is regarded as 80-85% as this level is quite consistent with replacement level fertility (approximately two children per women) i.e. this level of CPR will ensure that sufficient numbers of children will be born and survive to maintain existing population levels. (Source: DFID, <http://www.dfid.gov.uk/R4D/Project/60778/Default.aspx>)

¹³ United Nations Population Fund, UNFPA (2006): *Meeting the Need: Strengthening Family Planning Programs*. http://www.path.org/publications/files/RH_UNFPA_fp.pdf

¹⁴ *2011 Ethiopian Demographic and Health Survey*

¹⁵ United Nations Population Fund, UNFPA (2007): *Giving girls today and tomorrow: Breaking the cycle of adolescent pregnancy*. http://www.unfpa.org/webdav/site/global/shared/documents/publications/2007/giving_girls.pdf

¹⁶ United Nations (2008): *Goal 5: Improve Maternal Health*. <http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%205%20FINAL.pdf>



areas.¹⁷ Such differences in the level of access between urban and rural areas are common in many countries and can only be partially attributed to cultural and religious beliefs.¹⁸

Low quality of service

Women in developing countries frequently lack information about family planning and the health benefits for them and their children which can come from using such services.¹⁹ However, a high unmet need for family planning interventions does not necessarily just mean that there is a lack of infrastructure or family planning services. In many cases, the services that are available are not of a high enough quality to instil confidence in the system and retain high numbers of patients.²⁰ Reliable availability of consumables, choice of methods, non-judgemental staff, accessible opening hours, high quality patient after-care and support play a fundamental part of achieving continuation in the use of services and family planning interventions.²¹ Unfortunately many interventions to date have focused on the supply of commodities rather than the quality of available family planning services.²²

Cultural barriers to access

Attitudes to family planning vary by context between and within countries.²³ This may add to the barriers that women, particularly those who are young or unmarried, experience in accessing family planning services. Increasing acceptance of family planning through educating communities and training health care providers about the higher risks borne by adolescent mothers and those leaving insufficient time between child births could play an important role in enabling high-need groups to access life-saving information and services.²⁴

Family planning and Development Impact Bonds

Support for family planning in developing countries has suffered from a number of problems which Development Impact Bonds could help to address. These include unpredictability of funding, insufficient focus on service quality, lack of coordination, insufficient focus on marginalised communities, and insufficient flexibility in implementation. Development Impact Bonds could potentially be used to create stronger incentives to address these issues:

¹⁷ Preliminary results from the 2011 Ugandan Demographic and Health Survey 2011

¹⁸ In Ethiopia, only 4% of rural births were recorded as having been delivered in a health facility against 50% of urban births (2011 Demographic and Health Survey). Although a significant percentage of the population state that they abstain from attending healthcare facilities while giving birth as a result of culture and beliefs, this figure is significantly lower than for Uganda, and much of sub-Saharan Africa (Approximately 30%. Source: Ethiop. J. Health Dev. 2010;24 Special Issue 1:100-104.). Maternal and neonatal morbidity and mortality rates in Ethiopia are among the highest in the world (recorded at 676 for every 100,000 births compared with an average of 290 per 100,000 births in developing countries, and 14 per 100,000 in developed countries), and can in part be attributed to a lack of access to professional care as well as cultural and traditional beliefs. Additional factors such as distance and cost in reaching the nearest health facility play an important part in the decision for many expectant mothers to stay at home for the birth of their children and as such, education of the benefits of hospital deliveries in the presence of skilled healthcare professionals remains a key part of any family planning intervention.

¹⁹ United Nations Population Fund, UNFPA, (2007): *Giving girls today and tomorrow: Breaking the cycle of adolescent pregnancy*. http://www.unfpa.org/webdav/site/global/shared/documents/publications/2007/giving_girls.pdf

²⁰ United Nations Population Fund, UNFPA (2006): *Meeting the Need: Strengthening Family Planning Programs*. http://www.path.org/publications/files/RH_UNFPA_fp.pdf

²¹ Guttmacher Institute (2003): RamaRao S et al., *The link between quality of care and contraceptive use*. International Family Planning Perspectives, 2003, 29(2):76–83. <http://www.guttmacher.org/pubs/journals/2907603.html>

²² Guttmacher Institute (2011): *International Perspectives on Sexual and Reproductive Health*. 37(2):58–66. <http://www.guttmacher.org/pubs/journals/3705811.html#29>. DHS surveys Ethiopia, Malawi, Rwanda, Uganda.

²³ IntraHealth International (2008): *Family planning in Rwanda - how a taboo topic became priority number one*. <http://www.intrahealth.org/page/family-planning-in-rwanda-how-a-taboo-topic-became-priority-number-one>

²⁴ United Nations Population Fund (UNFPA), 2007. *Giving girls today and tomorrow: Breaking the cycle of adolescent pregnancy*. http://www.unfpa.org/webdav/site/global/shared/documents/publications/2007/giving_girls.pdf

- **Unpredictable funding streams** – Historically, many family planning programmes seem to have lacked the predictability that service providers require for long-term planning and delivery of services. Donor funding for supplies, for example, has been inconsistent and unpredictable in the past. Between 1992 and 1996, donor funding for contraceptive commodities increased from US\$83 million to US\$172 million, partly due to widespread support following the 1994 Cairo conference. However, by 1999, donor funding had dropped again to US\$131 million.²⁵ A more recent focus of funding on HIV/AIDS programmes, although highly valuable, has also drawn donor resources away from family planning issues. Development Impact Bonds structured over 5-8 years in relation to clearly defined family planning outcomes could provide a more predictable funding stream for this sector enabling more sustainable intervention approaches to be developed. Research has shown that investing in preventative measures, such as the use of contraceptives to prevent unintended pregnancies is significantly more cost-effective than treating the complications of an unintended pregnancy.²⁶
- **Stock-outs** – Many family planning programmes have faced challenges around enabling regular, predictable access to contraceptive supplies. This has been particularly problematic in countries such as Uganda where providers have relied on a centralised public sector system of contraceptive supply. Women who are starting to use modern methods, especially the contraceptive pill and injectables, need to be sure that further supplies will always be available at their preferred clinic. Stock-outs have been demonstrated to reduce demand from clients as contraceptives which are not routinely used will not deliver the desired results. Inconsistency of supply can therefore drive discontinuation of contraceptive usage as clients fail to experience the benefits of family planning.²⁷ Development Impact Bonds could be used to provide up-front financing to invest in improved stock-tracking and distribution systems to improve the number of clinics that have a continuous and reliable source of contraceptive supplies for their clients. Payment metrics around contraceptive continuation rates could be used to ensure that service providers are incentivised to dispense existing stock.
- **Lack of coordination** – Improving family planning services has a knock-on effect on many other important social areas. For example, either limiting or delaying childbearing by increasing the time period between births can improve the chances that each child born has the care and support needed to survive, reducing the levels of under nutrition and child mortality.²⁸ In turn, this reduces the rate at which populations grow without necessarily limiting the number of children per woman. Greater coordination and alignment of objectives among government, donors, NGOs and service providers will be crucial to achieving these improvements. Properly structured, Development Impact Bonds can create incentives that encourage all stakeholders to work together towards the same outcomes aligning interests towards better coordination of services. Common goals should encourage DIB-funded service providers to fill gaps in existing provision, promoting an environment of flexibility and innovation.
- **Poor service quality** – As we discuss above, one of the reasons that high discontinuation rates are recorded for the use of contraceptives in sub-Saharan Africa is the poor quality of services delivered.²⁹ A study of the social determinants for sustained use of family planning

²⁵ Population Reference Bureau: *Securing Future Supplies for Family Planning and HIV/AIDS Prevention*.

²⁶ DFID 2010: *Choices for women: planned pregnancies, safe births and healthy newborns*.

²⁷ McClain Burke & Ambasa-Shisanya: African Journal of Reproductive Health, Vol. 15, No. 2, June, 2011, pp. 67-78.

²⁸ WHO (2008): *Birth Spacing - Cluster representatives and health volunteers guide*. www.emro.who.int/mps/pdf/birth_spacing_trainee.pdf

²⁹ Guttmacher Institute (2003): *The Link Between Quality of Care and Contraceptive Use*. International Family Planning Perspectives Volume 29, Number 2, June 2003.

identified three determinants of higher quality services: 1) choices of contraceptive methods and effective counselling on side effects; 2) outreach to marginalised groups; and 3) culturally appropriate support.³⁰ Development Impact Bonds could be structured to create incentives for service providers to focus on the quality of care delivered through payment triggers based around both attracting and retaining clients.

- **Unequal access to services** – In many countries family planning services are disproportionately inaccessible for younger women, those on low incomes and those in rural areas. Development Impact Bonds could be used to create incentives for service providers to target their services towards those populations that are currently most excluded from access to high quality family planning services. This could be achieved by offering higher tariffs for outcomes achieved with excluded groups.
- **Over-specified interventions** – Traditional project finance has often struggled to enable the flexibility of intervention approach that is required to respond to local needs and deliver the best possible outcomes. Development Impact Bonds could be used to create incentives for service providers to monitor, tailor and adapt their intervention approach based on the specifics of local need as the programme progresses.

Family planning DIB scoping study

The following sections of this scoping report outline how Development Impact Bonds might be applied to improve family planning outcomes in developing countries. These initial findings are based on work undertaken by Social Finance and the Center for Global Development over a 6 week period in April and May 2012.

The aim of this study was to assess the potential for using Development Impact Bonds in the family planning space. Within the time constraints of this project it has not been possible to explore specific country opportunities in any depth. Nor has it been possible to undertake specific conversations with investors around their potential interest in such products.

The sections below outline general principles and promising options for key components of a Family Planning Development Impact Bond including:

- Defining the target population;
- Identifying outcome metrics;
- Potential intervention approaches;
- Payment mechanism considerations; and
- Creating a compelling investor proposition.

While these considerations are presented sequentially, we have found in other contexts that their definition requires an iterative process involving government, outcome funders, service providers and investors.

We finish by summarising some initial conclusions and outlining recommended next steps.

³⁰ CARE International in Ethiopia, SRH Program Unit, Ethiopia.

Defining the target population

Before defining the target population for a Development Impact Bond, it will be necessary to identify a handful of countries that offer good potential for piloting Family Planning DIBs. The specific family planning needs and government priorities in potential DIB countries will inform the target population definition.

Identifying promising locations

When defining a target location, country characteristics, cultural context, the domestic family planning targets of the partner government, and their role in the commissioning and delivery of DIB processes will need to be considered. We have identified some high level considerations for selecting appropriate pilot countries in the table below. Three high level country assessments can be found in Appendix 1.

Criterion	Rationale
Unmet need for family planning	<ul style="list-style-type: none"> Demonstrated need for increased focus on family planning in target geography Need demonstrable through data on: <ul style="list-style-type: none"> Unmet need / contraceptive prevalence rate / continuation rates General fertility rates / adolescent fertility rates Availability of family planning clinics – nationwide and to specific under-served communities (e.g. young women or rural women)
Priority country for DfID	<ul style="list-style-type: none"> Potential DfID interest in fully or partly funding outcomes payments for improvements against agreed outcomes
Partner government policy priority	<ul style="list-style-type: none"> Evidence of partner government desire to improve outcomes around family planning
Partner government interest in payment-by-results approaches	<ul style="list-style-type: none"> Evidence of partner government experience of or interest in payment-by-results contracting approaches Potential to build partner government capacity to commission / co-commission and manage outcomes-based contracts
Good potential for attribution of impact	<ul style="list-style-type: none"> Target group(s) and contract outcome(s) can be clearly defined and agreed with partner government Baseline / control group data is available and / or could be easily collected in a reliable and cost-effective way Impact of DIB funded interventions could be easily disaggregated from impact of other family planning interventions <ul style="list-style-type: none"> It has been suggested that this approach might be piloted most easily in countries where there has not been a large amount of funding for family planning to date – e.g. Sierra Leone

Defining the target group(s)

In the course of this scoping study we have identified a handful of key indicators for groups that are likely to face barriers to accessing family planning services:



- **Residence** – rural populations tend to have greater levels of unmet need for family planning than the general population;
- **Age** – adolescents aged 15-19 tend to have lower rates of family planning usage and are at higher risk of unsafe abortions and death in childbirth than more mature mothers;³¹
- **Socio-economic group** – women with lower household income tend to have greater levels of unmet need; and
- **Level of education** – whether a woman has had no education, or completed primary education, secondary education or higher education is considered a contributing factor to the age at which she first gives birth, her use of contraceptives and often the number of children that has in the future.³²

Conversations with family planning experts suggested five priority subgroups of women with a high need for family planning services in many developing countries:

- Women under 20 years old;
- Women accessing emergency contraception;
- Women post abortion and post-birth;
- Women in urban slum areas; and
- Women in rural areas.

In order to establish a Development Impact Bond contract around such groups, particularly if linked to variable outcome tariffs, it will be necessary to objectively define the characteristics of target groups and locations. An initial evaluation of data sources indicates that this could be achieved through detailed country-specific feasibility work.

Achieving the right level of focus

Our initial scoping study has indicated that too great a focus on specific target groups may not prove helpful.

For example, in a country with a limited availability of family planning clinics, or unreliable supplies of contraceptive consumables, the infrastructure that would need to be put in place to improve outcomes for teenagers could and should be used to improve outcomes for other women with an unmet need for family planning services. Were payments to be triggered only for outcomes relating to teenage girls, this broader benefit of the DIB-funded services would not be captured. This would mean that the measured impact of the DIB would underestimate the overall benefit to society; the measures of unit cost would appear more expensive than they really are because many of the wider benefits would not be captured in the cost effectiveness calculation.

On the other hand, if existing clinic provision is good, but teenage women are not accessing family planning services, a DIB focused solely on providing age-appropriate services to overcome barriers to access may be appropriate.

³¹ United Nations Population Fund, UNFPA (2007): *Giving Girls Today and Tomorrow: Breaking the cycle of adolescent pregnancy* http://www.unfpa.org/webdav/site/global/shared/documents/publications/2007/giving_girls.pdf

³² USAID (2006): *New Estimates of Unmet Need and the Demand for Family Planning*. Comparative Reports No. 14.



Applying different tariff levels to different target groups may be a good way to enable a broad service focus while encouraging work with the most excluded groups. Ultimately the right level of focus will depend significantly on the country context.

Identifying outcome metrics

The importance of metrics

Outcome metrics aim to create the right incentives for service providers to deliver whilst avoiding perverse incentives. Within a Development Impact Bond, the contracted outcome metrics determine whether payments are made. Their definition is therefore a critical factor in determining whether service providers and investors will participate in the DIB.

Selected outcomes need to be objectively and rigorously measurable to ensure that there is no disagreement between the contract commissioner, service providers and investors about the extent to which outcomes have been achieved. Often it will be necessary to appoint an independent auditor to verify the impact achieved and act as the final arbiters as to which payments are due.

Although the need for trusted and independent outcome measures can be thought of as a cost of the DIB approach, it is also a benefit because it forces all stakeholders – donors, governments and service delivery organisations – to pay more attention to gathering and interpreting information about outcomes.

Promising outcome metrics are:

- Strongly linked to the change that commissioners are seeking to incentivise;
- Provide an incentive to work with the whole target group rather than just the easiest to reach;
- Provide an incentive to focus on sustainable success for the target population;
- Minimise the potential for perverse incentives and ‘gaming’; and
- Transfer an appropriate level of risk to investors.

When designing outcome metrics, simplicity, ease and cost of accurate measurement are key considerations. While it may be tempting to specify a variety of outcome metrics, we believe that the best DIB contracts will be structured around the smallest number of outcome metrics that incentivise the desired service provider behaviour.

- The outcome metrics should be simple and clear enough to be understood by all stakeholders.
- Additional complexity can reduce transparency and increase the potential for ‘gaming’.
- The objective measurement and internal monitoring required for outcome metrics is not without cost. In an international development context, where availability of quality data is often limited, this could be a significant factor driving the decision to choose one outcome metric over another. Any additional costs of monitoring outcomes may be offset if donors are able to reduce the need to monitor inputs and processes.
- Timescale of the programme is an important factor when considering outcome metrics, it is crucial that the chosen outcomes can be realistically impacted upon and accurately measured within the timescale of the programme.

Where significant investment in health infrastructure or contraceptive consumables is required, it may be more cost-effective to tie some of the payment triggers to service delivery outputs rather than seek to fund these through payments for outcomes alone. Our scoping study indicates that, in many instances, a hybrid contracting structure that uses both output

and outcome metrics may offer the best value for money. We discuss this further in the potential intervention and payment mechanism sections of this document.

Promising family planning outcome metrics

Policy makers working in the area of family planning have defined a wide number of outcome metrics which have been used to measure the impact of past programmes. These include:

- Contraceptive Prevalence Rate (CPR) for women of reproductive age (15-49) using modern methods;
- Couple Years of Protection (CYP);
- Teenage pregnancy rates;
- Unmet need for family planning;
- Age of mother at birth of first child; and
- Average interval between births.

Of particular importance in the family planning context is the need to ensure that outcome metrics do not create perverse incentives that would move service providers away from ensuring voluntarism and individual choice.

Our initial scoping study has revealed a number of metrics in the family planning space that, with contractual best practice safeguards, could potentially be used as the basis for a DIB. We recommend that this initial thinking is further refined through detailed feasibility work in relation to the specific needs, and measurement potential, in potential pilot countries.

Contraceptive Prevalence Rate

Definition: Contraceptive Prevalence Rate (CPR) is defined as the percentage of women who are practising, or whose sexual partners are practising, any form of contraception.³³ This figure is commonly given for the number of currently married women aged between 15-49, using any form of contraception (modern or traditional), but an individual breakdown of both modern and traditional types of contraception is also available via national Demographic and Health Surveys (DHS). More recently, the percentage of all women aged 15-49, using modern and/or traditional methods, is being collected by the DHS in sub-Saharan Africa.

Rationale for use: The indicator is useful in tracking progress towards health, sex and poverty goals. It also serves as a proxy measure of access to reproductive health services that are essential for meeting many of the MDGs, especially the child and maternal mortality and HIV/AIDS goals.³⁴

Potential limitations: CPR measures change across a population without accounting for the continuously growing pool of potential clients as a result of population growth. Furthermore, no distinction is made between new users and those continuing use of contraceptives. Conversations with family planning experts have highlighted that if this outcome metric was

³³ As defined by the World Health Organisation: <http://www.who.int/healthinfo/statistics/indcontraceptiveprevalence/en/index.html>

³⁴ UN (2010): *Every Woman, Every Child. Global Strategy for Women's and Children's Health.* http://www.everywomaneverychild.org/images/content/files/global_strategy/full/20100914_gswch_en.pdf



tracked at a regional or national level there is a risk that service providers will not be able to impact on this metric significantly enough to produce a statistically attributable result. Used on its own, this metric could also create an incentive to focus on new users without a focus on the quality of service required to ensure continuation.

Current data sources: Household surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), contraceptive prevalence surveys. Estimates can also be made from service statistics using census projections as a denominator. Such estimates, however, are often expressed in terms of couple years of protection (CYP).³⁵ Our initial assessment suggests that current national level data collection may not be frequent enough or sensitive enough to local interventions to be used as the basis for a DIB. If CPRs are used, a bespoke measurement infrastructure may be needed.

Contraceptive Continuation Rate

Definition: The percentage of contraceptive users continuing to use any given contraceptive method offered by a program after a specified period of time (e.g. 3 or 6 months).

Rationale for use: Improving contraceptive continuation rates not only helps women achieve their reproductive health intentions, it should also reduce unintended pregnancies, as well as related abortion and maternal mortality and morbidity. Discontinuation is known to be a particular problem among adolescents and young women as they tend to have more unpredictable and irregular sexual activity, combined with more limited access to family planning services.³⁶ High levels of discontinuation can be indicative of low method satisfaction, poor service delivery and poor after care. As a result, this metric could be a good way to incentivise higher quality service provision.

Potential limitations: Continuation rates are likely to reflect a woman's experience with health services, but are also strongly linked to relationships, culture and economic conditions. As with all family planning outcome metrics, this is highly dependent on the choice of individual women as to whether they wish to use contraceptives or not and as such, may be hard for government, donors, service providers and investors to influence. This metric would encourage a focus on those women who wish to use contraceptives to plan their family size. To ensure sustainable impact, both short-term and longer-term follow-up would be needed. Academics often use twelve months as the average interval between follow-up surveys, however, family planning experts have suggested that more frequent follow ups would be useful as most discontinuation happens within 3-6 months.³⁷ Our initial scoping indicates that continuation rates offer the most promise as a standalone DIB contract outcome. However, due to the individual-specific nature of data collection required, this metric may be less suitable for a highly transient target population.

³⁵ CYP is the estimated protection provided by contraceptive methods during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period:
http://www.usaid.gov/our_work/global_health/pop/techareas/cyp.html

³⁶ Blanc, Tsui, Croft and Trevitt (2009): *Patterns and Trends in Adolescents' Contraceptive Use and Discontinuation in Developing Countries and Comparisons With Adult Women*. International Perspectives on Sexual and Reproductive Health Vol. 35, No. 2, June 2009, Guttmacher Institute. <http://www.guttmacher.org/pubs/journals/3506309.html>

³⁷ This is the average time after which many people stop using contraception (implants/IUC) as a result of bad side-effects. Ali, Mohamed M; Sadler, Rachael K; Cleland, John; Ngo, Thoai D and Shah, Iqbal H, (2011): *Long-term contraceptive protection, discontinuation and switching behaviour: intrauterine device (IUD) use dynamics in 14 developing countries*. World Health Organization and Marie Stopes International, 2011.



Current data sources: Household surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS). We understand that these surveys are, on average, performed every 3-5 years. As such a bespoke local level measurement infrastructure may be needed as the basis for a DIB. There may be potential to use mobile phone-based vouchers and other technology to support cost-effective tracking.

Teenage birth (fertility) rates

Definition: Current fertility levels are measured in terms of age-specific fertility rates (ASFRs) and total fertility rate (TFR). The age-specific fertility rate measures the annual number of births to women of a specified age or age group (in this case women aged 15-19) per 1,000 women in that age group.³⁸ The ASFR is then given as the number of births per 1,000 girls/young women (rates are for the period 1-36 months prior to interview) and therefore provides the age pattern of fertility. The TFR refers to the number of live births that a woman would have had if she were subject to the current ASFRs throughout her reproductive years (15-49 years).³⁹

Rationale for use: Adolescent fertility may be a good proxy for the health of the family planning system as a whole, picking up issues such as access to modern methods of family planning, education, attitudes to women and girls and empowerment. Furthermore, having children either young (under 18) or older (over 35) puts women at more risk of complications in pregnancy and childbirth. Adolescents aged 15 to 19 are twice as likely to die in childbirth as those in their 20s and girls under 15 are five times as likely to die as those in their 20s.⁴⁰ Despite these high mortality figures, family planning interventions are rarely targeted towards this age group and adolescents are known to face multiple barriers to accessing family planning services. For example, opening hours of clinics frequently overlap with the hours adolescents may be attending school. Judgmental attitudes and lack of knowledge among clinic staff, particularly towards those who are unmarried, pose additional barriers.⁴¹

Potential limitations: Using adolescent fertility as a proxy for the system as a whole may lead to incentives to focus on the adolescents only. Furthermore, explicitly providing family planning to adolescents may be more culturally sensitive than broader family planning provision from which teenage girls may also benefit.

Current data sources: Demographic and Health Surveys (DHS). In rural areas in particular, where fewer births are delivered in healthcare facilities, or even attended by skilled providers, it may be more difficult to collect accurate data for the monitoring of this outcome. As such, a bespoke measurement infrastructure may be needed. Country-specific feasibility work should seek to understand the potential of existing health system metrics.

Percentage of women with a birth interval <24months

Definition: Birth interval is defined as the length of time between two successive live births.⁴² This outcome metric would aim to capture the percentage of women between 15-49 years who have an interval of fewer than twenty-four months between births. This time period has been

³⁸ Definition from the UN: http://www.un.org/esa/population/publications/VVFR2009_Web/Data/Meta_Data/ASFR.pdf

³⁹ As defined in the Demographic and Health Surveys.

⁴⁰ Source: <http://www.gatesfoundation.org/familyplanning/Pages/overview.aspx>

⁴¹ United Nations Population Fund (UNFPA), 2007, *Giving girls today and tomorrow: Breaking the cycle of adolescent pregnancy*,

⁴² As defined in the Demographic and Health Surveys.



chosen due to the increased risk to both mother and child from birth intervals shorter than two years.⁴³

Rationale for use: Reducing the number of births occurring less than twenty-four months apart should lower maternal mortality and morbidity levels as well as child and infant mortality.⁴⁴ Short birth intervals expose a woman to a greater risk of complications during and after pregnancy (such as miscarriage or eclampsia). Women without access to modern contraceptives often have children closer together than they desire, have more unintended pregnancies, and are at a greater risk of dying due to complications during childbirth or unsafe abortion. The inclusion of this metric would incentivise service providers to work with postpartum women, a group that often has a high demand for contraceptives, but are poorly reached through existing maternity services.⁴⁵

Potential limitations: As this is a metric less frequently used among current family planning initiatives, there is limited understanding of the effectiveness of interventions targeted at this outcome. Due to the dispersed nature of any given target population (currently only around 20% of non-first births occur within twenty-four months of the previous birth⁴⁶) there may be added challenges associated with the measurement of this outcome and the demonstration of a statistically significant effect. Due to the longer term follow-up associated with this metric, it may be less suitable for countries with a high transient population which would make data collection more difficult.

Current data sources: Demographic and Health Surveys (DHS). Due to health system data limitations and the often high number of births that occur without a trained provider, this metric may be hard to track and is likely to require a bespoke data collection system. Country-specific feasibility work should seek to understand the potential of existing health system metrics.

Recognising broader impact

Other outcomes that might be desirable, but are not directly linked to family planning might include HIV rates, births attended by a skilled professional and maternal mortality rates. Such outcomes might offer a valuable picture of the broader impact of DIB-funded interventions and might be included as part of an evaluation to provide a fuller picture of the wellbeing of the women in the target group.

Promising family planning output metrics

As we discussed at the beginning of this section, in contexts where significant investment in family planning infrastructure is required, there may be value to using output metrics in addition to outcome metrics.

⁴³ Infants born after intervals of less than two years are twice as likely to die as those born after longer intervals:
http://www.usaid.gov/our_work/global_health/pop/news/issue_briefs/healthy_birthspacing.pdf

⁴⁴ Very short birth intervals (less than 15 months) are associated with maternal death rates 150% higher than at longer intervals, as well as with various complications during pregnancy. USAID:
http://www.usaid.gov/our_work/global_health/pop/news/issue_briefs/healthy_birthspacing.pdf

⁴⁵ USAID (2005): Family Planning for Postpartum Women: Seizing a Missed Opportunity.
http://www.usaid.gov/our_work/global_health/mch/mh/techarreas/missed_opportunity_brief.html

⁴⁶ 20% is the average figure given for populations from Ethiopia, Malawi, Rwanda and Uganda in the National Demographic Health Surveys 2006-2011.



Such metrics might include measures of the availability of services, for instance the number of family planning clinics / trained professionals per 100,000 women in the target location. They might also include measures of clinic-level activity, for instance:

High Impact Couple Years of Protection

Definition: Couple Years of Protection (CYP) is defined as the estimated protection provided by contraceptive methods during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period. The CYP is calculated by multiplying the quantity of each method distributed to clients by a conversion factor, to yield an estimate of the duration of contraceptive protection provided per unit of that method. The CYP for each method can then be summed for all methods to obtain a total CYP figure. CYP conversion factors are based on how a method is used, failure rates, wastage and how many units of the method are typically needed to provide one year of contraceptive protection for a couple. The calculation takes into account that some methods, like condoms and oral contraceptives, for example, may be used incorrectly and then discarded, or that IUDs and implants may be removed before their life span is realized.⁴⁷

High Impact CYP is the proportion of the total CYP figure that impacts on the sub-groups of society with the highest need for contraceptives. For example, those with the lowest wealth (<\$1.25 per day or below MPI poverty line⁴⁸), adolescents (aged 15-19), those who live furthest away from healthcare facilities and socially excluded groups (country-specific). The aim is to measure how much impact programmes are having on the highest need groups in the population.

Rationale for use: High impact CYP ensures that providers are incentivised to provide sustainable contraceptive solutions to target groups that have traditionally struggled to access family planning services. In terms of a contract incentive, it should be possible to strongly relate measures of high impact CYP to DIB-funded activities. As CYP is inferred without follow-up it could be suitable for more transient populations.

Potential limitations: Given its focus on the duration of contraceptive protection provided, contractual safeguards may need to be used to ensure that women are allowed to freely choose the method and duration of contraceptive that best meets their needs. Notably, sterilisation yields a large number of CYPs and donors will wish to ensure that they do not incentivise service delivery of sterilisation if that is not the most appropriate form of contraception.

Current data sources: Client exit interviews and surveys are the most common methods used to identify CYP. We understand that some service providers are currently investing in technology to track high impact CYP more easily on the ground. Models are also being developed to infer broader family planning impact – in terms of unwanted births, abortions avoided, maternal mortality, etc. – from CYP metrics.

⁴⁷ USAID: http://www.usaid.gov/our_work/global_health/pop/techareas/cyp.html
http://www.usaid.gov/our_work/global_health/pop/techareas/cyp.html

⁴⁸ Defined by Oxford Poverty & Human Development Initiative as: The Multidimensional Poverty Index (MPI for short) is an international measure of acute poverty covering 109 developing countries. The MPI complements income-based poverty measures by reflecting the multiple deprivations that people face at the same time. The MPI identifies deprivations across health, education and living standards, and shows the number of people who are multidimensionally poor and the deprivations that they face at the household level.

Attributing impact

In considering the most appropriate outcome metrics it is also necessary to consider how impact will be attributed to DIB-funded interventions.

One approach to this is to use a benchmark. A benchmark is the level of outcomes that would have been achieved in the absence of DIB-funded services. Once a benchmark has been established then outcomes achieved by the target group can be compared and the difference measured. This enables the intervention impact to be calculated.

Benchmarks can be determined in a number of ways. The most appropriate method will depend on the availability of information and the characteristics of the target population. The most common methods of determining benchmarks are outlined below.

Historical benchmarks for an equivalent population

Historical data for a population of women similar to the target group(s) could be analysed to determine the expected outcomes for the target population. Payments for the target population may depend on the delivery of improved outcomes compared to this historical benchmark.

This approach requires commissioners and service providers to be confident that the historical cohort is similar enough to the target population that equivalent outcomes could be expected if services continued as usual. Historical benchmarks are best when there is a reasonably stable population with consistent level of outcomes over a number of years. Given significant progress in family planning outcomes in Rwanda recent years, contraceptive prevalence rate has increased from 36% in 2008 to 52% in 2010, agreeing a historical baseline for this outcome may be challenging. Historical benchmarks work best for outcomes that are not significantly affected by broader socioeconomic trends.

Pre- and post- intervention measurements for target group

This approach to measurement is sometimes referred to as '*distance travelled*'. It measures outcomes for the individuals in the target population prior to the intervention start date and at a point after they have received the intervention service. This approach is often used when data is collected through questionnaires. The questionnaires are completed by participants at the beginning of their engagement with the proposed service and after leaving the service. Any change can then be measured and attributed to the impact of the service. While this approach is quite straightforward to administer and standard questionnaires may be available, it does not measure improvement relative to what would have happened anyway – how the target group would have fared had they not received the proposed service.

Control groups

This approach compares the outcomes achieved by the target group against a contemporaneous control group that is monitored during the period of intervention. The control group seeks to mirror the target group in characteristics and, where possible, be subject to the same socio-economic context. The only difference is that the control group does not receive the proposed service that the target group benefits from. Control groups need to be carefully defined in order to avoid ethical concerns. In data-poor environments where outcome expectations are anyway low, it may be hard to justify the additional cost and complexity of a control group approach.

Feasibility in practice

It is clear from our work to date that suitable outcome metrics exist and that a blend of several metrics may be needed to incentivise behaviour effectively amongst service providers. The critical issues in determining the final blend of outcome and output metrics will be:

- The level of service already in place, and therefore whether the expected intervention is going to be focused around roll out of core services or improvements in service quality and targeting.
- The availability of data and the cost of delivering a given set of measures. Clearly any bespoke measurement will need to be carefully designed to balance the potential cost with the need for accuracy.

The feasibility and cost of measuring outcomes may be a key factor in deciding the geographic focus for initial pilots. Commissioners, service providers and investors must have confidence in the rigour and objectivity of the chosen measurement framework in order to agree the DIB contract.

A potential approach might be to use historical baselines or a distance travelled metric and then compare the results of the outcome oriented pilot programmes with similarly structured pilots commissioned using a more traditional approach. In other words, the outcome metric used in the programme, that needs to balance risk and reward for investors in order to achieve best value for money, could be split from the method used to evaluate the programme's effectiveness overall.



Potential intervention approaches

Family planning programmes can be delivered from sites dedicated exclusively to providing family planning services or integrated into wider reproductive health services. The integrated model recognises that women's health needs are not limited to family planning and that a broader range of health services may be needed.

If DIB-funded interventions are to be integrated into existing health services, then the base level of existing services becomes a key variable in determining the intervention model. As we illustrate in the table below, the spectrum of potential interventions may range from building new health clinics to providing education and training through existing facilities. The geographic context and current health service infrastructure will be an important cost driver for the intervention model.

	Outcome based	PAYMENT TRIGGERS			Output based
Need	Education & Training	Vouchers	Social Marketing	Contraceptive Commodities	Infrastructure
Need	<ul style="list-style-type: none">Limited understanding of family planning methodsLow quality delivery through existing clinics and family planning professionals	<ul style="list-style-type: none">Financial barriers to paying for family planning	<ul style="list-style-type: none">Limited knowledge and interest in family planning	<ul style="list-style-type: none">Limited availability of contraceptives.Limited choice of contraceptives.Stock outs	<ul style="list-style-type: none">Difficulty in accessing health services.Limited access and availability of contraceptive commodities.Trained personnel in well-equipped clinics
Intervention	<ul style="list-style-type: none">Education on contraceptives, birth spacing, child development issues, sexually transmitted diseases and reproductive health.Cultural perspectives on family planningTraining for clinic based and community outreach staff	<ul style="list-style-type: none">Vouchers are distributed entitling users to heavily subsidised or free services at any contracted facility of their choice.Identifying potential facilitiesContracting those that are accreditedManaging voucher distributorsProcessing payments.	<ul style="list-style-type: none">Making contraception more widely available in commercial retail outletsPromoting contraceptives to consumers through mass mediaCommunity based distribution	<ul style="list-style-type: none">Better coordination to deliver productsImproved systems for contraceptive procurementEnsuring a choice of contraceptivesNew long acting contraceptive methods	<ul style="list-style-type: none">Improving client-provider interactions.Integration with post-abortion and abortion careIntegration with HIV/AIDS servicesIntegration emergency contraceptionMobile and outreach servicesTraining community health workers to deliver

In a location without existing health service infrastructure, a purely outcomes-based contracting structure may not be necessary. Contracting for infrastructure or commodity delivery around input or output-based payments could potentially be used effectively as a driver for efficiency of implementation.

A hybrid structure where activity based payments are made for sustainable delivery infrastructure alongside outcome payments that incentivise service quality and targeting, could be used. This would reduce the risk premium and cost of capital that would otherwise be required for investors.

In the event that there are a number of different ways of providing health coverage, using different potential levels of investment or innovation, then a fully outcomes-based model may be appropriate.

What might programmes cost to deliver?

There is a reasonable evidence base on the relative breakdown of costs in family planning interventions by component. A USAID study⁴⁹ calculated the relative costs of components of family planning interventions in 2010:

- Service Delivery (38% of programme cost) – defined as education and social marketing.
- Overhead (33% of programme cost) - defined as facility costs, transportation, maintenance, supervision, training, administration.
- Commodities (25% of programme cost) - direct procurement of contraceptives.
- Support (5% of programme cost) - e.g. evaluation.

Despite the large number of studies, few authors have adopted standardised approaches to estimating unit costs which makes estimating costs across different settings difficult. The right intervention model will depend on the country and the context of implementation. Factors affecting programme costs include:

- **Staff** –There are significant differences in average annual salaries and the type of personnel delivering services by country. According to USAID estimates, the annual salary of a nurse in Kenya is \$6,500 compared to \$1,200 in Mali and \$880 in Ethiopia. In addition, the average profile of delivery staff varies by country. In Kenya it is common to have involvement from a Clinical Officer (average salary of \$7,500) while in Ethiopia programmes are most commonly delivered by nurses and health extension workers (average salary of \$640).
- **Source of commodities** –Unit costs of contraceptive commodity types and management charges from a procurement agent. Within sub-Saharan Africa commodity costs are relatively similar. According to USAID estimates, an implant with supplies for insertion and removal costs \$26 in Ethiopia, \$34 in Mali, and \$37 in Kenya. There is significant cost variation between types of contraceptives, and the profile of contraceptives offered to users across countries is varied. Implants are the most costly contraceptive method, while injectables and pills are cheaper at \$3.5-\$4.5.
- **Existing infrastructure** –The quality of existing health services and the number of family planning service delivery points varies significantly by country and at a regional level. For example, certain areas in Uganda have a strong network of clinics run by for-profit providers, for whom Uganda Health Marketing Group provides training and supplies at wholesale prices. In addition, Marie Stopes Uganda has 14 clinics and also hosts outreach teams which visit Ministry of Health clinics. Without an existing network of service delivery points, significant upfront funding may be needed to develop points from which to provide contraceptives and family planning advice. This would add significantly to the costs of delivering outcomes.

Example programme costs – DfID Uganda ARC programme

The cost of the programme is £35m over four years with a target population of 700,000 women. This translates to a unit cost per woman targeted of £50.

⁴⁹ Stover, J. Weissman E, Ross J. et al 2010. Global resources required to expand family planning services in low and middle income countries. USAID. 2010

The approximate allocation of funds to components of the programme:

Activity / intervention	Amount (£)	% of total
Service provision	18m	52%
Contraceptive commodities	10m	29%
Social marketing	5m	13%
Communications	1m	3%
Impact evaluation	1m	3%
Total	35m	100%

In addition to the costs outlined above, Development Impact Bond budgets would need to include budget lines for outcome evaluation and for cost of capital (the risk premium to be paid to investors on success). These costs would depend on the quality of existing data and data collection infrastructure in the pilot countries, and on the level of risk being transferred to investors in terms of both the operating context and payment mechanism.

Estimating programme impact

The success payment per output / outcome within a DIB contract is determined by the intervention cost and the expected level of success.

The investor and commissioner will need to agree a shared understanding of the potential impact of an intervention model targeting family planning. During this initial scoping exercise we have sought to identify the level of impact that has been achieved by existing family planning programmes.

The summary table below should be treated with caution as figures include:

- Results from interventions that were primarily focused on a single outcomes area, providing services more specialised than may be desirable for the Family Planning DIB;
- Results from programmes working with populations with diverse needs and demographic profiles; and
- Results measured on a basis substantially different to the short-listed DIB outcome metrics (e.g. Birth interval of less than 2 years vs. Women who plan to use birth spacing).

The variability of expectations of impact is to be expected in light of substantively differing country contexts. This underlines the importance of detailed country-specific feasibility work in order to develop a DIB.



Metric	Impact	Programme
Contraceptive prevalence rate	8 percentage points (targeted)	ARC Uganda (DfID) ⁵⁰
Contraceptive discontinuation rates	Not found	Not found
Adolescent fertility rate	2.7 ⁵¹ - 15 ⁵² percentage points	Kremer, Kenya ⁵³ Cabezón, Chile ⁵⁴
Birth interval of less than 2 years	The percentage of women who report to plan to use optimal birth spacing increased from 68-90%	Optimal Birth Spacing Program: Operational Research in Mozambique, 2004-2005 ⁵⁵

The case for a broader focus?

Services commissioned by DfID around family planning outcomes could help to address the issues in service provision for the cohort whilst allowing service providers flexibility to deliver positive outcomes. However, it may be desirable to ensure that the Development Impact Bond has further flexible funding for supplementary services to address related health needs of the target population and to reinforce and sustain positive family planning outcomes for women and their families. Additional support may include:

- **HIV/AIDS** – Individuals with an unmet family planning need may also have a need for HIV/AIDS support. In Uganda 6.5% of adults (15-49 years) are living with HIV/AIDS as of end-2001.⁵⁶ As DfID is committed to improving family planning outcomes and reducing the spread of HIV, flexible funding to provide HIV education programmes alongside core DIB interventions may provide DfID with opportunity to leverage the DIB investment. Supplementary services could include the delivery of contraceptives and HIV protection and prevention to high HIV risk women through the same channel.⁵⁷
- **Maternal Health** – Changes in maternal health are strongly linked to the impact of family planning programmes. Improvements to healthcare infrastructure for family planning could therefore also impact positively on wider maternal and infant health targets such as the delivery of ante-natal and post-natal care, the percentage of births delivered in healthcare facilities and the level of care delivered to infants.

⁵⁰ DFID (2011): *Accelerating the Rise in Contraceptive Prevalence in Uganda (ARC). Full Business Case*.

⁵¹ In the control group 16 percent of girls had ever been pregnant within 3 years, this share was 2.7 percentage points (17%) lower in the intervention group (Kremer, Kenya).

⁵² Pregnancy rates for the intervention and control groups and the cohort were 3.3% and 18.9%, respectively.

⁵³ Duflo, E.D., P; Kremer, M, Education (2011). *HIV and Early Fertility: Experimental Evidence from Kenya*.

⁵⁴ Cabezón C, V.P., Rojas I, Leiva E, Riquelme R, Aranda W, Garcia C, *Adolescent pregnancy prevention: An abstinence-centered randomized controlled intervention in a Chilean public high school*. Journal of Adolescent Health, 2005

⁵⁵ Beracocha E; Pruy N. *Optimal Birth Spacing program: operational research in Mozambique, 2004-2005*. Management Sciences for Health [MSH], Advance Africa Project, 2005

⁵⁶ Adult prevalence rate – Joint United Nations Programme on HIV/AIDS (UNAIDS), *Report on the Global HIV/AIDS Epidemic*, 2002.

⁵⁷ Bill and Melinda Gates Foundation, *Dual Protection Initiative Multipurpose Prevention Technologies*. 2012 London Symposium

- **Sustaining change** – Further interventions may be required in order to sustain improved family planning outcomes for women during the period of the DIB and beyond. Additional funding could support the development of family planning champions who actively support and promote the issue. The Network of Champions, a Family Health International project asked champions to promote awareness of contraceptive technology. The programme found that it can be difficult to sustain champions so flexible funding could be used to provide some material support as well as open dialogue.⁵⁸

⁵⁸ International conference on family planning research and best practices. Munyonyo, Uganda | November 15 – 18, 2009

Payment mechanism considerations

The payment mechanism refers to the contractually agreed triggers for payments to be made to investors for success. The longer the period of time between the delivery of DIB-funded interventions and the assessment of outcomes that will trigger payment the greater investors will perceive the outcome risk to be and hence the more they will want to be paid for success.

As we discussed in the introduction to this document, the best value for money will be determined by identifying the optimum, rather than maximum, level of risk transfer from the outcomes funder to investors. This will need to be determined on a country-by-country basis.

The reasons for this can be seen if one considers a contract based around Contraceptive Continuation Rates. If payments are only triggered for women that have continued using contraception for at least 2 years, investors will have a significant period of time when they are spending money on interventions but have no indication of whether interventions are working and they will get paid. They are likely to view such a contract as fairly high risk and hence will require a high return on their investment – the ‘cost of capital’ will be high.

If, however, it is known that historically most women discontinue use of contraception within three months, and it is similarly known that if they continue for six months they have a high probability of continuing to use contraception for longer, it may represent better value for money to trigger success payments for women that have continued using contraception for a shorter period of time. This would enable an earlier assessment of whether the funded interventions are having an impact, reducing the cost of capital. It would also reduce the amount of investment that needs to be raised as earlier cash flows reduce the peak working capital requirement – the amount of money that is needed to fund interventions before success payments are made.

The most appropriate payment mechanism will depend on the nature of the interventions required in a particular location – whether best funded by output or outcome-triggered payments. It will also depend on the attribution mechanism that is selected – generally outcome models that pay against a baseline or control group will require longer to trigger payments as a minimum number of people may need to achieve the outcome in order to qualify as success.

Potential payment triggers

DIB contracts could include one or more of the following payment triggers depending on the nature of the intervention, the risk appetite of outcomes funders and investors, and the desired incentives for service provider behaviour.

- **Output payments** – Output payments are made for processes or activities that provide a deliverable (e.g. a reduction in the number of stock outs, or an increase in trained family planning personnel in a given area). Outputs are often necessary for the delivery of outcomes, but may not be sufficient in themselves. In contexts where outputs are difficult to achieve or there is scope for implementation efficiencies, payment for outputs may be a cost-effective way to reward investors. Commissioners may want to combine payment for outputs with payment for outcomes to incentivise service quality in addition to availability.
- **Payments for every outcome delivered** – Outcome payments could be made for all successful outcomes. Potentially with outcome payments reduced proportionally to take account of deadweight – the outcomes that would have been achieved anyway without DIB-funded interventions. Payments for every outcome delivered gives investors a degree of protection as some payments can be realised early in the contract, it also reduces the

working capital requirement. However, it still represents some risk transfer to investors over simple payment for outputs. As such, this may offer a good balance of risk transfer and value for money in some contexts.

- **Outcome payments above deadweight** – Outcome payments are made only for outcomes delivered above an agreed level of deadweight.⁵⁹ This method involves a greater level of risk transfer to investors. If the intervention does not achieve an impact above the deadweight then investors would lose their capital. As discussed in the outcomes section, deadweight can either be fixed, based on historic data, or live, based on a contemporary comparison cohort. If the baseline is fixed both investors and outcomes funders take some risk around its continuing validity.
- **Outcome payments above a target baseline** – Outcome payments are payable only when outcomes above a target baseline – set above deadweight – are achieved. For example, in the Peterborough SIB investors only receive outcome payment if reoffending is reduced by at least 10% in comparison to a matched control group. This was to ensure that any result was statistically significant. This method transfers the highest level of risk to potential investors, with the prospect of capital loss even if success is achieved above deadweight (but below the target baseline) as such a result could potentially have occurred through random effects. Analysis would be required to establish a target which is seen as statistically significant by donor agencies, whilst being sufficiently achievable by investors so as not to make the cost of capital prohibitive. The third factor to bear in mind in this instance will be the cost of data gathering and collection – larger populations will more readily allow statistically significant results. Given the relatively limited evidence base for the impact of existing interventions on the suggested outcome metrics, keeping any target baseline close enough to deadweight to ensure investors are reasonably confident of some level of outcome will be highly desirable.

In addition to different triggers for different outputs / outcomes, it may be appropriate to vary the tariffs available according to the target group. Higher tariffs for work with more challenging client groups, could incentivise providers to target efforts on women with the highest need. As we discuss earlier in this document, this could include women in rural areas, adolescents, women in the lowest wealth quintile or post-partum women. Detailed feasibility work will be needed to establish the relative cost of working with higher need groups to ensure that tariff variations create an appropriate incentive.

⁵⁹ The numbers of the eligible population who would have been expected to achieve the outcome in the absence of DIB-funded interventions.

Creating a compelling investor proposition

The feasibility of a DIB approach depends on creating a compelling value case for both outcome funders and investors.

The precise nature of the investor proposition will ultimately be determined by country-specific definitions of appropriate target groups, intervention models and payment metrics. Nevertheless, it is possible to identify some key considerations for investors:

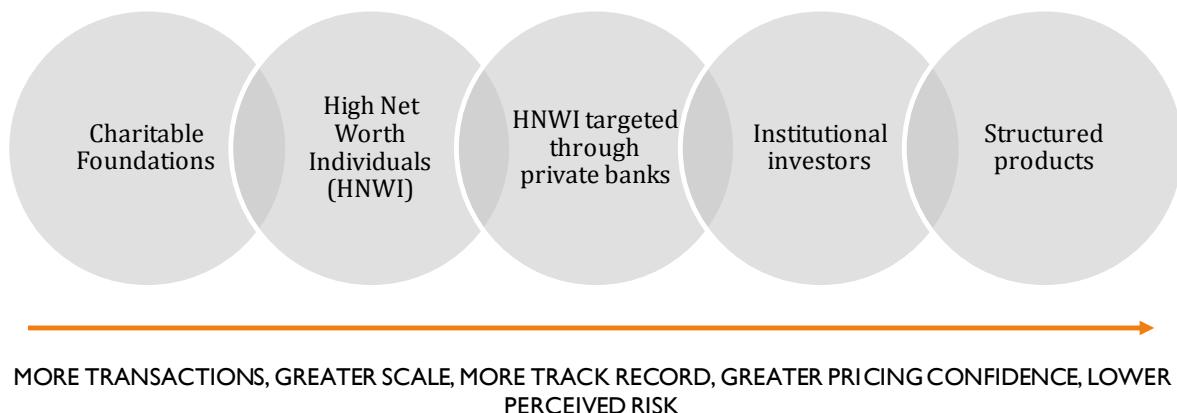
- **Contract duration.** The duration of the contract must balance the length of time needed to create an impact on the outcome metrics against the amount of time for which investors are prepared to lock-up their capital. This is a particularly important consideration at this early stage of the market as no secondary markets for contracts of this kind – that could potentially offer investors an early exit – currently exist. Experience of raising investment for similar contracts in the UK indicates that an investment horizon of more than 5-8 years is likely to be challenging.
- **Outcome risk.** The level of confidence investors have in the programme's ability to deliver the output / outcomes that trigger success payments will depend on four considerations:
 - **Intervention evidence base.** In order to be comfortable investing, investors will need to be reassured of the ability of the planned interventions to deliver the contract outcomes. Interventions with a weak or non-existent track record will be viewed as more risky, although investors are also likely to take into consideration the quality of the proposed intervention management team (see below).
 - **Payment mechanism.** As we outline in the previous section, the payment mechanism refers to the contractually agreed metrics that trigger payments to investors for success. The longer the period of time between the delivery of DIB-funded interventions and the assessment of outcomes that will trigger payment the greater investors will perceive the outcome risk to be. This risk can be reduced by introducing some payments that occur earlier in the implementation period – potentially output triggered.
 - **Operating context.** A number of diverse factors will inform investors' assessment of the riskiness of the operating context. These might include the likelihood of partner government support for DIB-funded services at a national, regional and local level; and socio-economic factors not controlled for in the DIB payment mechanism – like political disturbances, or drought – that could affect the ability of funded services to deliver outcomes.
 - **Intervention management.** Investors' confidence in the management team's ability to oversee, monitor and report on the implementation of DIB-funded interventions will play a significant role in their assessment of outcome risk. Investors ultimately back the judgement of this management team to ensure that their money is used effectively to deliver high quality interventions, to ensure that interventions are adapted or new service providers found if outcomes are not being delivered, and to advise on exit if it seems unlikely that outcomes will be achieved. As this management team is ultimately responsible for safeguarding their investment, investors are likely to want the option to replace this team if they are unhappy with their performance. For this reason, investors may be unwilling to back a contract with a purely public sector management team even if parts of the intervention will be delivered through public sector facilities. Different models for managing this will need to be explored with investors and partner governments as part of the detailed feasibility assessments.

- **Counterparty risk.** Investors will evaluate the likelihood that the contract commissioner / outcomes funder will live up to their contractual obligations. There will be particular focus around contract clauses for termination or variation, and further concern regarding the likelihood that payments will be made for successful delivery. Whether the donor agency or partner government is the contracting party in this respect may significantly affect investors' perception of the inherent riskiness of the investment opportunity – the UK government is, for example, more likely to be trusted by investors to stick to their contractual commitments than some governments in the developing world. Partner government credit rating may therefore be an important factor when considering the most appropriate contract structure. If donor agencies want the contract to be awarded and managed by a partner government, they may need to underwrite the outcomes payment commitment in order to attract investors.

The considerations outlined above will determine investors' perception of the riskiness of the DIB investment opportunity. As a general rule, the greater the risk investors believe they are taking, the higher the financial return they will require for their investment.

While it has not been possible to undertake specific interviews with investors in the course of this scoping work, it seems safe to assume that the pool of private investors that would be prepared to take on significant outcomes risk is relatively small. Investors of this kind might include trusts and foundations, donor agencies and high net worth individuals with a significant interest in the target geography and / or social issue.

If the scale of the investment required is large, it may be necessary to develop investment structures that have a lower risk profile. This could be achieved by managing the level of risk transferred to investors in terms of the considerations outlined above, or by seeking a class of mission-motivated investor that is prepared to take a 'first loss' position.⁶⁰ An overview of the potential investor universe is given in the diagram below.



⁶⁰ A class of investors that agree to be repaid last thereby reducing the risk of repayment to other investors.

Initial conclusions

Our initial scoping study indicates that there is good potential to apply Social Impact Bond structures to improving family planning outcomes in developing countries.

Family planning is an important area of work for improving the lives of millions of women and families. Alongside direct health benefits, for both women and children, there are wider benefits to improving family planning in relation to economic development through its impact in enabling greater labour market participation by women. We believe this would make a family planning Development Impact Bond an interesting proposition for investors.

From a technical perspective family planning also appears to be a good choice:

- Appropriate measures appear to exist that could incentivise both availability and quality elements of a potential intervention. These might include:
 - Contraceptive Prevalence Rate and / or Couple Years Protection - potentially reasonable measures for supporting the roll-out of infrastructure and working clinics;
 - Contraceptive Continuation Rate – a potentially strong indicator of service quality; and
 - Teenage fertility rates – potentially a good proxy indicator for the state of family planning services as a whole.
- There seems to be good potential to use variable tariff rates to incentivise work with high priority populations – potentially including rural women, women under 20 years old, women post-abortion and women post-partum.
- There are a range of geographies with differing but significant need. Thus pilots could be set up to test the model in quite different circumstances.
- There are a range of interventions that both point the way to effective implementation but also leave plenty of room for efficiency and effectiveness improvements to be incentivised using a DIB model.
- Likewise there seem to be a range of suitable and effective service providers who would be keen to participate.

Nevertheless, there are also potential challenges in applying outcomes-based models to family planning:

- Becoming pregnant is, for many, a cause for celebration rather than frustration. Outcome metrics, governance structures and interventions will therefore need to be particularly mindful of potential perverse incentives or local concerns.
- Some of the more valuable measures in terms of broader social value are the hardest to measure. This includes measures of teenage births and spacing between births. Further investigation will be required in relation to specific geographies and target populations to determine the right balance between cost and accuracy of sampling and measurement techniques.

Within the time constraints of this scoping exercise we have not been able to assess investor appetite. However, we see no reason why the investor returns could not be reasonable. Formal investor discussions would need to be a part of the next phase of work.

Next steps

A full feasibility analysis is now needed to build upon this scoping exercise. We recommend that the feasibility work has two distinct phases, the first to assess which countries would be the best fit for hosting the pilots, in terms of need, country interest and outcome tracking. Thereafter, detailed work could be carried out to develop the appropriate governance, measurement, tariffs, legal structure, and investor and donor offering.

We would envisage that such work would take 6 – 12 months to get to contract launch if undertaken by a specialist team with skills in structuring contracts for outcomes finance, developing family planning outcomes assessments, and delivering family planning services in the developing world.



Acknowledgements

Social Finance and the Center for Global Development would like to thank the following people for taking the time to share their time and thoughts with us in the course of this scoping study:

Name	Role	Organisation
Angela Baschieri	Health and Population Adviser	DfID
Tania Boler	Head of Research and Metrics	Marie Stopes International
Ellie Cockburn	Innovative Aid Instruments Adviser	DfID
Jacqueline Darroch	Senior fellow	Guttmacher Institute
James Droop	Senior Policy Adviser	DfID
Nel Druce	Senior Health Adviser	DfID
Kenzo Fry	MSI Research & Metrics	Marie Stopes International
Gillian Mann	Health Adviser	DfID
Sara Seims	Population Program Director	David and Lucile Packard Foundation
Susheela Singh	Vice President for Research	Guttmacher Institute
Sally Waples	Policy and Programme Manager	DfID
Julia Watson	Senior Health Adviser	DfID



Appendix 1 – High level country assessments

Based on the criteria outlined on page 15, we have produced three potential geographic profiles to illustrate how DIB models could be variably applied according to country need. These examples are based on a preliminary assessment of the needs of the population in three countries and the level of family planning infrastructure already in place.

Urban Rwanda, existing infrastructure - existing clinic infrastructure seems good in comparison to much of sub-Saharan Africa. The Government of Rwanda has previously demonstrated interest in innovative approaches to development financing and as such Rwanda could represent a good environment in which to overlay quality of service interventions to improve family planning outcomes. A strong donor presence in country has strengthened data collection and evaluation processes but may make attribution of impact to DIB funded programmes more challenging.

Criterion	Suitability	Rationale
Unmet need for family planning	✓✓	Moderate unmet need
Priority country for DfID	✓✓✓	Significant DfID interest
Partner government policy priority	✓✓✓	National Priority
Partner government interest in payment-by-results approaches	✓✓✓	Existing DfID results based aid education pilot
Good potential for attribution of impact	✓	Potentially challenging to disaggregate from impact of other family planning interventions

Rural Uganda, high need - the need for family planning services is high in Uganda, particularly in rural areas. Limited rural healthcare infrastructure may mean that a model with greater focus on payment for outputs may be appropriate to ensure that a basic level of service from which to deliver interventions is available. A strong donor presence in country has again strengthened data collection and evaluation processes but may make attribution to specific programmes more challenging.

Criterion	Suitability	Rationale
Unmet need for family planning	✓✓✓	Very high unmet need. Total fertility rate second highest in the world.
Priority country for DfID	✓✓✓	Significant DfID interest
Partner government policy priority	✓✓	Key priority with wealth creation, governance, poverty and hunger



Criterion	Suitability	Rationale
Partner government interest in payment-by-results approaches	✓✓✓	Existing DfID results based financing pilot in northern Uganda
Good potential for attribution of impact	✓	Challenges around baseline data and limited existing infrastructure.

Sierra Leone, ease of attribution - the need for family planning services is high in Sierra Leone. Limited infrastructure (both healthcare and general infrastructure) may again mean that a model with greater focus on outputs would need to be adopted to ensure that the outcomes can be delivered. There is however limited current spend from donors, as such, data collection and programme evaluation may be more challenging, however attribution of impact to DIB-funded interventions may be easier.

Criterion	Suitability	Rationale
Unmet need for family planning	✓✓✓	High unmet need.
Priority country for DfID	✓✓	DfID interest
Partner government policy priority	✓✓✓	Family planning and education key priorities
Partner government interest in payment-by-results approaches	✓	DfID results based aid through budget support
Good potential for attribution of impact	✓✓✓	Limited funding for family planning to date so attribution potentially easier

Appendix 2 – Scoping Team

Social Finance was set up in 2007 to help build a social investment market in the UK. Its mission is to improve the quality and quantity of finance available for achieving social purpose. To this end it developed and launched the first Social Impact Bond in the UK in 2010, focused on funding rehabilitation services for short-sentence prisoners released from Peterborough Prison. It is interested in applying the model in the international development context in the form of Development Impact Bonds and is partnering with the Center for Global Development to this end. The Center for Global Development (CGD) is an independent think tank that works to reduce global poverty and inequality through rigorous research and active engagement with the policy community. Its interest in DIBs builds on its work around cash on delivery aid and its wider interest in improving the quality and accountability of international development funding. Social Finance and CGD are working in partnership to bring together a Development Impact Bond Steering Group to explore the feasibility of using DIBs in a selected number of settings.

Social Finance

Toby Eccles (Director)

Toby founded Social Finance in 2007. He assembled the initial team and led the development of the Social Impact Bond from first concept to implementation. As Development Director, Toby oversees all our Social Impact Bond work. From 2005, he acted as secretariat for the Commission on Unclaimed Assets, where he helped develop the recommendation for the creation of a Social Investment Bank. Prior to this, he was Director of Research at ARK, a child focused foundation, where he built programmes around education in the UK and communities with high levels of HIV/AIDS in South Africa.

In the commercial world, Toby worked in corporate finance at UBS Warburg, and built a next generation internet protocols business for Data Connection, a leading UK software company. He has taken non-executive and investor roles in two technology related start-ups and is a non-executive director of Antidote, a charity developing emotional intelligence in schools. Toby holds a BA in Maths from St. Edmund Hall, Oxford.

Louise Savell (Director)

Louise is an experienced Director with an international development background. She helped establish Social Finance in 2007 and played a key role in the development of the Social Impact Bond approach. She has led SIB feasibility and development work in the fields of youth unemployment, homelessness and health, and advisory work to clients in Ireland, Australia and Europe.

Before joining Social Finance, Louise managed the Eastern European programmes of ARK, a UK charitable foundation. She started her career in East Africa researching and developing youth HIV/AIDS prevention programmes. Louise was a Scholar at the University of Oxford, where she received a BA in Philosophy, Psychology & Physiology and an MPhil in Development Studies. She also holds a post-graduate diploma in Voluntary Sector Management from the Cass Business School.

Suzanne Ashman (Senior Analyst)

Suzanne joined Social Finance in February 2010 as an Analyst. She works on the Social Impact Bond (SIB) at HMP Peterborough and on SIB development in the field of vulnerable children. She has also worked on health and financial inclusion projects. Suzanne previously worked at the Tony Blair Faith Foundation on the Yale University Faith & Globalisation Initiative as well

as on programmes focused on the UN Millennium Development Goals. She interned with the Portland Trust, a foundation committed to promoting peace and stability between Palestinians and Israelis through economic development. Suzanne is a governor of a primary school in Westminster. She holds a BA in Philosophy, Politics and Economics from Trinity College, Oxford.

Eleanor Nettleship (Junior Analyst)

Eleanor joined Social Finance as an Analyst in April 2012. She is working on the development of Social Impact Bonds in the area of International Development. Previously, Eleanor has worked at the British Council on their International Education projects, and interned at Transparency International UK, where she conducted research into the categorisation of bribery typologies and follow-up analysis for Transparency International's second "Transparency in Reporting on Anti-Corruption" Report. She holds a degree in Chemistry from Oriel College, Oxford and an MSc in Development Studies from the School of Oriental and African Studies, London.

The Center for Global Development

Owen Barder (Director)

Owen is a senior fellow at the Center for Global Development and the Director for Europe. He is establishing a European program for CGD. Owen was a British civil servant from 1988 to 2010, during which time he worked in the UK Treasury, No.10 Downing Street and the Department for International Development. He was Private Secretary (Economic Affairs) to the Prime Minister and previously Private Secretary to the Chancellor of the Exchequer. In the Department for International Development he was variously Director of International Finance and Development Effectiveness, Director of Communications and Information, and head of Africa Policy Department. During 2005-2007 Owen was a Senior Program Associate at CGD, where he worked on the Advance Markets Commitment for vaccines. He has also worked in the South African Treasury on budget strategy, and was a visiting scholar at the University of California, Berkeley. Owen is a non-executive director of Twaweza. He writes a personal blog at <http://www.owen.org/blog> and hosts a development podcast at <http://developmentdrums.org/>.

Rita Perakis (Associate)

Rita is a program associate at the Center for Global Development. She joined CGD in June 2010 and works on aid effectiveness initiatives including Cash on Delivery Aid. Rita is a graduate of Columbia University's School of International and Public Affairs where she completed a Master's of Public Administration. During her master's program, she served as a consultant on an agribusiness development project for the Millennium Challenge Corporation and as an intern for the Education for Employment Foundation in Morocco. Previously, she worked for Seedco, the Council on Foreign Relations, the French Ministry of Education and Cultural Services, and the Carter Center. Rita has a BA in international studies from Emory University.