WHICH STRINGS ATTACHED? Toward an Ethics Framework for Selecting Conditionalities in Conditional Cash Transfer Programs

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ABSTRACT

Conditional Cash Transfer programs (CCTs) present a promising new strategy for promoting the uptake of healthy behaviors, particularly for populations that face economic obstacles to these practices. CCTs provide cash payments to households or individuals contingent upon the completion of certain behaviors (e.g. school attendance, vaccination) or achievement of pre-specified outcomes (e.g. nutritional outcomes, STI status). CCTs have quickly become a popular approach in low and middle-income countries worldwide, addressing a range of public health and development issues. However, to date, there is little guidance on how CCT program designers should assess the ethics of a particular CCT design approach. With a range of potential behaviors or outcomes to incentivize, how ought program designers consider the ethics of the various options on which they could condition the monetary reward? What conditionalities should be used for a given conditional cash transfer program, given the health aims and the context?

This dissertation seeks to advance the current understanding of ethical considerations related to conditionality selection through three aims. Aim 1 seeks to identify and define the moral considerations relevant to conditionality selection to help assess which behaviors and outcomes are morally permissible and preferable for program designers to select as conditionalities. Manuscript 1 provides the findings of the conceptual analysis for this aim, which applied norms and principles from a number of frameworks for public health ethics and social justice, drawing upon the extensive literature on CCT program experiences.

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Aim 2 is to provide insight into the values, perspectives, and experiences of multiple actors involved in the design of conditional cash transfer programs, with a particular focus on their views surrounding the conditionalities attached to payment. Through qualitative, in-depth interviews, this empirical research explored how various CCT program designers made decisions about program conditionalities, the rationales they used to support their choice of conditionalities, and their views on what general qualities make certain behaviors or outcomes well suited for conditioning. The findings are presented in Manuscript 2.

Aim 3 is to provide an evaluative framework to help policy makers and program designers critically assess the ethics of various conditionalities. Manuscript 3 puts forward an ethical framework to facilitate structured analysis and evaluation of the ethics of a particular CCT approach through an iterative approach of assessing, refining, and reevaluating the program conditionalities at various periods in the design, implementation, and adjustment of the program. It provides a set of ethical considerations across the various stages of the CCT policy cycle to help program designers identify aspects of a conditionality that may be morally problematic and support the selection of optimal conditionalities for the program. Development of this framework was informed by the aforementioned conceptual and empirical aims. At the heart of the framework are six core categories of morally relevant features: effectiveness in producing desired health gains, associated risks and burdens, receptivity, attainability, indirect effects and externalities, and distributive considerations.

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LIST OF ACRONYMS

ADB	Asian Development Bank
CCT	Conditional Cash Transfer
DFID	UK Department for International Development
EPRI	Economic Policy Research Institute
FAO	Food and Agriculture Organization of the United Nations
HH	Head of Household
HIC	High Income Countries
HIV	Human Immunodeficiency Virus
IDB	Inter-American Development Bank
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
LIC	Low Income Countries
LMIC	Low and Middle Income Countries
MDGs	Millennium Development Goals
OHCHR	Office of the High Commissioner for Human Rights – United Nations
OVC	Orphans and Vulnerable Children
M&E	Monitoring & Evaluation
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MSM	Men who have sex with men
NGO	Non-governmental Organization
STI	Sexually Transmitted Infection
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank

INTRODUCTION

Over the past two decades, there has been increasing interest in the use of conditional cash transfers (CCTs) to improve educational and health outcomes while working to break the cycle of poverty. CCTs provide cash payments to poor households or individuals contingent upon the completion of certain behaviors (e.g. school attendance, vaccination) or achievement of pre-specified outcomes (e.g. nutritional outcomes, STI status). The earliest programs introduced in various Latin American countries demonstrated the potential of cash incentives as social protection policies addressing poverty and vulnerability, and to date, CCTs have been piloted or implemented in over 40 countries worldwide.¹ In 2007, Lagarde et al. published a systematic review in JAMA of CCTs for health improvement in low and middle income countries and concluded that, based on the experience of six cash transfer programs, these types of strategies can be successful in increasing utilization of health services, improving nutritional outcomes in children, and promoting uptake of preventive behaviors.² While these programs clearly embody beneficent aims to promote healthy behavior and reduce poverty among the world's poorest, concerns have been raised around the ethics of using material incentives.^{3,4,5}

One specific area for ethical analysis concerns the selection of the specific conditionalities for payment for any given program. When program designers devise the structure of the incentive scheme, how ought they consider the various options on which they will condition the monetary reward in order to achieve their public health goals while also being respectful and fair to their target beneficiaries? In what instances should payment be conditioned upon the practice of certain behaviors versus the attainment of

desired outcomes? Are the target beneficiaries receptive to the conditioned practice(s), and if not, under what circumstances is it justifiable to override individual preferences or attitudes? How might conditionalities change the potential effectiveness of the program, and what implications does this have when assessing whether the CCT has a favorable ratio of benefit to burdens? What kinds of unintended consequences might be associated with candidate conditionalities? Understanding how to navigate these challenging questions, among others, could determine whether a CCT program is ethically sound or not.

Despite the importance of conditionality selection for overall program success and ethical acceptability, little practical or normative guidance exists for CCT designers. The literature to-date largely focuses on impact evaluations of current schemes and novel applications of incentives with a number of studies evaluating the short and long-term effectiveness of CCTs^{6,7,8,9} as well as increasing attention to design aspects that influence impact and cost-effectiveness.¹⁰ A 2009 World Bank report briefly explores some practical guidance for selecting conditionalities.¹¹ However, they employ a political and economic rationale focusing on effectiveness and efficiency, rather than any ethical criteria. More recently, the Economics Policy Research Institute in collaboration with the UK Department of International Development (DFID) drafted the second edition of Designing and Implementing Social Transfer Programmes.¹² This guide includes a chapter on CCT design that begins to consider complex issues surrounding conditionalities, including whether they are exclusionary, how effectively they will support program goals, and what balance they strike between household autonomy and public, inter-generational benefit. It is clear that relevant actors are shifting from their

conception of CCTs as the 'magic bullet' to address ill health and poverty and starting to appreciate the nuances of the approach as it is applied in new ways to a variety of health issues. In fact, in a recent update to their initial review of CCTs for health, Lagarde and Ranganathan urged that greater attention and public debate be directed to the ethical aspects of CCT schemes, particularly for those incentivizing irreversible procedures or with high potential for unintended consequences.¹³

This dissertation includes the first comprehensive *normative* analysis of what specific factors are *morally* relevant to selecting conditionalities and how they *ought* to factor into CCT design. Furthermore, it contains one of the only empirical studies investigating the processes surrounding CCT design decisions and the underlying rationales of policy makers' conditionality selections. This empirical work provides critical insight into the experiences of CCT program designers who have faced difficult choices in program design, particularly in setting conditionalities: what do they consider; what ethical principles are most relevant in their decision-making process; what processes, if any, do they use to evaluate the options? Combined, the conceptual and empirical papers contributed to the development of actionable recommendations for evaluating the options and selecting ethically justifiable conditionalities.

CCTs represent a promising strategy for improving health and overcoming poverty, but more robust ethical guidance and oversight are needed. As worldwide investment in conditional cash transfer schemes continues to grow (see Figure 1), it is critical to understand the morally relevant considerations underpinning the design of these programs. This research seeks to define the morally relevant aspects of setting conditionalities, capture the existing experience of designers in making programmatic

decisions around conditionalities, and develop an ethical framework to guide the design of future CCTs and adjust conditionalities of existing programs where appropriate.

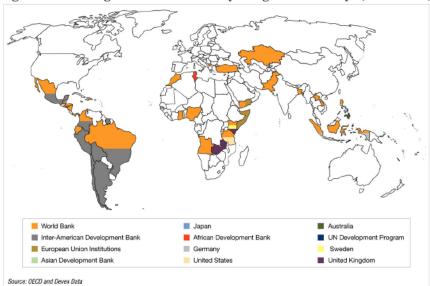


Figure 1: Leading Donors to CCTs by Program Country (2001-2012)

Conditional Cash Transfers: An Overview

Since the mid-1990s, conditional cash transfers (CCTs) have been rapidly gaining popularity throughout the world, with nearly every country in Latin America having some form of CCT scheme and numerous countries in South and East Asia, Sub-Saharan Africa, and the Middle East introducing programs to improve education and health among their poor.^{11,13,14} Conditional cash transfers are programs that provide monetary payments to individuals or households based on their compliance with a prescribed set of behaviors or achievement of specific health outcomes. The programs operate to provide immediate assistance to impoverished individuals, while at the same time creating demand for investments in human capital, such as education and health inputs, which can be instrumental in promoting long-term wellbeing and breaking the vicious cycle of poverty.¹⁵ These programs vary significantly in scale, scope, and program requirements.¹¹

See Appendix 1.2 for a select list of CCTs with health conditionalities. The older and more traditional CCT schemes, such as those implemented in Mexico, Brazil and Nicaragua, were developed to serve as alternative approaches to providing broad social safety nets, replacing existing subsidies for the poor.¹³ However, as CCTs have gained in popularity, their application has evolved in many settings to include more novel approaches focused on discrete health outcomes or behaviors, such as in-facility delivery or HIV prevention.¹⁶

Since the findings from the Oportunidades randomized-controlled experiment demonstrated the potential of CCTs to improve health outcomes of the beneficiaries, a series of impact evaluations and review articles have been published to highlight the evidence in support of CCTs for health.^{2,6,8,11,13,17,18} These evaluations have linked CCTs to marked positive impacts on utilization of preventive health services, immunization coverage, improvement in child growth and development, and in one study, a 25% reduction in STI incidence.¹³ While the magnitude and mechanism of health impact vary by program and context, it is clear that CCTs can be a successful approach to realizing positive health gains among the poor in low and middle income countries. These findings have galvanized global support for CCTs, with national governments and major development partners directing funds into the scale-up and implementation of these programs. Figure A1.1 in Appendix 1 shows a map of the increase in CCT programs between 1997 and 2008, and there are even more programs that have emerged in the last four years.

CCTs represent an attractive intervention option to address health and poverty for a number of reasons. The cash transfer can remove economic and social barriers to

making desired investments in human capital, in many instances offsetting opportunity costs associated with keeping children enrolled in school, using time and resources to seek out health services, or empowering the disenfranchised to act in the face of social or cultural barriers.¹¹ The cash transfers serve to alleviate economic constraints on individuals and families that previously made investments in health and education inefficient or infeasible. With regard to empowerment, in many programs the payments go to the female head of household. The assumption is that the women's objectives may be more in line the children's best interests, and attaching conditionalities to the payments would enable the female head of household to exercise greater authority to use the transfers toward human capital investments, thus disrupting the existing power dynamic.¹¹ This design aspect addressing gender disparities closely aligns with broader global development goals.^{19,20}

The incentive approach also serves to counteract the impact of individuals' discounting of future benefits. It has been well documented in the economics and behavioral psychology literature that people tend to greatly undervalue future gains in favor of realizing immediate benefit, a phenomenon known as hyperbolic discounting.^{11,21,22,2324} One study estimated that people discount their future health status as much as 30% in excess of what economists expect for a rational discount rate of future health gains.²⁵ This tendency toward myopic decision-making and undervaluing of future benefit appears to be greatest among younger individuals as well as in settings where high rates of poverty and disease add greater uncertainty to life prospects and the potential to ever realize the prospective future gains.^{21,22} The cash transfers provide an immediate benefit to long-term investments in health for which beneficiaries might

otherwise undervalue eventual returns, counteracting the effects of discounting.²⁶ Furthermore, the CCT approach may help to promote intergenerational justice, since the cost of human capital investments is borne by parents and the future benefits often go to the children.¹¹

Beyond addressing individual-level factors, there are arguments in favor of CCT programs that cite broader society-level utility from having a healthy, well-educated population.^{11,12} Societal benefit helps make the case for government investment in CCTs, and the conditionality of payments has made these redistributive assistance programs more palatable in contexts where there are strong negative social constructions of the poor.^{11,20} Adding this dimension of personal responsibility has facilitated political support because beneficiaries are viewed as "deserving," with less stigma attached to receiving this form of government assistance.^{12,26}

Existing Guidance for CCT design

Given the growing popularity and proliferation of CCTs over the past decade, various case study accounts and guidance documents have been published to assist policy makers in developing their own cash transfer programs.^{11,12, 27,28} As noted above, the World Bank (WB), which has been one of the more active agencies in promoting the CCT approach, issued a policy research report in 2009 with provisional guidance on designing a CCT.¹¹ The report includes various considerations for targeting populations, structuring of the benefit, setting exit and entry rules, as well as selecting conditionalities for payment. When designating conditionalities, they emphasize the importance of using the evidence base to justify the link between the conditioned "service use" and the desired outcome. They briefly discuss the option of setting the conditionality as the

desired outcome itself, rather than an upstream behavior, noting that this may be desirable when there is insufficient evidence supporting links between service usage and health gains. Another recommendation is to tailor the incentive structure to the specific behavior and beneficiary population. Their overarching guidance favors the approach that is most likely to lead to the desired health impact and greatest return on investment in human capital.

Proceedings from an Asian Development Bank (ADB) regional workshop on CCTs largely mirrored the WB volume above with a few additional notes based on the experience of meeting participants.²⁹ The document stresses effectiveness, highlighting as best practice an analysis of potential conditionalities to determine which is most likely to achieve the desired outcome. It also recommends the selection of conditionalities that are "measurable, enforceable,... inexpensive to administer... [and] causally linked to desired outcomes." The guidance further supports the use of complementary measures, including community outreach and education sessions, tying additional conditionalities to outcomes or adjusting the size of the benefit based on achievement, and combining the CCT with unconditional cash transfers (UCTs).

Another publication out of the Economic Policy Research Institute (EPRI) includes a chapter on the design of CCTs.¹² It initially focuses on when conditionalities are necessary or appropriate, then provides a thoughtful examination of conditionalities, addressing questions about the appropriate balance of individual and societal benefit as well as balancing the short and long-term objectives of the program. EPRI guidance favors inclusion of the poorest, even when this will require substantial infrastructural and administrative investment. It also urges consideration of those who may have the most

difficulty complying with the conditionalities, as these individuals are often in greatest need of assistance. Whereas the WB guidance appears to favor maximum impact, the EPRI guidance emphasizes inclusion, particularly of the most disadvantaged. It further recommends that CCT schemes must ensure adequate supply and quality of conditioned services, that stipulated conditionalities should actually be such as to motivate the desired behavior, that beneficiaries should be appropriately compensated for costs of compliance, and that compliance should be easily and accurately measurable.

Additional guidelines developed at a workshop co-sponsored by the Latin American divisions of the Office of the High Commissioner for Human Rights, the Food and Agriculture Organization, and Hunger-Free Latin America and the Caribbean Initiative examine the use of CCTs from the standpoint of human rights.³⁰ The meeting report calls for CCTs to have clear objectives established at the outset of the program and stresses careful consideration to avoid discriminatory exclusion of beneficiaries. Additionally, it asserts the need to perform a "reasonableness analysis" of conditionalities to ensure that they are well adapted to the target population and their social and economic contexts, will effectively contribute to the programmatic objectives, and will not further contribute to social inequalities or gender disparities. It further states that if the program design does not contribute to the realization of its intended impacts on health and education, then restricting social transfers on the basis of meeting conditionalities is neither reasonable nor justified.

In summary, the key guidance documents include the following features when evaluating conditionalities: effectiveness in achieving program objectives, inclusion of vulnerable groups, provision of necessary complementary services or infrastructural

inputs, measurability and enforceability, and appropriate calibration of the benefit size with respect to the cost of compliance. These considerations provide a good starting place for an evaluative framework for conditionality options.

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MANUSCRIPT 1: Selecting Appropriate Conditionalities in Conditional Cash Transfer Programs - What Factors Are Morally Relevant?

ABSTRACT

Conditional Cash Transfers (CCTs) present a promising approach to simultaneously alleviate chronic poverty and poor health. While these programs clearly embody beneficent aims, questions remain regarding the ethical design of CCTs. Limited guidance exists for the ethical evaluation of the defining feature of these programs: the conditionalities. This paper outlines five categories of morally relevant considerations that program designers should consider when assessing which behaviors or outcomes they require for payment: (1) Likelihood of yielding desired outcomes; (2) Risks & Burdens; (3) Receptivity; (4) Attainability; and (5) Indirect Impacts & Externalities.

INTRODUCTION

In the past decade, there has been increasing interest in the use of conditional cash transfers (CCTs) to improve educational and health outcomes while working to break the cycle of poverty. CCTs provide cash payments to poor households or individuals contingent upon the completion of certain behaviors (e.g., school attendance, vaccination) or achievement of pre-specified outcomes (e.g., negative STI status). A number of impact evaluations and systematic reviews of CCTs for health improvement in low and middle income countries have shown that this approach can be successful in increasing utilization of health services, improving nutritional outcomes in children, and promoting uptake of preventive behaviors.^{1,2,3,4,5,6,7}

While these programs clearly embody beneficent aims to promote healthy behavior and reduce poverty among the world's poorest, ethical concerns – including those related to respect for persons, unintended negative consequences, and the fairness of the incentive approach – have been raised about using material incentives. ^{8,9,10,11} Under what circumstances is morally permissible to adopt the CCT approach? How should CCTs be structured so as to respect ethical norms? In particular, the selection of the specific conditionalities for payment in a program calls for focused ethical analysis: what do program participants have to do to receive the payment? Because the conditionality is the distinguishing feature of the CCT approach, it is critical to understand what is morally relevant when choosing which strings will be attached to the payment.

There are many potential behaviors or outcomes on which a CCT might condition payment in order to achieve the health goals of the program, ranging from distal inputs

like health education to proximate behaviors directly linked to health outcomes, like vaccination. [See Figure 1.1] What characteristics are morally relevant when assessing the merits and drawbacks of these options? Despite the practical and ethical importance of conditionality, little normative guidance exists for CCT designers.^{4,12} This paper aims to identify and define the moral considerations relevant to specifying which behaviors and outcomes are morally permissible and preferable for program designers to select as conditionalities.

Goal	Potential Conditionalities for Payment		
Reducing Maternal and Infant Mortality	 Attending education sessions on family planning and birth spacing Attendance at Antenatal Care Visits In-Facility Delivery Attended Home Birth Compliance with Antenatal Vitamin Intake Birth weight in normal range 	Distal Factors Education	
Childhood Nutrition, Growth and Development	 Mothers' attendance at nutrition education sessions Annual well-health visits for children 0-6 Pick-up of nutritional supplements Childhood Vaccinations Weight gain Children meet age-appropriate growth targets 	Counseling Service Utilization Biomedical	
Reducing HIV Incidence	 Attendance at sexual health education sessions Periodic pick-up of condoms Collection of HIV test results Medication compliance among HIV+ individuals (TasP) Long-term Contraception in HIV+ women of childbearing age Male Circumcision Periodic STI testing with negative results 	Prophylaxis/ Medication Compliance Outcome	

 Table 1.1: Examples of Options for Conditionalities Across 3 Health Goals

*Note: many of these come from existing CCT programs or pilots; some are hypothesized based on the health goal

SCOPING THE RANGE OF MORALLY RELEVANT CONSIDERATIONS FOR CONDITIONALITY SELECTION

In order to identify and characterize the universe of morally relevant considerations for setting CCT conditionalities across a diverse range of settings, I have adopted a pluralistic approach,ⁱ applying norms and principles from a number of frameworks for public health ethics and social justice, as well as drawing upon the extensive literature on CCT program experiences. The use of multiple theoretical approaches and action-guiding frameworks facilitated the development of a comprehensive and exhaustive set of moral considerations relevant to conditionality selection. The analysis further benefitted from application of these frameworks to a broad sample of cases varying in geographical and cultural setting, health focus, and point of intervention along the causal pathway.

I began the conceptual exercise by turning to commonly used public health ethics (PHE) frameworks, which have been put forward to help public health practitioners and policy-makers navigate ethical dilemmas arising in the design and implementation of programs aimed at population-level health.^{13,14,15,16,17,18} These frameworks identify a number of guiding questions, principles, constraints, and general moral considerations to inform the ethical analysis of public health approaches. Common principles include the production of benefits for individuals and populations, minimization of harms, attention to equity and the distribution of program burdens and benefits, respect for persons and

ⁱ See Arras (2013) for a discussion outlining the advantages of using mid-level, non-ideal theorizing for policy-oriented bioethics and the ways in which pluralistic accounts have gained considerable traction in public health ethics, often borrowing elements from higher-level theories.

their autonomy, and process considerations such as transparency and public engagement.ⁱⁱ By applying the general norms presented in these frameworks to the context of the CCT approach, I generated an initial list specifying moral considerations relevant to the problem space of conditionality selection.

I then turned to prominent social justice theories for public health and international development to further define and specify these morally relevant considerations.^{19,20,21,22,23} By design, CCTs aim to tackle chronic poverty and disease through investments in health and human capital, with the ultimate goal of promoting long-term wellbeing and interrupting the intergenerational transmission of disadvantage.^{3,24} Given the rationale behind the CCT approach, this family of social justice frameworks, characterized by their attention to fostering capabilities and addressing disadvantage across multiple dimensions of wellbeing,^{iii,25} was particularly well suited for the present analysis. Applying the lens of social justice not only helps ensure coherence with the larger aims of CCTs beyond health, but also further safeguards against programmatic features that could exacerbate disadvantage experienced by the vulnerable groups targeted by these interventions. The combined use of social justice theories and public health ethics frameworks supported the generation of a wide range of considerations with more nuanced and detailed justifications for their moral relevance.iv,26,27

ⁱⁱ See Lee (2012) for an in-depth review of these frameworks, detailing their philosophical underpinnings, foundational values, and operating principles. Relevant pieces of these frameworks are excerpted in Appendix A2.1 and referenced in the text where they are invoked.

ⁱⁱⁱ While each account offers its own treatment of social justice and the specific constitutive features of wellbeing, there is considerable overlap across these accounts. See Bailey, Merritt & Tediosi (2015). ^{iv} Human rights frameworks could also be applied. Though not directly included in this work, many of the principles and considerations in prominent rights frameworks (see Gruskin et al 2007 and Hunt & Backman 2008) are encapsulated by the range of included public health ethics and social justice frameworks.

At each stage in the development of these categories of morally relevant considerations, I drew heavily upon the documented experience of existing CCTs to develop, modify, and refine the content. Immersion in the CCT literature and reflection on real-world examples provided a way to test emerging considerations and elicit new ones, yielding a richer analysis informed by the complexities and realities of CCTs as they operate on the ground.²⁸ After a careful review of operational documents, impact evaluations, systematic reviews, and policy papers, I identified five categories of considerations, as detailed below, that CCT designers should attend to as they evaluate options for program conditionalities. [See Table 1.2]

With each consideration, at least one moral principle or value from the aforementioned PHE frameworks or theories of social justice is at stake. As in other pluralistic accounts, none of the considerations listed are intended to be absolute, nor does any one type of consideration take primacy over another.^{15,29} Instead, they are together meant to apply on balance, with considerations under one category at times constraining optimization of other morally relevant features. While not every consideration listed will apply in all contexts, the intent is to describe an exhaustive set of ethical considerations that CCT designers ought to bring to bear as they evaluate potential conditionalities.

Category	Specific Considerations	Moral Principles/Concerns
Likelihood of yielding desired outcome(s)	 What is the state of the evidence supporting a <i>causal linkage</i> between the conditionality and desired outcome? How likely is it that the behavior produces positive health effects? What is the extent of the expected benefit to individuals - the effect size and value of health improvement? How <i>durable</i> are the benefits? 	 Beneficence/producing benefits ^{a,b,c} Evidence & effectiveness ^{a,b,c} Responsible stewardship of public health funds, efficiency, opportunity costs ^{c,e} Proportionality/balance of benefit over harm ^{a,b,e} Sustainability: maintenance of healthful changes ^e
Risks and Burdens	 What risks (physical, psychological, social) or burdens, if any, does the conditionality impose on the <i>direct beneficiaries</i>? What are the probability, severity, and permanence of associated harms? Can these harms be avoided or minimized? 	 Non-maleficence; avoiding, preventing, minimizing and removing harms ^{a,b,c,e} Producing maximal benefits over harms ^{a,b,c,e} Avoiding further disadvantaging the disadvantaged ^{f,g,h,i}
Receptivity	 How receptive are the intended beneficiaries? What are the source(s) of non- receptivity: burdens, perceived risks, preferences, values? Can they be addressed? How receptive are households and communities to the conditionality? 	 Respect for persons and autonomy a,b,c,e,f,g,h,i Self-determination & agency ^{f,g,h,i} Effectiveness, maximizing benefits ^{a,b,c,e} Mitigating risks/harms ^{a,b,c,e} Affiliation, association & attachment ^{f,g,h,i}
Attainability	 What kinds of financial, physical, social, or cultural <i>barriers to compliance</i> exist for the beneficiary population, particularly the most disadvantaged? Are ancillary or complementary services being offered to ensure reasonable opportunities to attain conditionalities? 	 Respect for persons ^{b,e,f} Self-efficacy and self-respect ^{e,f,g,h,i} Justice, fairness, equity ^{a,b,c,e,f,g,h,i} Reciprocity principle ^d Building and maintaining trust ^a Empowerment ^{e,f,g,h,i} Avoiding further disadvantaging the disadvantaged ^{f,g,h,i}
Indirect Impacts & Externalities	 What are the potential <i>indirect</i> benefits and harms associated with conditioned behavior or outcome for beneficiaries? What are the foreseeable positive and negative externalities for members of the household, community, and society? Where negative impacts or externalities exist, how severe are they, who is affected, to what extent can they be avoided or minimized? 	 Beneficence/producing benefits ^{a,b,c} Non-maleficence; avoiding, preventing, minimizing and removing harms ^{a,b,c,e} Producing maximal benefits over harms ^{a,b,c,e} Fair distribution of harms and benefits ^{a,b,c} Avoiding further disadvantaging the disadvantaged ^{f,g,h,i}
a. Childress, et a b. Kass c. Baum, et al	d. Upshur e. Tannahill f. Powers and Faden siderations are not presented in any hierarchical order	g. Nussbaum h. Wolff and Deshalit i. Venkatapuram

Table 1.2: Categories of Morally Relevant Considerations with Underlying Principles

Notes: These considerations are not presented in any hierarchical order and are meant to be applied on balance. Distributional considerations permeate all categories, with attention to fair distribution of benefits, burdens, and opportunity.

MORALLY RELEVANT CONSIDERATIONS FOR SELECTING CONDITIONALITIES

1. Likelihood that conditioned behaviors will yield desired outcome(s)

A thorough examination of the evidence can provide insight into the likelihood that a particular conditionality will translate into the expected and desired health benefit(s). As with any health program, obligations of beneficence require the designers to assess the benefits produced or harms averted through the uptake of the program. Because payments require compliance with specific conditionalities, the burden of proof lies with the government or sponsoring agency to justify that these conditionalities will in fact promote the public health aims of the program.^{4,12} An evidence-informed approach, drawing upon the experience of past CCTs and the broader literature specific to a program's health goals, can facilitate the selection of conditionalities that will translate to health impacts.^v Attention to the potential effectiveness of conditionalities requires consideration of three separate aspects of this criterion: (1) Causal Linkage, (2) Probability and Magnitude of Benefit, and (3) Durability.

Causal Linkage

A core function of public health, and epidemiology in particular, is the generation of knowledge about distal and proximal determinants in the causal pathway for diseases and poor health outcomes. Understanding causal factors is essential to the design of effective public health interventions. Examining the evidence supporting the role of a conditioned behavior in the causal pathway critically informs its potential effectiveness. For instance, when considering a CCT for HIV prevention, the program could target

^v A commitment to evidence-based public health policy is central to many public health ethics frameworks. See Kass, Childress et al, Baum et al, and Tannahill. This consideration also closely aligns with the second question in the Kass framework, "How effective is the program in achieving its stated goals?"

upstream factors, such as knowledge of the disease or safe-sex practice, or it could focus on behaviors directly linked with HIV incidence, such as male circumcision, medication adherence, and condom use. [See Table 1.1] The determinants of risk and barriers to prevention will vary by context, and it is important to assess which points in the causal pathway represent the best targets for intervention in any given setting.

Many CCTs have focused on the utilization of health services, such as well child visits or in-facility attended births, but there is mixed evidence across programs regarding the causal linkage between increased utilization and improvements in health outcomes, morbidity, or mortality.⁶ Clinic visits may not always be necessary or useful for improving health outcomes, particularly when there is low capacity or poor quality. Consider Nepal's Safe Delivery Incentive Program (SDIP), in which women were paid for giving birth at a public medical facility. While the program significantly increased rates of skilled birth attendance, there was no impact on neonatal mortality.³⁰ Gaarder et al. criticized the program for not including prenatal care in the scheme.⁶ When designating health services as conditionalities, it is important to not only ensure that these services are important causal factors but also that they meet the standards of quality necessary to generate the associated health gains.

Probability and Magnitude of Benefit

Beyond having evidence of causal linkage, it is also morally relevant to determine the probability and magnitude of the expected benefit. Some interventions are associated with higher success rates and larger effect sizes as compared to others. For instance, there is a wide range of interventions for improving maternal and child nutrition, including micronutrient supplementation, exclusive breastfeeding, management of acute malnutrition, and nutrition counseling. Some of these interventions have significantly

greater impacts than others on mortality and other important nutritional and developmental outcomes.^{31,vi} Similarly, biomedical strategies for HIV prevention vary in effect size, reducing HIV incidence by 39% with microbicides, 54% with male circumcision, and 96% with antiretroviral "treatment as prevention."^{32,33} Understanding which interventions will have the largest impacts on the most important outcomes – as informed by the evidence – can facilitate the selection of conditionalities that will produce the greatest health benefits. Using an evidence-informed approach also supports the selection of conditionalities with the greatest value for money. CCTs require substantial financial outlays, and, all else being equal, programmers should try to maximize public health impact with their investments.^{16,18} Failure to use public health dollars efficiently comes at the cost of alternative investments with greater health benefits.³⁴ Furthermore, assessment of associated benefits helps ensure a favorable balance of program benefits over potential harms. Risks will be discussed in detail below, but the size of projected benefits will be relevant in the calculus of the risk-benefit ratio.

The magnitude of the associated benefit also has moral implications related to proportionality when other morally relevant considerations are at stake.¹⁵ When the production of benefit is in tension with other morally relevant considerations, such as those related to autonomy, it is important to determine whether the expected health benefits are great enough to outweigh them. For example, programs such as India's JSY or Nepal's SDIP condition the CCT payment on giving birth in a facility. The women

^{vi} An additional point of consideration is how strong and reliable the evidence is to support the effect size. Some interventions have been tested more rigorously, with multiple randomized controlled trials confirming results. Other more novel approaches may be promising based on initial studies, but do not have the same level of evidentiary support. The systematic review of nutrition interventions cited here provides extensive tables detailing the interventions, effects sizes, and the strength of evidence for each to support recommended investments. Each of these dimensions is important for understanding the expected magnitude of benefit.

may prefer to deliver their children at home in the presence of relatives, where the caregivers are familiar and they are free to practice traditional birthing rituals.³⁵ If there is no significant benefit associated with institutional delivery, the incentive could unduly influence individuals to deliver in facilities in spite of their considered judgments. Such threats to individual autonomy are discussed in detail under *Receptivity*.

Durability

Even when the conditioned behavior shows promising evidence that it will translate to sizable benefits, the durability of those gains is also morally important. Some interventions like vaccination offer long-term protective immunity against infection and disease. Even short-term improvements in early childhood nutrition can produce longterm impacts on physical growth and cognitive development.³⁶ Conditioning payment on vaccination or nutritional supplementation therefore has strong support across all three effectiveness considerations. But many programs aim to target behaviors with corresponding health benefits that require ongoing maintenance. For example, the RESPECT program in Tanzania incentivized safe sex practice, as measured by negative STI tests, showing a positive effect during the period of payment.³⁷ However, the qualitative study and post-intervention follow-up for this trial suggest that ongoing cash payment was necessary for sustained protection among female participants, because the money helped alleviate economic pressures to engage in transactional sex and gave women leverage to negotiate condom use with partners.^{38,39} Evidence from a range of health incentive programs requiring sustained behavior change – for weight loss, smoking cessation, and medication adherence – have raised concerns about the durability of impact when the health gains require ongoing maintenance.^{40,41,42,43}

A related consideration under durability is the potential effect the program may have on intrinsic motivation, or the so-called crowding effects.^{44,45,46,47} On the one hand, incentives may work to "crowd-in" intrinsic desire to practice a certain behavior, a highly desirable effect promoting long-term maintenance of health behaviors even after payment stops.⁴⁸ However, more often concerns have been raised about potential "crowd-out," in which the extrinsic benefit of the payment displaces intrinsic desire to practice beneficial behaviors or achieve certain goals.49,50,51,52 Crowding out could be highly problematic, not only because of the negative implications for durability but also because it might leave program beneficiaries worse off. The potential harms associated with crowd-out are further explored below under *Risks*. That being said, there is limited empirical evidence documenting crowd-out in health incentive programs, and these concerns become less relevant in cases where conditioned behaviors have durable impacts (e.g., vaccination) or target a specific risk period (e.g., antenatal care visits).⁴⁸ Additionally, the potential for crowd-out only exists when there is intrinsic motivation at baseline. Thus, high individual receptivity to conditionalities at baseline indicates a stronger obligation for program designers to monitor and evaluate potential crowd-out effects, particularly when program behaviors require sustained practice to maintain benefits.

A commitment to effectiveness requires careful examination of the evidence across these three dimensions, and at times, investment in the supply side to ensure the quality and accessibility of services necessary for realizing health benefits. Recognizing that it may not be possible to have conclusive evidence until after the program has been introduced, there must, at minimum, be a reasonable expectation that the conditionality will lead to the desired effect.⁵³ Appropriate monitoring and evaluation mechanisms

should be put in place for all programs to measure how well the CCT fulfills its stated mission.^{vii}

2. Risks and Burdens

As with any program, obligations of non-maleficence require an assessment of potential risks and burdens.^{14,15,16,18} Different conditionalities pose varying levels and types of associated risk. These can include physical, psychological, social, financial, and legal harms.⁵⁴ There may be some physical harms directly resulting from the conditioned behavior, such as indigestion with iron supplementation. Other types of physical harms could arise when conditionalities encourage a practice with low acceptance in the community^{viii} or are related to a stigmatized health condition. For instance, a CCT program in El Salvador that encouraged, but did not require, cervical cancer screening as part of the conditioned clinic visits reported select instances of domestic violence, because husbands viewed exams conducted by male physicians as acts of infidelity.55 Psychological risks can be associated with programs conditioning payment on diagnostic tests, such as HIV status, among other things. Risks of social exclusion and stigma will be more pronounced when community receptivity to the conditionality is low, as discussed in greater detail below. Additionally, conditionalities inherently pose some level of burden on program beneficiaries. Program designers must ensure that compliance with conditioned behaviors is not overly burdensome for impoverished individuals and

^{vii} Note that other aspects of the program, aside from conditionality, will affect associated benefits, including compensation amount, quality of services, and participants' understanding of what is required of them. The scope of this paper is limited to examining elements specifically relevant to the conditionalities themselves. The more generic aspects of effectiveness must be considered at another stage within program design and development. Additionally, cash alone given unconditionally can contribute to improved health outcomes. However, because "conditions" are required for payment in the CCT approach, there is a general moral requirement that these conditionalities should have some associated benefit.

^{viii} A more detailed account of community acceptance and associated risks can be found below under *Receptivity*

households, who already face a multitude of competing demands on their time and resources.^{56,57} An evaluation of Mexico's Oportunidades program showed that some participants in the program found the co-responsibilities to be onerous, particularly for single-parent households, requiring them to attend regularly health talks and clinic visits on top of regular household duties.^{58,59} The additional burden of the conditionalities led some to drop out of the program or relinquish other income-generating opportunities. Assessing acceptable levels of burden to beneficiaries is discussed further under *Receptivity* and *Attainability*.

Evaluating and minimizing potential risks and burdens to program participants is important for avoiding harms and ensuring that the program benefits outweigh any potential harms.^{14,15,16,18} Parallel considerations to likelihood, magnitude, and durability of benefits apply when weighing the risks, with attention to probability, severity, and permanence of harms.^{60,ix} This risk-benefit calculus will vary by context, so it is critical for program designers to gather relevant evidence specific to their setting to ensure a favorable risk-benefit ratio.

Consider a CCT program incentivizing HIV testing in a context where the disease is highly stigmatized and access to care is not guaranteed. Knowing one's positive status could result in psychological trauma, stigma, and social isolation, among other harms.⁶¹ Benefits commonly attributed to voluntary counseling and testing (VCT) and knowledge of HIV-positive status are the ability to seek care, plan for the future, and protect partners from infection. However, in a resource-poor area where treatment is not readily available,

^{ix} NBAC 2001 includes the following on risk assessment: "Risk quantification considers both the likelihood of occurrence and the potential severity of the harm. Severity, in turn, depends upon the amount of damage, the duration, the permanency of the consequences as well as subjective considerations, such as the extent to which it may alter or affect the subject's lifestyle."

incentivizing HIV tests may produce social and psychological harm with no medical benefit. Even when factoring in the potential for third-party benefits (i.e. protecting partners), the evidence is inconclusive regarding effects of VCT on safe sex practice.^{62,63} With equivocal evidence on very small protective effects for partners and inadequate resources to support linkages to care, the benefits of incentivizing HIV testing in a resource-poor area do not appear great enough to justify exposing people to the associated psychological and social risks.^x

Another category of harms that program designers ought to consider are those specifically resulting from the introduction of the behavioral incentive followed by subsequent cessation of the program. These harms can arise as a result of motivational crowd out, where beneficiaries are less likely to practice a health promoting behavior after the program than they were at baseline, essentially leaving them worse off. Another example is the harm associated with starting and stopping certain medications, in cases where CCTs condition on drug adherence. Drug discontinuation effects have been well documented for different classes of drugs, including cardiovascular and antihypertensive medications, with abrupt withdrawal of treatment leading to serious or fatal consequences.⁶⁴ Discontinuation of antiretroviral therapy for HIV can lead to viral rebound, disease progression, and drug-resistance.^{65,66} CCT programmers planning to condition on HIV ARV adherence should be especially cautious with regard to resistance concerns, as this could render patients non-responsive to whole classes of treatment

^x Note that this assessment would change in a context where benefits of ART are available or where there is sensitization to and acceptance of people living with HIV/AIDS. Thornton also notes that, "Monetary incentives may also reduce actual or anticipated social stigma. For example, while others could interpret attending a VCT center as a signal of self-perceived risk of infection or of prior unsafe sexual behavior, monetary incentives may provide individuals with an excuse for going to the center, thereby reducing negative inferences made by others." For further discussion of money as "an excuse," see Wolff 2014 and Gorin & Schmidt 2014.

options and create the potential for them to infect partners with resistant virus. Taking stock of the full range of potential risks and burdens that may be associated with a conditionality can help program designers decide whether to move ahead with a conditionality, identify strategies to minimize potential associated harms, and to ensure that remaining risks are justified by the associated benefits of the program.¹⁴

3. Receptivity to Conditionalities

What are the attitudes of the potential beneficiaries toward the behaviors that the program will promote, and how open are they to practicing them, independent of the cash offer? Understanding receptivity to conditioned behaviors will enable program designers to determine what, if any, threat the program poses to autonomy and self-determination.^{xi} Attention to receptivity requires an examination of how receptive people are to the behavior as well as the underlying reasons contributing to overall receptivity. The degree of receptivity and the nature of resistance to engaging in the behavior will inform whether the cash incentive jeopardizes meaningful, autonomous choice that engages important self-determination interests. Receptivity is also instrumentally relevant because it can be a predictor of compliance and subsequent effectiveness. Recent reviews of CCT impact evaluations show that program success is associated with the willingness of the targeted group to satisfy the conditions of the program.⁶⁷ Receptivity should be examined at individual, household, and community levels. Even when an individual welcomes the conditioned behavior, it is also important to understand how other members within the household and greater community will respond to what is being incentivized. Degree of

^{xi} Though related, autonomy and self-determination are distinct terms. There are a wide number of decisions over which individuals can exercise autonomy. Only a subset of these decisions engage important self-determination interests, meaning they impact one's ability to shape one's life in ways that are important to them.

receptivity, sources of non-receptivity, and considerations at the individual, household, and community level are discussed in greater detail below.

Degree of Receptivity

CCTs, and incentives more generally, have been criticized for disrespecting individual autonomy.^{8,10,49,50} However, in order to determine whether a conditionality poses any threat to autonomy, one must assess receptivity. Faden and Beauchamp distinguish between *welcome* and *unwelcome offers*, noting that incentives and similar attempts to influence behavior threaten autonomous choice only when the offer is inconsistent with the desires and will of the individual.⁶⁸ A conditioned behavior in a CCT may be highly consistent with the desires, values, and interests of intended beneficiaries, a *welcome* offer with high receptivity. In these instances, cash incentives not only pose no threat to autonomy; on the contrary, they may be autonomy enhancing, helping beneficiaries overcome economic, social, or even motivational barriers to behaving in accordance with their desires to secure health and well-being for themselves and their families.^{4,6,49,51,52,69,70}

Conversely, the conditioned behavior might be *unwelcome*, contradicting local norms, individual values and preferences, or the considered judgments of beneficiaries. As Grant and Sugarman argue, it is ethically suspect to use incentives to get people to do things to which they are averse.⁷¹ Revisiting the example of JSY above, in which mothers are paid for facility deliveries, there may be women who are not receptive to this conditionality and prefer to give birth at home. Home delivery may be central to a woman's conception of being a good mother and engage cultural norms that are important to her. Thus, payment for delivering in a clinic might undermine important self-determination interests and constitute an undue inducement.⁷¹

As a rule, CCT program designers should favor conditionality options to which beneficiaries are receptive. Proceeding with a conditionality that is unwelcome requires substantial justification on other moral grounds, such as protecting third parties from harm, which may be the case for some CCTs targeting preventive care for children.^{72,73} Various strategies have been used successfully to engage beneficiary communities and foster buy-in for program conditionalities, including community consultations in the design and participatory processes in the implementation of the program.⁷⁴

There will also be some conditionalities to which beneficiaries will be relatively indifferent. When indifference is due to insufficient knowledge to form an attitude about the incentivized behavior, considerations of autonomy require providing pertinent information to enable beneficiaries to form an opinion about it. However, there may be cases in which beneficiaries have sufficient information and understanding yet still express indifference. In such instances the conditionality would represent a *neutral* offer. Neutral offers differ from welcome offers because the desire to comply with the conditionality stems solely from monetary reward and not some intrinsic motivation. While conditionalities that are neutral offers pose no direct threat to self-determination interests, indifference at the outset may translate to less durable health gains, particularly when behaviors require ongoing reinforcement. On the other hand, a neutral attitude toward a behavior might allow for the "crowding in" of intrinsic motivation.⁴⁵ Even bracketing questions about the interaction between monetary incentive and intrinsic motivation, the moral importance of self-determination interests and instrumental importance of receptivity for realizing benefits demonstrate the moral relevance of beneficiaries' degree of receptivity to candidate conditionalities.

Reasons for resistance: why an offer may be "unwelcome" and when it matters

It is not enough to simply ask whether people are receptive to a particular behavior and how willing they would be to practice it. The "why" also matters in assessing whether the conditionality threatens morally relevant interests. There are a number of influences that lead someone to be willing or unwilling to engage in a particular behavior, including: perceived burdens of compliance, such as financial outlays and time commitments; perceived risks of exercising the behavior, which may or may not be *actual* associated risks; and attitudes toward the behavior informed by preferences and values. When receptivity to a potential conditionality is low, determining the nature of the resistance will inform the moral analysis of the conditionality's overall permissibility, allowing programmers to determine whether autonomy concerns and important selfdetermination interests are at stake. In order to determine whether low receptivity poses a threat to autonomy in ways that carry significant moral weight, it is critical to identify the underlying reasons contributing to non-receptivity.

One potential source of resistance is the burden associated with practicing the activity (e.g., costs, time, transportations). Non-receptivity stemming solely from these types of easily surmountable burdens is not morally problematic, particularly because it is not the practice itself to which the beneficiaries are opposed, but rather the accompanying inconveniences which can be easily addressed. Another major influence on overall receptivity is the perception of associated risks. Even though CCT designers have a duty to minimize any objective risks associated with conditionalities, as discussed above, the subjective risks as *perceived* by the beneficiary population still shape how receptive

people are to the proposed conditionality.^{75,xii} When the target population perceives risk due to misinformation or misperception, program designers can try to address these concerns through effective and context-appropriate education and communication. This can also enhance autonomous decision-making by ensuring that beneficiaries have the relevant facts and a more complete understanding of the conditioned behaviors they are being invited to practice.⁷⁶ Nonetheless, even well-informed beneficiaries might still perceive the risks as too great. When intended beneficiaries perceive the level of risk as unacceptable, introducing a cash incentive raises concerns that the monetary offer will constitute an undue inducement, compromising voluntariness and potentially offending program participants.⁷¹

Preferences and values also critically influence receptivity to behaviors and decision-making more broadly.^{77,78,79} Respect for persons and their autonomy requires due consideration for their judgments and choices.⁸⁰ Grant and Sugarman cite incentives as problematic when aversion is strong, particularly when that aversion is "principled," stemming from values, beliefs, and preferences.⁷¹ While both preference and value-based resistance raise autonomy concerns, not all choices informed by preferences and values carry the same moral weight. For instance, while some preferences derive from higher-order values, others merely reflect the relative desirability of one option over another at a given time, and do not engage interests important to how one chooses to live one's life.⁸¹ Preferences referring to the subjective attractiveness or aversiveness of a particular action

^{xii} Wertheimer discusses the distinction between the "objective" risk-benefit ratio versus the "perceived" risk-benefit ratio in the context of clinical research. However, his concern lies with the potential for undue inducement, in that the *perceived* risks may be negatively skewed by the money offer, and research participants may disregard the seriousness of associated risks. In this case, I am examining the possibility that the intended beneficiaries of a CCT program might overestimate actual risks.

are malleable and more liable to change.⁷⁷ Rather than treat all autonomous decisions as morally equivalent, it is useful to examine the degree to which they engage important self-determination interests.^{19,82,83}

Accordingly, greater attention should be paid to non-receptivity stemming from deep-seated values, as compared to fleeting and morally unimportant preferences. Values can be defined as beliefs about desirable ways of behaving or being, often arising from social, cultural, and religious norms.^{77,78} In the social psychology literature, values are characterized as intimately bound up with one's sense of self and often relatively stable over the life course.^{77,79} Given the centrality of values to self-identity and one's conception of a good way of living, choices that engage core values are deeply tied to self-determination interests, reflecting one's ability to live life in accordance with one's values.¹⁹ By contrast, when peripheral, less stable preferences contribute to low receptivity, it may be of little ethical concern that an offer of payment might lead people to act contrary to such preferences. Although it can sometimes be difficult to tease apart meaningful or value-laden preferences from mere desires, Jaworska offers a helpful distinction: "A person could contemplate being free of a mere desire with a sense of relief [or even indifference], but one would always view the possibility of not valuing something one currently values as an impoverishment, loss, or mistake."84 (p114)

Receptivity at the household and community levels

Thus far, the discussion of receptivity has focused mainly on individual willingness to participate. It is also important to consider receptivity at the household and community levels. Decision-making may involve multiple members of the household or broader community, including partners, parents, in-laws, and local leaders. Furthermore, the motivations of intended beneficiaries may derive from a consideration of how others

in their lives will react and, in some settings, beneficiaries may identify with an *interdependent* construal of self, in which important interpersonal relationships pervasively inform the experience of "self."⁸⁵ In these settings, respect for autonomy requires a broader understanding of receptivity, reaching to the household level or beyond.⁸⁶ The alignment of conditionalities with people's core values may require attention to the roles of other important actors in their lives. For instance, in many cultures, respect for one's elders might dictate the involvement of parents or in-laws in deciding whether to engage in conditioned behaviors. If the elder generation perceived a behavior as unwelcome, the direct beneficiary might not want to disrespect her elders and might even feel that she has no choice in the matter, even if she would be receptive to the behavior herself.

Even in contexts where individuals have more independent self-construals, there are compelling reasons to take into account receptivity at household and community levels. One reason is the requirement to avoid social harms, of the sort that might result from a conditionality that drives a wedge between intended beneficiaries and people who are important to them. In some cases, lack of receptivity among households and communities can also expose beneficiaries to threats of physical violence. Broader acceptance of an incentivized behavior also has instrumental importance for the uptake of that behavior and, thereby, for the program's potential effectiveness. For example, the uptake of family planning services has been thwarted in many contexts by male partners' attitudes to contraception and local gender norms, leaving women to either forego using birth control or use it in secret.⁵⁵ Attention to how a conditionality may affect social cohesion within the community and critical sources of social capital for the intended

beneficiaries is also important. Will incentivizing a particular behavior that is not welcome at the community level expose beneficiaries to a new source of social exclusion or exacerbate existing tensions, further marginalizing those who are already vulnerable? Problems with social cohesion in CCTs have been noted with regard to selective targeting,^{55,87,88,89} and the selection of the conditionalities to which only some members of the community are receptive may similarly exacerbate existing tensions or introduce new ones. For many poor households and individuals, social capital may be a critical resource, providing social supports and even access to capital in times of major health or economic shocks.⁹⁰

As with individual-level receptivity, it can be morally permissible in some circumstances to proceed with a CCT, even in the face of low household or community receptivity. A recent pair of articles on health incentives discussed the ways in which payment for behaviors can serve as a cover or rationalization mechanism for individuals to practice a behavior that would not otherwise be accepted by their peer groups.^{51,52} Justifying the behavior by saying, "I did it for the money," can shield participants from potential social backlash and allow them to safely practice what would otherwise be unwelcome in their social circles.^{xiii}

Receptivity serves as a barometer for programmers to determine whether important self-determination interests are at stake, what kinds of resistance exist and should be addressed prior to program implementation, and what potential harms are associated with household or community level aversion. Assessing receptivity requires that CCT designers engage with the beneficiaries and communities in advance of roll-out

xiii I revisit this point in the following section on *Attainability*, in the discussion of social barriers to compliance.

and address a host of barriers, from the structural issues to informational and cultural challenges. This consideration encourages programmers to select conditionalities that will be acceptable to beneficiaries and their communities.

4. Attainability of Conditionalities

Conditionalities must be something with which beneficiaries can reasonably comply. When there are excessive barriers to performing a conditioned behavior or achieving the pre-specified outcome, the program will not only fail to realize its intended health benefits, but will effectively deny opportunities for participants to receive much needed social assistance due to reasons beyond their control.^{12,91,xiv} Impediments to attainability include geographic barriers to access, social constraints on behavior, and financial barriers, among others. CCT programmers have an obligation to design the conditionalities so that beneficiaries can take responsibility for complying with them.¹⁷ Participants should have a fair opportunity to realize the benefits of the program, both the intrinsic benefit of improved health and the extrinsic benefit of payment.^{92,93,94}

When thinking about attainability, it is worth revisiting the context in which CCTs emerged as a popular approach. A key reason why the conditional approach to cash transfers has garnered political favor is that the assistance is perceived as going to the "deserving poor."^{3,4} In fact, many programs adopt the term "co-responsibilities" when referring to conditionalities. For instance, the architects of the PROGRESA (now Oportunidades) in Mexico claimed that conditionalities were essential to the design, stating that "[s]hared responsibility and respect inevitably imply a reciprocal effort by the

^{xiv} There is ongoing academic debate surrounding the degree to which any person has control over their actions and responsibility for their behavior. For the purposes of this paper, I will not address these imponderable questions but instead focus on the tangible, objective factors influencing "attainability" that programmers can attend to when designing their CCT.

poor families to link the benefits they receive to concrete actions on their part." ^{4(p61),24} Because programs are set up to assign co-responsibilities to beneficiaries, the CCT programmers must design the conditionalities in such a way that the beneficiaries *can* take responsibility for compliance.

It is important to remember that the intended beneficiaries of CCT programs are often poor and marginalized populations who already face constraints and obstacles related to personal, social, and environmental disadvantages.^{95,96} Social justice in the context of public health would, at the very least, require that CCTs not exacerbate such disadvantages.^{14,15,97} Failing to consider attainability could do just that, effectively denying them the opportunity to access the cash reward, a desperately needed resource. Furthermore, a CCT program that sets unattainable conditionalities – even unintentionally - might convey disrespect for the beneficiaries and a lack of concern for the challenges they face in practicing healthy behaviors. A program that sets up beneficiaries to fail can damage their self-efficacy and self-esteem, producing psychological harms and further undermining their motivation to practice the conditioned behavior.^{98,99} For government-run CCTs, setting excessively difficult conditionalities can also result in a sense of disillusionment with public institutions. This would clearly be inconsistent with the obligation to build and maintain public trust.¹⁵ Attention to the attainability of conditionalities has obvious moral relevance and requires that program designers (a) take stock of what barriers and constraints to fulfilling conditionality exist across the beneficiary population; and (b) develop solutions to ensure that people have reasonable opportunities to comply.

Assessing Barriers to Attainability

A comprehensive assessment of the various barriers to compliance provides critical insight into whether a conditionality is attainable. Given that most intended beneficiaries of CCT programs are extremely impoverished, the most obvious set of barriers are financial ones. While the cash transfer is meant to offset the cost of fulfilling the conditionality, the amount may not suffice to cover financial outlays.^{12,67,xv} Studies have shown that even with the cash transfer, costs of compliance can be prohibitive, and in some cases, the fear of incurring additional expenses was enough to deter uptake.^{55,100} The transfer amount should be enough to meaningfully defray the direct and indirect costs of fulfilling the conditionality, if not cover them completely. This may require adjusting payment size by relevant beneficiary characteristics (e.g., household composition, geographic location, etc.). For instance, many CCT programs conditioning on school attendance differentiate payments based on age of the students, recognizing that the opportunity costs are greater for older students who could be earning higher wages for labor were they not in school.⁴ While this can add some level of administrative complexity, as compared to a flat benefit structure, it can help make the conditionality more attainable for those with higher costs. Setting appropriate incentive levels is a complex issue, with implications for cost-effectiveness and scale of coverage. Others have addressed approaches to setting the transfer amount in greater detail,^{12,101} but one important consideration when determining the incentive level is how well it covers the costs imposed on beneficiaries and promotes financial attainability.

^{xv} Offsetting costs is just one of the mechanisms in which incentives have been posited to stimulate behavior change. The monetary reward can also address motivational deficiencies and combat discounting of future health benefits.

Other obstacles include geographical and supply side barriers.^{3,102} Many of the most underserved communities reside in remote regions. They are less likely to have health posts and schools in the vicinity, and difficult terrain complicates travel to the nearest facilities. When conditioning on service utilization, program implementers must ensure that services are accessible, or make provisions for when they are not. Bolsa Familia has a field manual specific to indigenous peoples that recognizes the special challenges they face: "When adequate health or education services are not available, the program acknowledges their absence and the difficulty/impossibility to comply with conditionalities...^{*103} Beneficiary families who are unable to comply due to extenuating circumstances, such as flooded roads, do not lose their monetary benefits so long as they resume compliance after the limiting factor is resolved.¹⁰⁴ Other supply-side considerations, such as adequate staffing, quality services, and sufficient stock of medicines and equipment are critical to ensuring that beneficiaries can comply and that compliance translates to positive outcomes.

Social and cultural norms can also present challenges. For instance, given that female heads of household are often responsible for carrying out conditioned behaviors, it is important to understand local norms that may restrict their actions.¹⁰⁵ In many contexts, women are still limited in their freedom of movement unless accompanied or given explicit permission by a male family member. That being said, the CCT can present an opportunity to increase women's liberty to move about freely. In PROGRESA, there was some tension when women were required to leave the home, but the corresponding payment often alleviated the conflict.¹⁰⁶ A *promotora* for the program said, "Husbands get angry when women go to [health education workshops]... But when they go for the

money, even if they go the whole day, they don't get angry.^{106 (p.291)} There was also an expectation that the women continue to fulfill their household duties, such as preparing meals, which raised questions about whether conditionalities imposed too great a time burden upon the women. Another account from Turkey demonstrated the impact of gender relations on beneficiary compliance. The program provided transportation for children in remote areas to attend school, as conditioned by the program. However, only one vehicle was provided in each area, and families felt uncomfortable sending their daughters on the same bus as male students. Recognizing this as a major barrier, the program arranged for separate transport for the girls.¹⁰⁷ These examples underscore not only how social and cultural norms can present additional obstacles to compliance but also highlight how the monetary incentive and creative solutions to address barriers can promote attainability.

Additionally, attention to education levels and literacy can inform the selection of attainable conditionalities. Low literacy can impede beneficiaries at multiple steps along the pathway to compliance, from understanding what is expected of them, to navigating transportation to health facilities, to seeking the conditioned services once they arrive at the hospitals and clinics.⁵⁵ In Mexico, literacy and language barriers presented a serious challenge for enrolling the Huichol people, an indigenous population comprised of subsistence farmers and migrant works, in Oportunidades.¹⁰⁸ Few families participated "because the conditions attached to these hand-outs require them to make... a long trek up the mountain with small children or while pregnant, to listen to health talks that they did not understand."¹⁰⁸ Further challenges included filling out government forms and the shame some participants felt due to low levels of education and poor Spanish skills.

Understanding these limitations in advance can help program designers be responsive to the communications and language barriers of beneficiaries, provide additional services and materials to facilitate access, or even offer alternative conditionalities that cater to populations facing language and literacy challenges.

Lastly, biological factors can influence an individual's ability to fulfill conditionalities, particularly when programs condition on outcomes. For example, imagine a CCT for childhood nutrition and growth in which the program conditions payment on height and weight improvements. Biological factors may make it impossible for some of the beneficiaries to achieve the conditioned height or weight gains, no matter how diligent the families are about feeding and nutrition. Conditioning on outcomes that are significantly influenced by genetic predisposition and physiology may amount to discriminating against many deserving beneficiaries on the basis of factors beyond their control. The RESPECT trial in Tanzania presents an example where biological and social factors contributed to women being disproportionately disadvantaged in attaining the conditionality.^{37,39} The program conditioned payments on negative STI tests as an imperfect proxy for safe sex. It has been shown that, beyond the social and economic pressures that make women more vulnerable to STIs, there are also biological factors associated with the microenvironment of the female genital tract that increase a woman's susceptibility to STI acquisition following an exposure.¹⁰⁹ In light of this biological disparity between men and women, the use of STI status as a conditionality meant that some women who were unable to engage in safe sex practice and became infected were denied payment while some men who engaged in unprotected sex continued to receive monetary reward. Caution should be exercised when considering an outcome-based

conditionality, examining to what extent certain beneficiaries may be disadvantaged biologically in attaining the outcome.

Attention to the range of economic, geographical, social, educational, biological, and supply-side barriers to attainability for a given conditionality – which can vary significantly across different subgroups and households – can have important implications for fairness of the conditionality.^{104,110} Particular attention should be paid to the most disadvantaged groups, who likely face multiple barriers and have fewer resources to overcome them. Although the typical CCT beneficiary population is characterized as disadvantaged, some subgroups or individuals within these populations will be are extremely vulnerable.^{xvi} Formative research and community engagement across a diverse sample of the beneficiary population can be instrumental for determining whether conditionalities will be reasonably attainable, who may be unable to comply, and what kinds of modifications can be made to ensure that beneficiaries have realistic opportunities to succeed in meeting program conditionalities.

5. Indirect Effects and Externalities: Positive and Negative

In addition to the direct benefits and harms associated with a conditionality, there are often a number of indirect effects and externalities, positive and negative, that can promote or set back people's interests and wellbeing in morally important ways. Indirect effects refer to impacts on other aspects of individual beneficiaries' lives beyond the

^{xvi} As noted in Soares (2012): "An important fact to keep in mind is that complying with apparently simple conditionalities is not as easy for families living in highly vulnerable conditions as for those with stronger links to formality. They live far from schools and clinics and often beyond the reach even of the Post Office. They are often fragile families or households headed by single women, and certainly have low social capital."

health outcome of interest. For example, a CCT for malaria prevention among children could have significant impacts on their educational attainment by reducing malariarelated absences and averting longer-term cognitive deficits associated with the disease.^{111,112} Positive and negative externalities affect parties not directly participating in the program, including other members of the household, community, or society more broadly.¹¹³ They include various peer effects, diffusion of knowledge, herd immunity, and community viral load, as well as economic impacts associated with health-related productivity. Table 1.3 uses the example of HIV testing to illustrate the types of potential direct benefits and harms, indirect effects, and externalities that can be associated with a conditionality.

Conditionality	Direct	Indirect	Positive & Negative Externalities		
	Benefits/ Harms	Benefits/Harms	Household	Community	Society
HIV Testing with Treatment Referral	• Know status with access to ARVs when needed	 Ability to return to work/earn income once on treatment Improved mental health 	 Increased HH Income; ability to serve as care provider Protect HIV- partner from infection HH planning 	 Reduced community viral load – lower HIV incidence Spillover effects, greater uptake of testing 	• Improved societal health, economic gains, resources available for other investments
	 Social stigma and psychological distress 	 Risk disinhibition if negative & engaged in risky behaviors Serosorting leading to infection with multiple strains – accelerated progression; reduce impact of ARVs Diverting energy from other health issues 	 Household stigma & social exclusion Impacts on relationships if infection occurred outside partnership 	• Local health system overburdened by increased demand for HIV services – crowd out of other health services	• Cost of screening and provision of ARVs diverting resources from other societal priorities

Table 1.3: Examples of Direct Effects, Indirect Effects & Externalities for HIV Testing

Consideration of the associated indirect impacts can influence the selection of conditionalities that produce the greatest overall good and limit unintended consequences, and is relevant to duties of beneficence and non-maleficence, as well as justice concerns regarding the distribution of benefits and harms across the affected parties. It can inform comparative analyses of candidate conditionalities, taking into account absolute gains and distributional considerations. Negative externalities borne by non-participants are especially important to consider given that these persons do not voluntarily accept CCT risks, nor do they reap the benefits, but they are nonetheless affected by the decision of the beneficiaries to engage in the program.

As with assessment of benefits and harms, consideration of potential indirect effects should include attention to likelihood, potential magnitude, and permanence of effect. In the case of negative externalities, it is important to consider how severe the adverse impacts may be and which populations will potentially be harmed. There may be some justifiable level of negative externalities borne by the well-off (e.g., a modest redistribution of health workers from affluent areas to meet new demand in program locales), whereas other externalities that further disadvantage non-beneficiaries within a very poor community or adversely impact older children within a household would warrant extreme caution, extra protections, or consideration of alternative strategies.

This section lays out the kinds of indirect effects and externalities that may be associated with various conditionalities, beginning with those affecting individual beneficiaries, then exploring externalities impacting other members in the household, community, and society. When moving from micro to the more macro-level, the effects will likely become more diffuse and harder to attribute to the conditionality, with other variables confounding the relationship. Externalities may be easier to predict, observe, and control for at the household or community level, where intended beneficiaries' actions affection people around them more directly. Accordingly, while it is important to

anticipate the range of potential externalities, particularly attention should be given to the most immediate and measurable impacts attributable to the conditionality, as well as those that would be most desirable or undesirable for the program.

Indirect Impacts for the Intended Beneficiary

There are a number of potential benefits and harms for beneficiaries beyond the specific outcome of interest, and it is important to consider some of the indirect effects the conditionality may have on other areas of wellbeing. Improvements in health have been shown to produce a variety of other positive effects on educational attainment, work productivity, and long-term wellbeing.^{114,115} Schooling, a common conditionality among CCTs, is associated with a variety of positive downstream effects on both health and economic status. One CCT in Malawi demonstrated the protective effects that school attendance had for girls, delaying sexual debut, increasing safe sex practice, and delaying early marriage and pregnancy.¹¹⁶ Interventions targeting undernutrition in the critical first two years of life can improve education, cognitive development, and reduce risk for a variety of chronic diseases.¹¹⁷

Some potential indirect harms associated with the conditionalities include risks of social stigma and motivational crowd-out, already discussed, as well as other unintended consequences. For instance, by incentivizing a specific health behavior, the program may divert attention and resources away from other critical priorities for health and wellbeing.¹¹⁸ The program could also create some perverse incentives. For instance, some CCT programs conditioning on early childhood health visits saw increases in fertility.¹¹⁹ Programs aiming to improve maternal and infant health by conditioning on facility childbirth could undermine their goals if the targeted women have *more* children,

not allowing for adequate birth-spacing, in order to secure additional funds.¹²⁰ Other potential indirect harms include the behavioral disinhibition or risk compensation when conditioning on preventive practices that are not fully protective (e.g., vaccines or male circumcision).¹²¹ Where foreseeable, there may be some creative strategies to avoid these negative indirect effects, including amending eligibility and graduation criteria, offering more comprehensive health services at clinic visits, and investing in additional education and counseling.

Externalities for the Household, Community, and Society

There may also be a variety of ways in which uptake of conditioned behaviors or realization of conditioned outcomes can produce positive or negative externalities for those not directly targeted by the program. Positive externalities are highly desirable and can amplify the impacts of the program on the targeted health problem as well as advance other important societal goals, such as economic productivity. Some behaviors under consideration for conditioning have clear and well-documented positive externalities. These include interventions like vaccines, which produce herd immunity; de-worming programs, which can reduce illness-related school absences in neighboring communities; and the use of insecticide-treated bednets, which can improve the special distribution of malaria vectors beyond the households using them.^{115,122} Additional positive externalities can result from informational and behavioral spillovers, via diffusion of knowledge and peer effects, in which non-participants emulate health-positive behaviors practiced by beneficiaries.¹²³ Some countries, such as Honduras and Nicaragua, made supply-side investments to meet increased demand, thereby strengthening service quality and accessibility for all residents in the program localities.¹²⁴ For societies, there are obvious

positive externalities of having a healthier, more educated population, both in terms of enhanced workforce productivity and averting high social costs of future poverty and disease burden.¹²⁵ Conditionalities that have predictable positive externalities, all else being equal, should be favored over those that produce only private, direct benefits.

Conversely, there may be negative externalities associated with a conditionality that warrant caution. For instance, conditionalities focusing on a single member of the household can shift intra-household resource allocation in ways that adversely affect other family members. For example, nutrition CCTs focusing only on young children might produce health gains for the direct beneficiary but at the expense of adequate feeding older children. Redirection of resources and attention can also create negative externalities beyond the household. In the clinic setting, there is some evidence that incentivized health targets divert providers' attention away from other conditions and aspects of care, or even lead to differential treatment between program participants and non-participants.^{126,127} Conditioning payments on health services can also be problematic when newly generated demand outstrips supply, leading to compromised quality of care and health worker burnout.¹²³ Prospective identification of these types of potential negative externalities can provide useful input for other aspects of the design and implementation (e.g., targeting, eligibility, complementary services, and supply-side investments) and may even compel the selection of different conditionalities.

Lastly, CCTs also have the potential to distort local market dynamics. There are inflationary risks, in which goods and services associated with the conditionality spike in price.¹²⁸ Conditionalities can influence which providers and vendors beneficiaries use for services and products, creating shifts that negatively impact the livelihoods of certain

merchants. While CCTs carry many potential benefits for local markets, particularly through the injection of cash, program designers should carefully consider the developdistort dilemma, assessing the program conditionalities and inputs in the broader context of the local economy.¹²⁹ While this is an area that requires further investigation in the context of CCTs, there may be ways in which engagement activities with program communities can identify potential pitfalls or facilitate partnerships with local providers and vendors to avoid such distortions.

Distributional Considerations

When evaluating potential conditionalities across these 5 categories of considerations, it is important to recognize that not all beneficiaries or subgroups of beneficiaries will fare equally across these criteria. Beneficiary populations are often quite heterogeneous and the program will likely have differential impacts on the various subgroups participating.¹³⁰ Thus, factoring in distributional considerations is critical to the moral analysis of conditionalities. Are there particular subgroups who will be disproportionately burdened by the conditioned behaviors, while others easily reap the benefits? Which people are most likely to be non-receptive to or unable to comply with conditionalities, and what can be done to ensure they can fairly realize the associated benefits of the program?

In many cases, those who are worse-off at baseline are likely to experience greater improvements through the program because there is a greater margin for

improvement.^{4,xvii} Yet these groups – who may experience the greatest gains through corresponding behavior change – may also be those most likely to express low receptivity or experience significant barriers to compliance, by virtue of being more remote or marginalized. Justice requires consideration of fair distribution of benefits and burdens as well as equity concerns, limiting the potential for the program to exacerbate disparities.¹⁹ This is particularly critical given that most CCTs aim to reduce inequities and promote long-term prosperity for the most disadvantaged by investing in multiple determinants of wellbeing (e.g., health, education, alleviation of poverty). For these reasons, from the formative stages of program development through implementation and monitoring and evaluation (M&E), it will be crucial to analyze how well conditionalities perform across the five categories above with particular attention to heterogeneous uptake and impacts.

CONCLUSION

As CCTs continue to grow in popularity, with novel approaches tackling a variety of health issues and inputs to human capital, it is increasingly important for program designers to think critically about the conditionalities they attach to payment. Using prominent frameworks for public health ethics and social justice, this paper sets out five key categories of morally relevant considerations that CCT designers should attend to when evaluating conditionalities. An evidence-informed evaluation of the likely benefits, risks, burdens, and externalities associated with conditionalities, as well as beneficiaries' receptivity and ability to comply, will help ensure that CCT designers structure programs in a way that is both morally sound and effective in achieving their goals. In many

^{xvii} There are several reasons why the impact would be larger for the poorest or least healthy households: greater margin for improvement; they may be more economically constrained in ways that affect health-seeking behavior, so the money has a larger effect; and they may be more likely to adhere to the conditionalities due to greater need for the transfers.

instances, these considerations will overlap or have interactive effects, as when low community receptivity increases beneficiaries' risk of social stigma. Additionally, program designers are not limited to using a single conditionality. In some cases, offering multiple conditionalities, each with its own corresponding transfer, can improve receptivity and attainability.

Taken on balance, with due reflection on distributional impacts, these five categories represent a comprehensive set of considerations for the moral analysis of specific conditionalities. When developing a CCT program, this analysis should inform the kinds of evidence collected, engagement with relevant stakeholders, implementation strategies, and M&E to capture performance across these indicators. Programmers will, of course, have to apply these considerations within the constraints of what is operationally feasible. But, by attending to these five morally relevant categories, CCT designers can select the optimal set of conditionalities for their setting, ensuring that the program realizes it stated goals, protects its beneficiaries from unintended harms, and coheres with the aims of social justice and international development.

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MANUSCRIPT 2: Which Strings Attached? Perspectives from CCT Program Designers on the Selection of Program Conditionalities

ABSTRACT

Over the past two decades, conditional cash transfer (CCT) programs have become an increasingly popular approach for improving educational and health outcomes, with CCTs now operating in over 40 countries worldwide. CCTs provide payments to households or individuals contingent upon the completion of certain behaviors - such as school attendance or health visits - or for the achievement of prespecified outcomes – such as maintaining a negative STI status. Despite a large literature on CCT program impacts, there has been little empirical exploration of how program designers select the defining feature of these programs: the conditionality. This study aimed to provide insight into the values, perspectives, and experiences of multiple actors involved in the design of conditional cash transfer programs, with a particular focus on their views surrounding the conditionalities attached to payment. Through qualitative, indepth interviews with 18 informants, this research explored how various CCT program designers made decisions about program conditionalities, the rationales they used to support their choice of conditionalities, and their views on what general qualities make certain behaviors or outcomes well suited for conditioning. Program designers discussed the following key considerations for selecting conditionalities: (1) alignment with program goals and likelihood for producing the corresponding desired outcome(s), (2) opportunities for program beneficiaries to succeed in complying with conditionalities, (3) potential risks associated with conditioned behaviors or outcomes, (4) acceptability of the conditionalities to the target population, and (5) the programmatic feasibility of enforcing

conditionalities. Informants also emphasized the importance of contextual factors for applying these considerations. The role of contextual factors in applying the key considerations is illustrated through the comparison of two HIV prevention CCTs operating in very different contexts, which ultimately utilized very different conditionalities. These findings provide insights into the design decisions for CCT conditionalities, and may be used to inform the development of much needed guidance on this topic.

INTRODUCTION

Since the mid-1990s, conditional cash transfers (CCTs) have been rapidly gaining popularity throughout the world, with nearly every country in Latin America having some form of CCT scheme and numerous countries in South and East Asia, Sub-Saharan Africa, and the Middle East introducing programs to improve educational and health outcomes among the poor and marginalized.^{1,2,3} The CCT approach provides payments to households or individuals contingent upon the completion of certain behaviors – such as school attendance or health visits – or for the achievement of pre-specified outcomes – such as maintaining a negative STI status. These programs operate to provide immediate assistance to impoverished individuals, while at the same time creating demand for investments in human capital, such as education and health inputs, which can be instrumental in promoting long-term wellbeing and breaking the cycle of poverty.⁴

For CCTs seeking to promote health, there is a wide array of potential conditionalities that could be incentivized to achieve the desired health outcomes. For instance, programs seeking to improve under-five child health and nutrition could include conditionalities ranging from a parental attendance at nutrition education sessions, to regular child health visits, to vaccination, or even paying beneficiaries for meeting specific weight gain or growth targets, among many other possibilities. Even programs with more focused health objectives, such as HIV prevention, present many points of intervention that can be conditioned for payment, with various smaller-scale pilot programs experimenting with conditions on schooling, after-school programs and educational workshops, HIV screening, medical male circumcision, viral suppression, negative STI results, and even negative HIV results.^{5,6,7}

A number of impact evaluations and systematic reviews of CCTs for health improvement in low and middle income countries have demonstrated that CCTs can be successful in increasing utilization of health services, improving nutritional outcomes in children, and promoting uptake of preventive behaviors.^{4,8,9,10,11} The early success of many of these programs has stimulated even greater innovation in the design and application of CCTs, addressing an expanding range of health issues, including HIV, tuberculosis, and maternal mortality, using a variety of conditionalities to promote health gains.^{7,12,13,14,15,16} With the increasing popularity of the CCT approach and novel applications, guidance documents have been produced to aid CCT programmers in the design and implementation of the program.2,17,18,19 But a key question remains largely unanswered: with a wide range of potential options, what do program designers consider when deciding on what to condition for payment and what should they consider?¹ Selecting a conditionality or set of conditionalities will have important implications for the success of the program – in realizing its public health goals, its long-term scalability and sustainability, and various ethical dimensions of the approach.

To date, a handful of qualitative studies have examined beneficiary perspectives of program conditionalities and contextual factors in a setting that can influence program effectiveness.^{20,21} However, there has of yet been no empirical inquiry documenting the experiences and views of the CCT program designers across multiple types of CCTs operating in a variety of settings. This study aimed to address this gap, to provide insight into the values, perspectives, and experiences of multiple actors involved in the design of

ⁱ Note that there has been much discussion in the literature about conditionalities generally, that is whether co-responsibilities should be attached to payment instead of giving cash transfers unconditionally. However, once the decision is taken to use a conditional approach, little has been offered regarding which conditionalities to use.

conditional cash transfer programs, with a particular focus on their views surrounding the conditionalities attached to payment. Through qualitative, in-depth interviews, this research explored how various CCT program designers made decisions about program conditionalities, the rationales they used to support their choice of conditionalities, and their views on what general qualities make certain behaviors or outcomes well suited for conditioning. The findings may inform the development of guidance for current and future CCT programmers in the selection and adjustment of CCT conditionalities.

METHODS

Data Collection

Given the nature of the research questions, qualitative methods were particularly well suited for gaining insight into the norms, processes, and contextual factors that influence the choice of program conditionality.²² The study used semi-structured indepth interviews with a range of key stakeholders involved in the design decisions for existing CCT pilots and programs that had a health-specific focus. An interview guide was developed based on a review of the literature and preliminary consultations with CCT experts. The guide included questions about the structure of the CCT programs in which they had been involved, challenges and considerations that arose in the design, processes used to make design decisions, and general input on how to select appropriate conditionalities (See Appendix A3.2 for interview guide). All informants were asked to provide additional supporting documentation or supplemental information relevant to the conditionality selection for their CCT programs to enhance reliability and offer additional context on programs. These documents, including formative research reports,

unpublished findings, and presentations, were used to provide additional details and context for the programs discussed.

Sampling

Because CCTs have been introduced in a range of settings to address a variety of behaviors related to health and human capital development, this study employed a maximum variation purposive sampling strategy to include participants whose experiences varied across multiple dimensions of interest,²³ such as geographic location, program scale, stage of implementation, and health focus. Individual participants were recruited based on their involvement in CCT design, as informed by the published literature on existing CCTs, participation in relevant workshops and conferences, and snowball sampling, in which informants suggested additional key informants.

All interviews were conducted by one individual (CBK) between September 2013 and August 2014. Interviews lasted approximately one hour. Fourteen of the interviews were conducted as one-on-one interviews, while two interviews were conducted with 2-4 participants. Four of the one-on-one interviews were conducted via Skype[™]. Detailed notes were taken during the interviews and all interviews were recorded on a digital voice recorder, which were transcribed for analysis.

Analysis

All interview transcripts, notes, and memos were read multiple times to identify frequent, dominant, or significant themes in the data and contribute to the iterative development of a codebook (See Appendix A3.3).²⁴ The coding process employed both deductive and inductive approaches, with some codes corresponding to specific questions from the interview guide while other codes were identified through ongoing review of the

interview data. After finalizing the codebook, all transcripts were electronically coded by the author (CBK) using HyperRESEARCH[™] Qualitative Software. A subset of the transcripts were reviewed by a second coder to help refine the coding scheme and ensure no key topics were overlooked. There was 76% agreement. Coding discrepancies were discussed and reconciled by recoding or revising code definitions. The data were then organized into tables corresponding to the key families of codes and a concept map was generated to identify linkages across the various themes and subthemes.

RESULTS

Sample Characteristics

In total, 29 CCT program designers were invited to participate. Eighteen CCT program designers participated in interviews, commenting on their experience with CCTs across 15 countries, predominantly in Latin America and Sub-Saharan Africa. Five additional informants were recruited but ultimately did not participate due to language barriers, scheduling conflicts, or when upon further inquiry, they did not meet the inclusion criteria. Six program designers never responded to requests to be interviewed.

Of the CCT programs discussed in interviews, there was a relatively even split of large-scale national CCT programs with broad health goals and narrowly focused, smaller-scale CCT pilots targeting a specific health issue, with many focused on HIV and one for diabetes management. Informants occupied roles as government employees, NGO staff, academic researchers, and technical consultants from development banks. A subset of the technical consultants had previously worked in government roles overseeing the development of their national CCT programs. Including a variety of stakeholders from different contexts with experience across a broad range of CCTs allowed for the elicitation of themes that were cross-cutting as well as those specific to the particular

context of a program. Additional details regarding the characteristics of the interview

participants are presented in Table 2.1.

Characteristics	Number	
Gender		
Female	11	
Male	7	
Primary Affiliation at Time of Design		
Government	8	
Academic Institution	6	
Technical Consultant/Development Bank	3	
NGO	3	
Experience Working on CCTs in Various Geographic Regions		
Sub-Saharan Africa	14	
Latin America & Caribbean	5	
Central Europe & Other	2	
* Note: A number of informants had experience working in	multiple settings, with some changes in affiliation from	

Table 2.1: Characteristics of Interview Participants (n=18)

one program to the next (e.g., government employee transitions to technical consultant at a development bank)

From this diversity of experiences, a number of salient themes emerged regarding the selection of CCT program conditionalities. Key informants discussed the following general qualities of conditionalities to be considered in design decisions: (1) alignment with program goals and likelihood for producing the corresponding desired outcome(s), (2) opportunities for program beneficiaries to succeed in complying with conditioned behaviors or outcomes, (3) potential risks associated with conditioned behaviors or outcomes, (4) acceptability of the conditionalities to the target population, and (5) the programmatic feasibility of enforcing conditionalities, including the measurability and cost of verifying compliance. Informants also stressed the importance of considering contextual factors when assessing conditionalities, namely the nature of the health condition targeted, the characteristics of the beneficiary population, and the setting, with particular attention to the health system infrastructure and supply-side constraints. Table

2.2 provides a summary of key contextual factors.

Table 2.2: Programmatic and	Contextual Factors Relevant to	Conditionality Selection
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Nature of the Health Condition
Chronic versus Acute Condition
Curable versus Incurable
Seriousness of the condition
Communicable, Non-communicable, STI
Associated Stigma
Condition associated with a special population (children, elderly)
Characteristics of the Beneficiary Population
Gender
Age
Religion, Culture, Ethnicity
Poverty and/or Homelessness
Occupation/Profession
Sexual Orientation
Community Structures and Social Capital
Setting and Health System Infrastructure
Urban versus Rural Setting
Local Capacity to Administer the Program
Distribution/Accessibility of Facilities
Quality of Health Services/Commodities
Supply Chain of Medical Goods
Human Resources for Health

The section to follow provides further detail on the five general characteristics of conditionalities, followed by two case examples of different HIV prevention CCTs that highlight how the contextual complexities in which a program is situated influence design decisions for the conditionalities.

Alignment with Program Goals and Likelihood to Produce Desired Outcomes

Almost all informants (n=17) discussed the importance of selecting conditionalities that are likely to generate the desired outcomes of interest for the program. For nearly half (n=8), this included starting with a clear conception of the program's specific goals and objectives. Having well defined priorities and targets

facilitated choosing conditionalities that tracked to the goals. For example, a programmer said the following in reference to a CCT program aiming to reduce HIV infection in adolescents:

"... I think also looking at what your ultimate goal is, so in a way we have two things here. We had – we wanted to see a reduction in new infections, but we wanted to see young people who were excited about their futures... And so the conditionalities really, really needed to make sense to what our overall purpose was...-68881

Various programs frame their goals differently, with some focusing on very discrete health outcomes – such as HIV-infection or diabetes management – and other programs defining aims more broadly to impact a range of outcomes related to poverty, health, and wellbeing. The framing and specification of these goals had important implications for design decisions surrounding conditionalities. For instance, one program designer from an HIV prevention CCT offered the following explanation for conditioning payment on schooling as opposed to behaviors more directly related to the disease:

"I'm really ... interested in sort of broadly impacting a whole host of things, and so I'd probably stick to the more traditional. You know, to me, keeping a girl in school and keeping a little cash in her pocket seem to go a pretty long way... I mean, yes, they have an impact on HIV, but they're more trying to change the girls' entire life." – 12702

With clear goals in mind, narrow or broad, many informants emphasized the importance of choosing conditionalities that would be effective in producing the corresponding health outcomes (n=15). Informants talked about effectiveness by referencing positive and negative cases: (1) discussing whether, why, and how much a particular conditionality would contribute to program objectives, and (2) offering examples of when conditionalities were likely to be ineffective. Positive support included reference to critical points of intervention in the causal pathway (n=11), evidence of

effectiveness (n=5), durability of gains (n=5), and potential positive externalities (n=5). Informants commenting on ineffective conditionalities (n=8) cite examples that fail to address key drivers of the problem and the ways in which poor quality of services could undermine the goals of the program. Each of these are discussed in greater detail below.

More than two-thirds of the informants who mentioned effectiveness discussed the prospects for yielding results by referencing the causal pathway – as it related to the nature of the condition and the beneficiary populations (see Table 2.2) – noting that conditionalities should focus on important points of intervention (n=11). Eight of the programs discussed used a combination of conditionalities targeting multiple points of intervention, distal and proximate, in the hopes of increasing impact.

Another interesting dimension of effectiveness raised by a third of the informants (n=6) concerned not just whether conditionalities would produce positive improvements, but how long those benefits would last – the durability of associated health gains. Three advocated the advantages of conditioning on behaviors that require a limited number of actions and confer long-term benefits, such as vaccination or medical male circumcision. Another two informants questioned the long-term effectiveness of conditioning on behaviors that require ongoing maintenance, such as safe sex practice, weight loss, or treatment of chronic conditions. However, a few of the informants (n=3) noted cases where durability was less important, because the CCT intervened during critical periods of risk and potentially instilled new behaviors, motivations, and habits extending long after the cash transfer ended. A third of the informants discussing effectiveness (n=5) also noted that conditionalities could further contribute to the realization of the CCT goals through positive externalities and spillover effects, affecting the primary outcomes of

interest among those not directly participating in the program. Examples ranged from increased health knowledge and behavioral spillovers, to herd immunity in vaccination programs, to reduction of community viral loads and preventing HIV transmission through viral suppression.

Beyond discussing conditionalities that would positively contribute to program aims and outcomes, over half of those discussing effectiveness (n=8) cautioned against conditionalities that might not work. The following informant conveyed doubt about the effectiveness of sexual education workshops in reducing HIV incidence:

"Now so of course you have to be very careful about... what you condition on... it may not be even in the causal path for some of the participants. Right, the fact that I am sitting here at a prevention talk every week or every month or quarterly may or may not do anything in terms of whether I reduce the number of partners or whether I engage in unprotected sex." -84845

This informant went on to discuss how the content of sex education often overlooks the needs and topics relevant to certain populations, like men who have sex with men, and that the quality of these workshops are often lacking. Though informants discussed effectiveness of conditionalities in producing health outcomes and contributing to program goals in a variety of ways, there was clear consensus that this represents a critical feature of any program conditionality.

Opportunities for Beneficiaries to Succeed in Complying

Program designers universally (n=18) discussed how the conditionalities should allow sufficient opportunities for beneficiaries to comply and earn the cash reward. Informants emphasized that the conditionality has to be something that beneficiaries can realistically achieve – is it "doable," is it "feasible," is it a "reasonable" thing to ask them to do? This included considerations of how much control beneficiaries had over compliance, supply-side barriers, as well as strategies to increase opportunities for beneficiaries to succeed.

Six of the informants invoked the language of "control," whether achieving compliance was actually in the power of the beneficiaries. One informant who worked on an HIV prevention CCT explained why they abandoned the idea of conditioning on HIV status, because "especially for women..., that they might get infected through... force, through rape, through unwanted sex and... somehow she hadn't been in control of getting the outcome, HIV." (14902)

Another key reason why informants felt beneficiaries might have unrealistic opportunities to successfully comply was due to constraints and shortcomings of the supply side of the health system (n=7). Program designers noted how lack of accessible facilities, issues with the supply-chain, inadequate health providers to conduct visits, and other systems factors (see Table 2.2) made it virtually impossible for some beneficiaries to comply with program conditionalities.

"I see this as an ethical problem, when you are asking a person to do... When a government asks a person to do something and for that they will give you money, if you do it, if you go to school or to a medical center, I will give you money. But if the government itself does not have the capacity to offer this service, then [the cash should be given unconditionally]." -88294

Recognizing these barriers, a few programs provided complementary services to make compliance more feasible, with two programs offering mobile health services and one providing additional compensation as an "inconvenience fee" to cover transportation costs or lost wages associated with seeking services. One CCT added another conditionality option of attending health workshops when moving from the pilot phase to scale-up, because beneficiaries in remote communities would not have reasonable access to health posts. Whether due to lack of control or supply-side limitations, three informants noted that it would be unfair for a program to have conditionalities with which beneficiaries could not realistically comply.

Lastly, more than a third of the informants (n=7) noted the importance of beneficiaries having multiple chances to succeed in complying with conditionalities. This was described not only as providing greater opportunities to succeed, but as an important piece of programs designed to instill learning and support lasting behavior change (see Durability above).

"I think it's this idea of second chance is important. You – in a way I think some of these conditions serve as a learning process, and so if you exclude people the first time, they sort of do not satisfy the condition, I think that you're losing them ... we say, okay, first time you don't satisfy it, it's a warning...– but I think it's this idea of learning is important." -36039

This commitment to having multiple chances was one of the main reasons offered by program designers of HIV-focused CCTs as to why they chose to condition payment on curable STIs, rather than HIV itself (n=3).ⁱⁱ Overall, program designers were keenly aware of the need to have conditionalities that provide reasonable opportunities for beneficiaries to succeed, with this consideration influencing the selection of conditionalities, investments in the supply side, provision of additional services to facilitate compliance, and policies surrounding non-compliance.

Reducing Risks, Minimizing Harms, and Avoiding Unintended Consequences

Most key informants (n=13) stressed the importance of ensuring that conditioned behaviors or outcomes do not expose beneficiaries to harms or generally make them

ⁱⁱ Other key reasons offered for why HIV status was not used as a conditionality in the programs discussed included the "harshness" of the HIV diagnosis – discussed below – and that the designers still wanted to be able to include people living with HIV in their program to promote safe sex practice.

worse off, particularly in light of the fact the CCT program beneficiaries are often already vulnerable. They expressed concerns about the potential for various conditionalities to pose risks of physical, psychological, and social harms. Those mentioning physical harms (n=6) typically referenced risks associated with medical procedures or medications, with two of the six informants also mentioning procedures they perceived as unduly intrusive or invasive, such as colorectal exams to screen for HPV among men who have sex with men (MSM). When discussing psychological harms (n= 6), program designers identified those directly associated with the nature of the condition – such as diagnosis with a serious illness – as well as the feelings of failure, regret, or "despondence" associated with being unable to successfully fulfill the program conditionalities. When the health outcomes of interest were emotionally charged, a few informants (n=3) noted that it would be overly "harsh" to condition on those outcomes, serving as a "double punishment" by denying the monetary reward on top of the health setback.

"...it's sort of harsh to have a participant who not only is, is going through this shock of receiving the news that he or she is HIV positive, but on top of that he or she is losing the incentive. So it's kind of harsh, because of the magnitude of the disease and the seriousness of the disease. Of course STIs are serious too, but you know they are more treatable and the consequences are important and they should be avoided at all costs, but I don't think that the shock is as severe." -84845

Five program designers also expressed concerns about social harms, with particular attention to stigma as well as how a conditionality might affect intrahousehold and community dynamics. Extra protections related to privacy and confidentiality were encouraged as a way to mitigate some of these risks (n=3). One programmer who worked on CCTs conditioning on negative STI status worried about risks associated with

unintentional disclosures to partners, because if they returned without payment it would

indicate they had a positive STI result:

"we asked a lot of questions to try to see that there was no harm, so the test results were given in private... we didn't find any occurrence of, you know, husband beating the wife because saying, 'where is the 10,000 shilling I was expecting you to come with.' But actually a lot of women say, 'we like this system because it allows – it's an opening for discussion with our husband about safe sex'... and so generally we found that a lot of married women like the system rather than feared it, and also we've not found any occurrence of violence due to it." -36039

Still fearing this potential source of harm, the program architects creatively modified the

approach in a subsequent pilot elsewhere to provide even greater protections to

participants:

"...so if you are negative, you get this two-part lottery ticket, okay, and I gave one to you with your number and the other one goes in the lottery urn and there'll be a public lottery... what we were doing in cases where people were positive, we were saying here is your lottery ticket, and sorry the other part will not go in the urn. It's going to trash....You can always say to your spouse, well, bad luck, my name was in the urn but it was not drawn." -36039

Lastly, a handful of informants (n=4) mentioned that some risks had the potential to directly undermine the goals of the program. For instance, two program designers noted that CCTs focusing on safe motherhood and reducing maternal and infant mortality could potentially create perverse incentives for increased fertility and decreased birth spacing – as documented in select cases²⁵ – which could put beneficiaries at increased risk of adverse maternal and infant outcomes. When discussing potential harms, program designers stressed the importance of thinking carefully about the kinds of risks associated with a conditionality – accounting for the local context, the nature of the condition, and the attributes of the beneficiary population – with adequate protections in place and monitoring of adverse consequences.

Acceptability of the Conditionality and Receptivity among Beneficiary Populations

Another salient theme that emerged in discussions with CCT program designers was how receptive beneficiaries and their communities would be to a particular conditioned behavior or outcome (n=13). Eight of thirteen informants raised this as a positive aspect of their programs, talking about how their CCTs began with populations that were very open to complying with the conditionalities and enthusiastic about a program that would provide monetary rewards for such behaviors. Two informants also noted that buy-in from family members and the broader community would provide greater support to individuals and enhance the effectiveness of the program.

However, the majority of discussions on acceptability and receptivity reflected the concerns program designers had about conditionalities that might target something unacceptable to beneficiaries and their communities (n=11). A number of reasons why certain behaviors might not be well accepted were offered, including conflicts with gender norms, religious and cultural beliefs, fear of harms, past negative experiences seeking health services, or general sentiments that external actors should not be interfering with personal behaviors. Some of these could be addressed more easily than others. For instance, having female clinicians offering services to women instead of male doctors. Other sources of resistance, such as the following example of deeply rooted beliefs, are more intractable:

"...unfortunately [nutritional supplements] are not very well accepted... since there are some voodoo beliefs that think that a similar powder steals people's consciousness... And despite how cheap these powders are, it is unthinkable to use them in some countries..." -88294 Four informants expressed concerns about CCTs being "coercive" when trying to induce beneficiaries to practice certain behaviors.ⁱⁱⁱ Of the thirteen informants discussing receptivity, nine also noted that it is important not only to understand how receptive direct beneficiaries would be to the conditionality, but to examine the perspectives of other important people in their lives, including partners, household members, and community leaders.

"So in many cases in East Africa at least, women have actually been quite opposed to their men, to their partners going for male circumcision. And again, possibly for good reason because they're probably wondering, 'why do you need to get male circumcision unless you plan to be unfaithful?' et cetera. So some men said, 'you know my partner is opposed. I can't go.' ...the other one that's quite common is, 'it's not culturally the norm in, you know, in my tribe or my ethnic group.'" -57402

Such examples illustrate the potential for resistance among family and community members to introduce risks of social harm and barriers to compliance. However, one informant provided a counter example in which the monetary reward served to combat spousal resistance to women having facility-based births, noting that although husbands preferred that their wives deliver at home, the cash was more important to them. Two informants also noted cases where positive externalities associated with conditioned behaviors, such as herd immunity from vaccination programs, could support a conditionality that was not universally welcome.

ⁱⁱⁱ Although these informants used the term "coercion," this is an inappropriate application of this term. Coercion refers to threats of harm to gain compliance, not offers of financial reward. Incentives alone are not coercive, though they can constitute undue inducements if the money undermines rational and voluntary choice. Furthermore, while cash payments can motivate persons to act in ways that they otherwise would not, this does not necessarily constitute an undue inducement or undermine voluntariness. See Wertheimer A, Miller FG. Payment for research participation: a coercive offer? *Journal of Medical Ethics*, 2008;34(5): 389-392

Of the thirteen informants discussing receptivity, more than half (n=7) emphasized how the acceptability of a particular conditionality is deeply dependent on context. One informant discussed this using the example of a program targeting maternal and infant health:

"I think it's entirely dependent on the behavior you want to change and how responsive that community is to [the behavior]. They may be looking forward to that! Some might say, 'Oh no,' like in certain examples of delivering in the home. That is where you feel safe, where you feel secured. As against delivering in facilities. ... So it's very much dependent on many factors. Not 'one size fits all' at all. [laughs] The designs are very much determined by the context and every aspect of the context."-97573

Recognizing that receptivity to a conditionality was highly contextual, four programmers emphasized the importance of conducting formative work and engagement activities to understand what would be acceptable in those settings, and had conducted specific research activities around acceptability.

Measuring, Verifying, & Enforcing Conditionalities: Implications for Programmatic Feasibility

In addition to discussing the various attributes of conditionalities that had relevance for the beneficiaries, program designers also raised a number of practical considerations related to the verification of compliance. This came up in all but two interviews. The two main ways in which informants discussed this theme were in reference to the measurability of a conditionality (n=11) and the administrative capacity to verify and enforce conditionalities (n=10). With regard to measurability, informants noted the importance of "objective" measurement – in some cases using behaviors that were directly observable and in others using reliable biological tests. Beyond highlighting the obvious need of verifiable conditionalities to have a functional CCT, two of the eleven discussed having objective measures as an issue of fairness, only rewarding

participants who have truly earned the cash reward and protecting against those who may try to "game the system." One program designer supported the choice of STI tests, saying:

"You have to have objective measures that cannot be easily manipulated. That cannot be easily gamed... We focused on new, curable STIs because you can take the biological tests... That is a much more concrete, reliable, objective than of course a self report of 'oh yes, I've used condoms all the time.' Which is not what you want to base, you know, the incentive on because everybody would have an incentive to cheat, right? If you were just asking, 'Did you use a condom?' 'Sure, I did. Give me the money.'" – 84845

Ten of the informants noted that certain conditionalities posed practical challenges for verifying compliance, imposing high administrative burdens in settings where capacity of the program staff and provider was already constrained. One program designer discussed the strain that the conditionalities could impose on those providing services:

"...they feel that the CCT programs make the doctors to work more because they have to certify all the co-responsibility, and it's more administrative work for them. If you talk with the doctors or the teachers that have a lot of beneficiaries of CCTs, they can tell you, 'oh no, no, no, this program is a mess. I really have to do a lot of work, and I don't have time to attend to people.' "-76945

Two informants discussed this challenge with specific reference to the resources needed to verify behaviors that require ongoing maintenance, such as antenatal care visits or treatment adherence. A few other informants (n=3) also raised concerns about the costs associated with verifying certain conditionalities. They noted that conditionalities requiring expensive lab tests or significant resources for verification would limit the scalability of the CCT and make the program unlikely to be cost-effective.

Contextual Considerations for Selecting Conditionalities: HIV as a Case Study

Each of the key themes described above emerged amongst a complex backdrop of contextual factors, with nuanced considerations related to the characteristics of the

beneficiary population, the setting and local health infrastructure, and the nature of the particular health condition (see Table 2.2). The case of CCTs targeting HIV prevention presents an example of how these contextual features influence the considerations and ultimate decisions regarding program conditionalities. Comparing the following two examples of HIV prevention CCTs side-by-side highlights how the specific context of a program critically shapes the selection of conditionalities, even among programs with the same health goal. Table 2.3 presents a snapshot of the various contextual factors present in each case, followed by a more in-depth description focusing on the aspects that had the greatest influence over the final selection of conditionalities.

Programmatic & Contextual Factors	Program 1: CCT for HIV Prevention among MSM in Urban Latin America	Program 2: CCT for HIV Prevention among Schoolgirls in Rural Southern Africa
Beneficiary Population	 Adult Men Who Have Sex with Men (MSM) Many are male sex workers (MSW) Poor Limited social and familial support Periods of homelessness or jail time High rates of drug use 	 Adolescent Girls Students Poor Many orphaned or have absent parents High rates of teen pregnancy and drug use High baseline knowledge of STIs, HIV, and the link to unprotected intercourse
Program Setting & Health Infrastructure	 Urban National Health Insurance Plan with Full Coverage of HIV Services Local clinic with high quality services and sensitivity to patient needs 	 Rural Limited access to the local clinic; linkages to testing services provided Free condoms available
Nature of the Condition	 HIV <u>Key Drivers:</u> Risk premium for MSW to have unprotected sex – clients pay more 	HIV <u>Key Drivers:</u> • No sense of future/high unemployment • Older Partners/ "Sugar Daddies"
Conditionalities	 Maintaining a negative status for new, curable STIs (2 tests per year) [Originally planned to include attendance at prevention workshops but this was dropped prior to implementation] 	 Enrollment in school Weekly participation in an extracurricular program developing life skills Annual HIV screening ("Know Your Status")

Table 2.3: A Comparison of Two HIV Prevention CCT Programs

Program 1: CCT for HIV Prevention among MSM in Urban Latin America

In this CCT program, the male participants receive payment every six months for

negative STI test results. When discussing the rationale for this conditionality, the

program designer went into a detailed account of the circumstances of the beneficiary population, the drivers of the epidemic for this vulnerable group, the challenges they faced in their daily lives as well as the resources already available to them. He noted that these men were impoverished, with frequent episodes of homelessness and little social capital. Sex work was their primary source of income, and the "risk premium," in which

"...male sex workers get paid, on average, about 40% higher prices for unprotected sex"

(84845) was a major contributor to the high rates of HIV infection. The intent of conditioning on negative STI tests was to counterbalance these existing perverse incentives for risky behavior by incentivizing a proxy for safe sex practice. At one point in the development of the CCT, the designers considered a second conditionality for monthly attendance at prevention workshops. However, given the population, they determined that it would be too difficult for them to ultimately comply with monthly sessions. The informant also cited that many additional resources, including prevention talks, were already available through the local clinic.

"It has been very good for us, again, to work with the [clinic] because really what everybody gets in our program is really a comprehensive package. A comprehensive package that includes condom distribution, lubricants, everybody got basically a prevention talk workshop at the beginning with highly trained HIV prevention specialists. Everybody... has access to a wide range of services. Not only treatment for STIs, ... the best treatment there is from public facilities for HIV, but also, if they need psychological counsel, psychiatric referrals..." -84845

Together, the robust level of existing services available for both prevention and treatment, the limited capacity of the population to attend multiple workshops, and need to address the "risk premium" led the designers to condition on negative STI tests. This was something perceived as "doable" for the population, with minimal associated risks given the "very good facilities... very professional, stigma free, discrimination free" and strong potential to impact HIV incidence.

Program 2: CCT for HIV Prevention among Schoolgirls in Rural Southern Africa

Though this program also aimed to reduce HIV infection, the conditionalities are quite different from the previous example, focusing on more distal inputs: schooling, extracurricular activities, and getting an annual HIV test. However, this difference is not surprising when one understands the fundamental differences between the two populations served and what drives the epidemic among these girls in their particular setting. The two informants who worked on the design of this program (68881 and 48766) independently stressed that the root cause of new HIV infections among these girls was a general sense that they had no future and that their lives did not matter.

"It's about how young people think about themselves, how they regard themselves, and, in particular, how they regard their futures. And we were finding in our work with students... was that in the impoverished areas these young people had basically given up on life. You know, they decided that in fact there was no future because when many of them didn't have the sort of stable family home, many of them had lost parents... Obviously one of the strongest drivers is this issue of, 'I just don't believe in a future anymore, so if I have a relationship with an older man and he refuses to use a condom, well so what, you know. I know I've got a good chance of getting – catching the virus, but I'm willing to take that risk because my life is not worth anything anyway'." - 68881

By conditioning on the extra-curricular activity, the program not only provided an alternative to engaging in various risky behaviors in the afterschool hours, but directly targeted this key driver by building life skills and promoting positive attitudes about future prospects. The education conditionality worked similarly, contributing to long-term opportunities for employment while providing immediate protection by keeping the girls in school. Whereas educational activities were overly burdensome for MSM in the case above, this program was working with a "captive audience" of school-age girls. The

designers also wanted to pair these more distal inputs with a conditionality more directly tied to HIV, so they included annual HIV screening. Both the informants who worked on this program emphasized the need for a mix of conditionalities, that while testing for HIV was an important piece of the intervention, it would not be enough to address the core social and psychological drivers of the epidemic in this population.

Comparing these two programs side-by-side illustrates how consideration of local contextual factors, such as the drivers of the health problem and the characteristics of the beneficiary population, influences the conditionality design. Also notable is that, in both cases, the programs included people living with HIV, and the conditionalities selected allowed them the ability to participate. Whereas conditioning on the outcome of HIV itself would categorically exclude those who already had the virus, these programs sought greater inclusion. They noted that this was not only critical for having an effective program, since promoting safe practices among people living with HIV is an important component of prevention, but also reduced the potential negative impacts of the program on a group that is already vulnerable.

DISCUSSION

These perspectives and experiences of these CCT program designers provide critical insight into the various considerations that have influenced the selection of behaviors and/or outcomes for CCT conditionalities. Although informants represented a diverse sample of program designers operating CCTs in a variety of countries with various health objectives, many themes that emerged were crosscutting and applied to conditionalities regardless of the background context. No matter the objective, informants agreed that conditionalities should have the prospect to effectively impact the health

outcomes targeted by the program. Informants also emphasized the importance of setting conditionalities with which beneficiaries could reasonably comply. Other features such as measurability, acceptability, and low levels of associated risk were widely endorsed.

Discussions with program designers illustrated how these considerations have to be applied on balance, and that even when a conditionality looks favorable in one regard, such as effectiveness, it may not be appropriate based on another consideration, such as risk or acceptability. Informants discussed examples where conditionalities fell short on one or more critical feature, leading them to reconsider their options and amend their approach. Expressed concerns about the acceptability of the conditionality and comments about "coercion" are consistent with discussions in the literature on how incentives may interact with autonomy and voluntariness.^{26,27} Informant also discussed the careful attention paid to potential risks associated with conditionalities, with discussion of different kinds of risks and the various ways to mitigate these them through extra precautions and creative design strategies. Informants' worries about risks and harms could be related to documented examples of CCTs that created unintended negative consequences, potentially expressing a concerted effort to avoid the pitfalls of earlier programs.^{8,17,28,29,30} The interviews also highlighted various responses to conditionalities that might not be "doable" for some portion of the beneficiary population, with some programs offering services to overcome barriers to compliance, others opting for conditionalities that would be more feasible without additional investments, and a few that provided some portion of the cash unconditionally. Judgments about the appropriate course of action to deal with barriers to compliance should be made in the context of the

program, taking into consideration the types of barriers present, the opportunities to surmount them, and the available resources to provide additional services.

These findings also suggest that when candidate conditionalities positively align across these key considerations – strong evidence of effectiveness, high acceptability, reasonable opportunities to comply, low risk – they represent favorable options for conditioning. Furthermore, the fact that informants emphasized the importance of applying these considerations with attention to the specific contextual factors – characteristics of the beneficiary population, the program setting and local health infrastructure, and the nature of the targeted health condition – recommends that conducting formative research and engagement activities early in the design stages can provide critical input for assessing these attributes in a given context.

It should also be noted that CCT programs are not limited to a single conditionality and many employ a combination of behaviors and/or outcomes. Using more than one conditionality can target multiple points in the causal pathway, potentially enhancing the impact of the program on health outcomes. Multiple conditionalities can also help address variability across beneficiary populations and program settings – offering more options for program participants to comply in ways that are accessible and acceptable to them. When considering multiple conditionalities, program designers must navigate the tradeoffs between the benefits of multiple conditionalities and the additional cost and administrative complexity they introduce. Some programs also pair the conditional program with unconditional transfers, thereby ensuring some level of social assistance even for beneficiaries who do not satisfy the conditionalities.

Limitations:

There were a number of limitations to this study. The first was that nearly all informants came from development banks or academic institutions or worked with partners at these institutions on the program design. Thus, there may be additional views from CCT program designers working independently that were not captured. Additionally, I was unable to interview any informants working on programs in South and East Asia. There may be additional perspectives from programmers in these settings that warrant further inquiry. Lastly, because the sampling strategy aimed for maximum variation in programs represented, seeking a range of perspectives on CCTs that differed in health goals, scale, maturity, and setting, there were some tradeoffs in the depth of exploration for individual programs. Of the sixteen programs included for which participants had directly contributed to the design, ten had only one informant. However, six of these were academic pilots for which the informant was the principal investigator or Co-PI. Programs with multiple informants, ranging from two to five, offered relatively coherent accounts of the processes and rationales for program design. While the findings may not represent the entire universe of experiences with and perspectives on CCT conditionality design, this study offers a critical first look into design considerations for CCTs across a multiple settings and addressing multiple types of health issues. This strategy has allowed for the identification of crosscutting themes as well as special considerations for programs in certain contexts.

CONCLUSION

With careful attention to the design of the program, CCTs present a promising strategy for promoting the uptake of healthy behaviors and interrupting the

intergenerational transmission of poverty and poor health. Selecting a conditionality or set of conditionalities will have important implications for the overall success of a program. Further guidance is needed to help program designers navigate design decisions for conditionalities, particularly as the popularity of this approach continues to grows and evolve with novel applications. This study provides critical insights into existing experiences and perspectives of program designers that can inform development of such guidance.

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MANUSCRIPT 3: Which Strings Attached - An Ethical Framework for Selecting Conditionalities in Conditional Cash Transfer Programs

ABSTRACT

Conditional cash transfers (CCTs) provide payments to households or individuals contingent upon the completion of certain behaviors or for the achievement of prespecified outcomes. For CCTs seeking to promote health, there is often a wide array of potential conditionalities that could be incentivized to achieve the desired health outcomes. The program conditionality or set of conditionalities will have important implications for the success and ethical acceptability of the CCT. This paper puts forward an ethical framework to facilitate structured analysis and evaluation of the ethics of a particular CCT approach through an iterative approach of assessing, refining, and reevaluating the program conditionalities at various periods in the design, implementation, and adjustment of the program. It provides a set of considerations across the various stages of the CCT policy cycle to help program designers identify aspects of a conditionality that may be morally problematic and support the selection of optimal conditionalities for the program. Development of this framework was based on prior conceptual analysis and empirical research. Six core questions on morally relevant features of a conditionality ground the framework, surrounding: effectiveness in producing desired health gains, associated risks and burdens, receptivity, attainability, indirect effects and externalities, and distributive considerations. These six questions are then applied across the stages in the CCT policy cycle, translating into more specific considerations, inputs, and actions relevant to these stages. As CCTs continue to grow in popularity and evolve with the use of novel approaches, in-depth analysis of the ethical

aspects of these programs is more important than ever. This framework presents a practical tool for the systematic ethical evaluation of conditionalities across the lifecycle of the program. It is applicable in a variety of settings for programs with diverse health objectives.

INTRODUCTION

Since the mid-1990s, conditional cash transfers (CCTs) have been rapidly gaining popularity throughout the world. Nearly every country in Latin America has some form of CCT and numerous countries in South and East Asia, Sub-Saharan Africa, and the Middle East are introducing programs to improve educational and health outcomes among the poor and marginalized.^{1,2,3} The CCT approach provides payments to households or individuals contingent upon the completion of certain behaviors – such as school attendance or health visits – or for the achievement of pre-specified outcomes – such as maintaining a negative STI status. These programs operate to provide immediate assistance to impoverished individuals, while at the same time creating demand for investments in human capital, such as education and health inputs, which can be instrumental in promoting long-term wellbeing and breaking the vicious cycle of poverty.⁴

For CCTs seeking to promote health, there is often a wide array of potential conditionalities that could be incentivized to achieve the desired health outcomes. For instance, programs seeking to improve under-five child health and nutrition could include conditionalities ranging from parental attendance at nutrition education sessions, to regular child health visits, to vaccination, or even paying beneficiaries for meeting specific weight gain or growth targets, among many other possibilities. Even programs with more focused health objectives, such as HIV prevention, present many points of intervention that can be conditioned for payment, with existing pilot programs conditioning on schooling, after-school programs and educational workshops, HIV

screening, medical male circumcision, viral suppression, negative STI results, and even negative HIV results.^{7,5,6}

A number of impact evaluations and systematic reviews of CCTs for health improvement in low and middle income countries have demonstrated that this approach can be successful in increasing utilization of health services, improving nutritional outcomes in children, and promoting uptake of preventive behaviors.^{4,7,8,9,10} The early success of many of these programs has stimulated even greater innovation in the design and application of CCTs, addressing a range of health issues, including HIV, tuberculosis, and maternal mortality, using a variety of conditionalities to promote health gains.^{11,12,13,14,15,16} With the proliferation of these programs, a number of guidance documents have been produced to aid CCT programmers in various aspects of design and implementation.^{2,17} While these documents provide various considerations for identifying target populations, structuring the level and frequency of the benefit, and setting exit and entry rules, relatively little guidance is available for the selection of conditionalities – the defining feature of the CCT approach. The existing literature largely focuses on whether and when to have conditionalities, with minimal input on which behaviors or outcomes to condition.^{2,18,19,20} Selecting a conditionality or set of conditionalities will have important implications for the success of a program – concerning how well it promotes its public health goals, its long-term scalability and sustainability, and various ethical dimensions of the approach.

The ethical framework put forward below seeks to address the current gap in guidance on conditionality selection for CCTs. It provides a set of considerations across the various stages of the CCT policy cycle to help program designers identify aspects of a

conditionality that may be morally problematic and support the selection of optimal conditionalities for the program. The framework is meant to serve as a tool to facilitate structured analysis and evaluation of the ethics of a particular CCT through an iterative approach of assessing, refining, and re-evaluating the program conditionalities at various periods in the design, implementation, and adjustment of the program. There are of course other considerations that inform the selection of conditionalities, such as those related to political and operational feasibility as well available financing. However, these practical considerations should only be applied when deciding between conditionalities already deemed morally permissible, as informed by the framework. The goal in designing this provisional guidance was to create a practical tool that policy-makers and program planners can use to assess the ethical considerations relevant to the selection of CCT conditionalities.

DEVELOPMENT OF THE FRAMEWORK

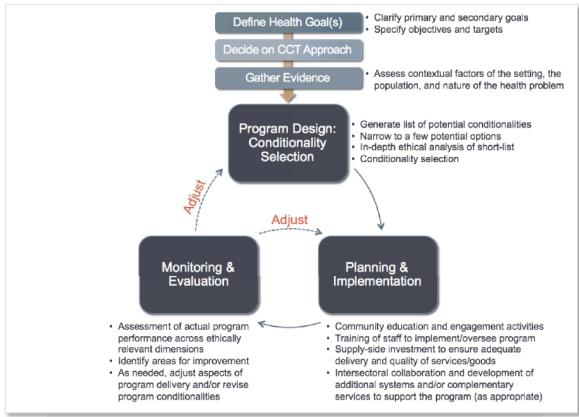
The framework was developed in three steps. The first step involved a comprehensive review of existing frameworks for public health ethics and social justice to scope morally relevant considerations for conditionality selection, drawing upon the extensive literature on CCTs to contextualize these considerations. This conceptual analysis, described in detail elsewhere, generated an exhaustive set of ethical considerations that CCT designers should bring to bear as they evaluate potential conditionalities.²¹ These considerations fall under five distinct categories, with a sixth consideration examining distributional effects (summarized in Box 1). These considerations for the ethical framework.

Box 1 | Six Ethical Considerations for Conditionality Selection

- 1. How likely is it that conditioning on this behavior or outcome will yield the desired health outcome(s)?
- **2.** What physical, psychological, or social risks and/or burdens does the conditionality impose on the beneficiaries?
- **3.** How receptive are the target beneficiaries to the conditionality and is it well accepted among other members of their households and communities?
- **4.** Is compliance with the conditionality reasonably attainable among target beneficiary populations?
- **5.** What potential indirect effects and externalities are associated with the conditionality, positive and negative?
- **6.** Across the five above domains, are the associated benefits, burdens, risks and opportunities fairly distributed among affected parties?

The second step consisted of a qualitative research study that aimed to provide insight into the values, perspectives, and experiences of multiple actors involved in the design of conditional cash transfer programs, with a particular focus on their views surrounding the conditionalities for payment. The in-depth interviews explored how various CCT program designers made decisions about program conditionalities, the rationales they used to support their choices, and their views on what general qualities make certain behaviors or outcomes well suited for conditioning.²² This qualitative inquiry served to test and strengthen the conceptual analysis by eliciting nuanced perspectives and rich examples, enhancing the relevance and comprehensive identification of morally relevant features of conditionalities.²³ Furthermore, this empirical work provided valuable insights into the institutional and environmental constraints for CCT program design, identified strengths and pitfalls of different approaches, and offered practical recommendations of strategies to enhance CCTs across multiple ethically relevant dimensions.

The third step integrated the findings from the conceptual and empirical studies to generate the provisional guidance framework, mapping ethically relevant considerations emerging in the first two steps to the appropriate stages of the CCT policy cycle. Attention to each of the 6 ethical considerations for conditionalities translates into more specific considerations, inputs, and actions at different stages of the policy cycle. Ethical obligations extend beyond the design stage, carrying through program planning, implementation, and monitoring and evaluation (M&E). Thus, this framework offers specified guidance appropriate to the evolution of the CCT program, using a simplified model of the CCT policy cycle that focuses on conditionality selection (see Figure 3.1).





Source: Developed by author. Adapted from Young & Quinn (2002)²⁴

ETHICAL FRAMEWORK TO ASSESS CONDITIONALITIES FOR CCTS

At the heart of the framework is the list of six morally relevant considerations (Box 1), which inform the specific ethical analysis of conditionalities and the activities to be undertaken at various stages. In order to ground the framework, this section begins by presenting a summary of what each consideration entails and why it is ethically important.ⁱ The framework follows, presenting guidance for practitioners across the stages of the policy cycle. It begins with "*Getting Started: Defining the Problem, Setting Goals, and Understanding the Context*," which will be instrumental for developing the preliminary list of potential conditionalities and informing the subsequent ethical analysis. Then concrete considerations, inputs, and recommended activities are provided for the next 3 stages: (1) Design and Selection of Conditionalities, (2) Planning and Implementation, (3) Monitoring and Evaluation.ⁱⁱ A comprehensive table of the ethical guidance across these three stages is provided in Appendix 4.

Six Ethical Considerations

Likelihood of Producing Desired Outcomes

When evaluating potential conditionalities, it is critical to examine the evidence and determine how likely it is that a particular conditionality will translate into the expected and desired health benefit(s). As with any health program, obligations of beneficence require the designers to assess the benefits produced or harms averted through the uptake of the program.^{25,26,27,28} Because payments require compliance with

ⁱ A more comprehensive treatment of each of these considerations is presented in Manuscript 1.

ⁱⁱ Note that the ethical considerations put forth in the paper focus specifically on those related to the ethics of the conditionality. There are of course other ethical considerations relevant to the design of the program, how it is implemented, and the M&E procedures, however those are beyond the scope of this paper.

specific conditionalities, the burden of proof lies with the government or sponsoring agency to justify that these conditionalities will in fact promote the public health aims of the program.^{4,17} Attention to the potential effectiveness of conditionalities requires consideration of three separate considerations: (1) Does the conditionality intervene at a critical point in the causal pathway? (2) How large are the expected benefits? and (3) How durable are the anticipated health gains? ^{3,21}

Risks & Burdens

Obligations of non-maleficence require an assessment of potential risks and burdens associated with conditionalities.^{25,26,27,28,29} These can include physical, psychological, social, financial, and legal risks.³⁰ [See Box 3] Though conditionalities inherently pose some level of burden on program beneficiaries, they should not be overly burdensome for impoverished individuals and households, who already face a multitude of competing demands on their time and resources.^{31,32} Additionally, for CCTs targeting behaviors requiring ongoing maintenance, there may be harms associated with starting then stopping the incentive payments, leaving beneficiaries worse off. This can happen when there is motivational crowd-out or in the case of treatment adherence, where abrupt discontinuation of medications can lead to serious or even fatal consequences.^{33,34} Taking a careful inventory of the range of potential risks and burdens associated with certain behaviors can inform which conditionalities are chosen and what precautions should be taken to avoid or minimize potential associated harms.

Receptivity

Receptivity relates to the attitudes of the potential beneficiaries toward the behaviors being promoted by the program. How open are they to practicing them,

independent of the cash offer? Understanding receptivity to conditioned behaviors will enable program designers to determine what, if any, threat the program poses to autonomy and self-determination. Though CCTs, and incentives more generally, have been criticized for disrespecting individual autonomy, there are many instances in which monetary incentives are neutral to or even promote autonomy interests – helping beneficiaries overcome economic, social, or even motivational barriers to pursuing behaviors consistent with their desires of securing health and well-being for themselves and their families.^{4,6,35,36,37,38,39,40,41,42} An examination of the degree of receptivity and the nature of resistance to engaging behaviors will inform whether the cash incentive jeopardizes meaningful, autonomous choice that engages important self-determination interests. Receptivity is also instrumentally relevant because it can be a predictor of compliance and subsequent effectiveness. Where possible, programmers should evaluate acceptability of the conditionality at the individual, household, and community level, noting that this may change over the lifecycle of the program.ⁱⁱⁱ

Attainability

Conditionalities must be attainable, something that beneficiaries can reasonably succeed in doing. When there are excessive barriers to performing a conditioned behavior or achieving the pre-specified outcome, the program will not only fail to realize its intended health benefits, but will effectively deny opportunities for participants to receive much needed social assistance due to reasons beyond their control.^{1217,43} Impediments to

ⁱⁱⁱ Note that there may be instances in which the direct beneficiaries are receptive to the behavior, but it may be less well accepted by other members in their households and communities. In some cases, the value of the money may make these external actors more open to the direct beneficiaries practicing the behavior. However, lack of receptivity among family or community members may introduce risks of social or even physical harms. This indicates the need to carefully assess and address these potential risks.

attainability include geographic barriers to access, social constraints on behavior, financial barriers, and, in the case of outcome-based conditionalities, even biological factors. Careful consideration of how reasonable it is for beneficiaries to comply with a specific conditionality based on their context can help CCT designers select conditionalities that are realistically achievable.²⁹ Participants should have a fair opportunity to realize the benefits of the program, both the intrinsic benefit of improved health and the extrinsic benefit of payment.^{44,45,46}

Indirect Impacts & Externalities

Conditioning payment on certain kinds of behaviors and outcomes can also generate indirect impacts for beneficiaries, as well as externalities for other parties who are not direct participants in the program.^{47,48,49,50} These can be positive or negative – promoting or setting back other interests for beneficiaries and those in their households, communities, and societies. Factoring these effects into the ethical analysis can facilitate the selection of conditionalities that produce the greatest overall good while limiting unintended consequences. Attention to these effects also engage distributive justice considerations regarding how the benefits and harms of the program are distributed across the affected parties. Conditionalities that not only improve health for beneficiaries but also contribute more broadly to their wellbeing and the wellbeing of others are highly favorable. Where there is the potential for negative effects and externalities, it who will be affected, how serious will the effects be, and what strategies can minimize these threats? Negative externalities borne by non-participants are especially important to consider given that these persons do not voluntarily accept these risks, nor do they reap the benefits, but they are nonetheless affected by the program.

Distributive Considerations

When evaluating potential conditionalities across these 5 categories of considerations, it is important to recognize that not all beneficiaries or subgroups of beneficiaries will fare equally across these criteria. Beneficiary populations are often quite heterogeneous, and the program will likely have differential impacts on the various subgroups participating.⁵¹ Thus, factoring in distributional considerations is critical to the moral analysis of conditionalities. Are there particular subgroups who will be disproportionately burdened by the conditioned behaviors, while others easily reap the benefits? Which people are most likely to be non-receptive to or unable to comply with conditionalities, and what can be done to ensure they can fairly realize the associated benefits of the program? Justice requires consideration of fair distribution of benefits and burdens as well as limiting the potential for the program to exacerbate disparities.^{52,53} This is particularly critical given that CCTs often aim to reduce inequities and promote long-term prosperity for the most disadvantaged by investing in multiple determinants of wellbeing (e.g., health, education, poverty).

Getting Started: Setting Goals, Defining the Health Problem, & Understanding the Context

Successful application of the framework will require a clear understanding of the specific goals of the CCT program, the problem it aims to address, and the context in which it will be implemented. Attention to the program goals and its specific objectives will critically inform the kinds of conditionalities considered and the subsequent evaluation of how well those conditionalities perform in realizing those goals. For instance, a CCT that has poverty alleviation as its primary objective with secondary goals

targeting primary health is likely to look very different from a CCT directly focused on a specific health issue. Clear articulation of program goals at the onset can orient program designers to the kinds of conditionalities they should consider and frame various aspects of the ethical analysis. Additionally, health issues and epidemics are often highly contextualized. They emerge and persist for a variety of reasons relevant to the local environment, culture, and socio-economic factors. Understanding the drivers of the health problem in a particular setting is crucial for identifying potential points of intervention that the CCT can target. Furthermore, assessment of local contextual factors can identify constraints, such as limitations of the health system or cultural beliefs and attitudes, that will inform which conditionalities will be appropriate for a given setting and population. Together, a clear conception of program goals and thorough understanding of the health problem and context comprise a critical first step to frame decisions about conditionalities for the CCT. Box 2 provides some key questions for program designers to consider during this early planning stage as they pertain to goals, the health issue, and context. Some of the questions map closely to a particular question in Box 1 (e.g., #3 and #5 below map to producing outcomes and receptivity, respectively) whereas the other questions are more crosscutting with regard to the 6 ethical considerations described above.

Box 2 | Getting Started: Key Questions for Program Goals, Health Problems & Context

- 1. What are the primary and secondary goals of your program, as they relate to health and wellbeing?
 - What are your specific aims, objectives, and targets?
 - > If there are multiple, what is their relative priority?
- 2. What are the key drivers of the health problem in the program setting?
- 3. Which behavioral changes or activities represent potential high-impact points of intervention, based on the goals and setting?
 - Refer to the literature on efficacy and effectiveness of interventions, consult experts in relevant disciplines (psychology, behavioral economics, public health, medicine)
- 4. What are the key reasons why the target beneficiaries do not currently practice the various desired health promoting behavior(s)?
 - Reasons may include, but are not limited to: lack of information and/or understanding, insufficient motivation and discounting of future benefits, inconsistency with local beliefs and norms, barriers to practicing behaviors, and fear of associated harms.
 - This may require engagement activities and/or formative research
- 5. How open are the target beneficiary groups to practicing different kinds of behaviors in the causal pathway associated with the desired outcome?
 - Are some behaviors unlikely to be acceptable to the beneficiary population whereas others would be more welcome?
 - > What, if any, are the sources of resistance to these behaviors?
 - This may require engagement activities and/or formative research
- 6. How heterogeneous is the beneficiary population?
 - Are there_subgroups or minorities that may require different kinds of strategies and inputs?

Stage 1: Program Design - Selecting the Conditionalities

Once the goals of the program are firmly established and the relevant contextual

factors have been explored, the next stage in the CCT policy cycle is to design the

approach and determine which conditionalities the program will adopt. The ethical

assessment of the conditionality options can be an iterative process – with successive

rounds of identifying candidates, narrowing the list of potential conditionalities based on

practical considerations, and prospective analysis of how well these options might

perform across the 6 key ethical considerations – until the optimal conditionality or set of conditionalities emerge.

Generating a List of Potential Conditionalities

The first step in this stage is to generate the list of potential options. It is important to consider the range of possible options since some will perform better than others along the morally relevant criteria, and assessment of a wider range of options increases the likelihood that the conditionalities ultimately selected are the optimal ones. The number of initial conditionalities put forward for review will depend on the health goals, program setting, and available resources for the CCT. The first three questions in Box 2 provide a useful set of considerations to identify potential conditionalities at this stage.

Narrowing the Options

With a wide range of potential options on which to condition payment, program designers can apply the following practical and ethical considerations to narrow their choices to a few approaches before conducting an in-depth ethical analysis. Though many potential behaviors or outcomes could theoretically function as high-impact program conditionalities, attention to the practical realities and constraints can serve as a useful first pass in this narrowing phase. Is there adequate capacity on the supply side to meet new demand for the services and goods generated by the program? Can compliance with the conditionality be objectively verified? What are the associated costs for a given conditionality, both in the delivery of services and in the verification of compliance? There will naturally be some tradeoffs between what might be ideal and what is practically feasible. These considerations will help reduce the list to those that are most likely to be viable in the context. For instance, imagine a hypothetical HIV prevention

CCT. Recent evidence has demonstrated that adherence to treatment among those who are HIV positive is highly effective in preventing transmission of the virus to uninfected partners – in other words, "treatment as prevention."⁵⁴ These data supports the idea of conditioning on the outcome of viral suppression. However, in many settings, the human and financial resources required to conduct routine viral load monitoring for a large cohort of CCT beneficiaries would be impractical and cost-ineffective. Program designers can further narrow the list of viable candidates for conditionalities on the bases of social and political acceptability, associated risks, and potential to produce desired health impacts, removing those that seem the most problematic across these domains.

In-Depth Ethical Assessment

With a short-list of potential conditionalities, the next step is to conduct an indepth ethical analysis of the remaining options. This will facilitate selection of the ethically optimal conditionalities, identification of activities and inputs for the planning and implementation stage, and highlight important indicators for the M&E stage. Box 3 provides a set of questions for this in-depth analysis as they pertain to the six categories of moral considerations discussed above, with distributional considerations indicated by a >. The final row presents 3 general types of indicators that program designers can apply when evaluating conditionalities across these ethical considerations, highlighting areas of strength (\clubsuit), weakness (\triangle) and uncertainty (?).

Note that these considerations are meant to be applied on balance, with no one consideration taking precedence over another. However, applied sequentially, each category of considerations can identify stopping points – that is, if a conditionality does not sufficiently perform on the early considerations, that option can be discarded without further assessment across the remaining considerations. Not all considerations under each

category will be relevant in every setting. Also, note that multiple conditionalities can ultimately be included, but all conditionalities should be assessed along the following criteria.

Box 3: Key Questions for Stage 1: Program Design & Conditionality Selection		
Producing Desired Health Outcomes	 Does the conditionality target an important point of intervention in the causal pathway? Is there evidence in support of the effectiveness of this conditionality? What is the strength and reliability of the evidence? How large are the expected health gains associated with the conditionality? How meaningful are these gains with regard to improvements in wellbeing? How durable are the health gains associated with this conditionality? If the conditionality has time-limited effects and associated benefits require sustained behavior change, what are the potential effects on intrinsic motivation (crowd-in, crowd-out) and the potential for behavioral maintenance? How equitable is the expected distribution of health gains across the subgroups of the beneficiary population? Are there any populations who are unlikely to benefit from this conditionality, even if it is generally effective for the broader beneficiary population? 	
Risks and Burdens	 What physical harms are associated with the conditioned behavior(s) (e.g., toxicity of medications, risks of medical procedures)? What psychological risks are associated with the conditioned behavior(s) (e.g. anxiety and depression with HIV testing if positive)? What social risks are associated with the conditionality? How might the conditioned behavior or outcome negatively impact relationships between beneficiaries and their families, communities, and social networks? How serious are these potential harms? Are they reversible or permanent? What can be done to minimize these risks? With added precautions, is the level of risk acceptable? Are certain groups at greater exposure to risk than others for this conditionality? Are there alternative strategies that avoid or minimize this risk for these more vulnerable groups? 	
Receptivity	 Is the practice promoted by the conditionality acceptable to target beneficiary group(s)? Is the practice acceptable to other members of the household? Is it acceptable in the broader community? Does the offer of money increase receptivity among household and/or community members? What are the sources of non-receptivity? Are they central to individual values and beliefs that are quite stable or are they more subject to change? What might be done to increase receptivity among the beneficiary population? Are there any particular groups or minorities that are less likely to be receptive to this conditionality, even if it is generally well accepted? 	

Attainability	 Do beneficiaries have reasonable opportunities to successfully comply with this conditionality? What kinds of financial, physical, social, or cultural barriers to compliance exist for the beneficiary population, particularly the most disadvantaged? For outcome-based conditionalities, are there biological barriers that can hinder attainment, at least for some members of the beneficiary population? For this conditionality, are there any groups that face multiple and/or insurmountable barriers to attainment? Are there additional inputs, such as complementary transportation or ancillary services, that can reduce barriers and ensure reasonable opportunity for attainment?
Indirect Impacts and Externalities	 Does the conditionality have additional indirect benefits for program participants that are associated with the behavior or outcome (e.g. ability to return to work, inputs to women's empowerment)? Does the conditionality have additional indirect harms for program beneficiaries associated the behavior or outcome (e.g. efforts diverted from other important inputs to health and wellbeing)? What are the foreseeable positive externalities for those not directly participating, at the household, community, and societal level (e.g. herd immunity, positive spillovers)? What are the foreseeable negative externalities for those not directly participating, at the household, community, and societal level (e.g. stress on the local health system reduces quality and access for non-beneficiaries)? Where negative effects are foreseeable or hypothesized, who is likely to be affected, how severe are these negative externalities, and what precautions, if any, can be taken to avoid or minimize them? Together with the direct benefits and harms, what is the overall distribution of associated positive and negative effects of this conditionality? Are the potential risks and negative externalities clustered among certain subgroups?
+	Looks promising. Proceed. Ensure implementation factors are in place to match assumptions. Check to see if prospective analysis/assumptions hold in M&E.
\wedge	Caution. May be inappropriate to proceed. Assess to see if negative impacts can be addressed through various safeguards. If you proceed, monitor closely.
?	Uncertainty/Limited evidence. Flag as an important priority to monitor. Consider a small pilot first to assess and build evidence.

The ideal is to select conditionalities that appear favorable across many or most of these ethical considerations. In reality, there are likely to be at least a few aspects of the conditionality that are unknown or raise concerns across of these domains of ethical considerations. When certain items are flagged for "caution," program designers can assess the severity of the concern along with opportunities to mitigate them or avoid them completely and weigh them against the positive attributes of the conditionality. There will be cases where trade-offs must be made between these ethical domains. For example, programmers may have to make a choice between one conditionality that has good prospects to yield the desired health benefits but is less attainable, and another conditionality that is easier to comply with but with smaller associated health gains. Again, this requires balancing the range of ethical considerations – perhaps beneficiaries are much more receptive to one of these options – to help sort through the comparative advantages and disadvantages. In some cases, low performance on one ethical indicator (e.g. low receptivity and opposition on cultural grounds) may necessitate selecting a different conditionality that, while still effective, produces lower overall health gains. Alternatively, the program could offer additional conditionalities to provide greater choice for the heterogeneous beneficiary population, which would improve the likelihood that beneficiaries would be receptive to at least one of the options, but at the same time add cost and administrative complexity.

In some instances, there may be more positive effects associated with the indirect impacts and externalities, as may be the case with many vaccines. Depending on the aims of the program, conditioning on a behavior that has smaller direct impacts on the outcome among beneficiaries but has significant positive indirect effects and spillovers may be justifiable, assuming that the conditionality does not impose too much burden or risk on the direct participants nor interfere with their considered interests. For example, consider a program conditioning on the use of insecticide-treated bednets (ITNs). In addition to providing direct protection, ITN use has been shown to produce significant positive externalities, reducing malaria morbidity and mortality among non-ITN users

with the geographical area.⁵⁵ Yet in many places, there is still inconsistent use, with purchasing and re-treating nets as a low priority.^{56,57} Furthermore, evidence shows that despite messaging about allocating nets to children under five, who are especially vulnerable to malaria, ITNs are often used instead by adult members of the household.⁵⁸ In this case, while there may be some small burden to those using nets, with low perceptions of private benefit, the indirect benefits for non-ITN users, particularly children, could justify proceeding with this conditionality.

Activities and Inputs to Enhance the Ethical Analysis During the Design Phase

There are various strategies, activities, and inputs that are useful when evaluating candidate conditionalities across these categories. A robust situational analysis can provide critical insight into the nature of the health problem and assess the capacity of the local health system to provide various services tied to the conditionality. For interventions under consideration, a thorough examination of the existing data on efficacy and effectiveness - with attention to the strength and reliability of that evidence base will inform the assessment of potential direct benefits, risks and adverse effects, and positive and negative externalities. Formative research and early engagement with beneficiary communities can generate context-specific data relevant to all six considerations, while building buy-in for the program. Programs exploring more traditional types of CCT conditionalities have a wealth of knowledge to draw upon, both in the literature and through direct consultation with other experienced program designers. For more novel applications of incentives, interdisciplinary collaboration with relevant experts in psychology, behavioral economics, public health, and medicine is recommended.

Stage 2: Planning and Implementation

While in-depth ethical assessment during the conditionality selection stage will inform an ethically acceptable and favorable design, the *actual* ethical acceptability of the approach will be dependent upon how that design is executed. Even highly promising conditionalities can fall short without proper attention to the processes leading up to and through program rollout. Attending to the various ethical considerations during the planning and implementation stage – with corresponding investments and activities – will help ensure that the CCT program performs as expected. Box 4 presents the relevant considerations as they correspond to the six categories of ethical considerations put forth in Box 1, with distributional considerations indicated by a >. Recommended activities and investments for this stage follow.

Box 4: Key Questions for Stage 2: Planning and Implementation		
Producing Desired Health Outcomes	 What investments in the supply side need to be made to ensure behavior change associated with conditionalities translates to health improvement (e.g. quality improvement of health services)? If conditioning on outcomes, do beneficiaries have adequate knowledge, tools, and access to necessary goods and services to realize desired health gains? [See Attainability] 	
	Are there certain areas where there are greater shortcomings on the supply side that will translate to disproportionate effects across the population?	
Risks and Burdens	 Where there are potential risks, how can the implementation and the offering of program services be sensitive to potential threats of harm? (e.g. privacy and confidentiality when dealing with stigmatized conditions) How do you plan to inform beneficiaries about potential risks of participating? What procedures, services, and/or referral mechanisms can you put in place to direct those who have experienced harms to get help? Are there special procedures in place to deal with risks that are particular to certain groups or types of beneficiaries? 	

	 Leading up to the implementation, in what ways can you engage and
Receptivity	educate the beneficiary communities and local leaders to enhance
	acceptability of the program and its conditioned behaviors?
	 Do you plan to use promoters or other liaisons to communicate with
	potential beneficiaries about the program?
	 Are there additional ways in which the community can be involved in the
	roll-out of the program? Examples include lotteries and award ceremonies
	for participants and community-based committees that help oversee
	 implementation What additional activities might be needed to improve receptivity
	among outlier communities and individuals that are not initially
	receptive?
Attainability	 What investments in the supply-side need to be put in place before
Attainability	introducing the program? (e.g. improvements in supply-chain, construction
	of new facilities, additional providers in program areas, mobile services,
	etc.)
	 What complementary services need to be set up to facilitate access to conditioned complementary and the set of conditioned outcomes 2 (conditioned outcomes 2)
	conditioned services or attainment of conditioned outcomes? (e.g., transportation, free distribution of related goods, education and
	counselling services, etc.)
	 Do you want to have "hard" conditionalities or "soft" conditionalities? How
	strongly are the conditionalities enforced?
	In cases where certain areas need major investments in the health
	infrastructure, consider a phased roll-out, allowing time to build the
	necessary infrastructure in advance (this can also help M&E – areas
	receiving the program later can serve as controls)
	Are the complementary services offered provided in such a way that they do not discriminate against cortain populations (o.g., gonder)
	they do not discriminate against certain populations (e.g., gender- specific transport)?
Indirect	 Can conditioned health visits include a combination of services beyond
Indirect	those directly related to the health goal to more comprehensively address
Impacts and	beneficiary needs?
Externalities	 Are there any complementary services that can be provided to
	households or communities to help minimize resources being diverted
	away from other persons and/or priorities in ways that can be harmful?
	 Are there specific implementation strategies that can encourage positive apillour effects (a.g., community wide education events for beneficiaries)
	spillover effects (e.g., community-wide education events for beneficiaries and non-beneficiaries)?
	 How can the program work with existing structures and local vendors to
	reduce potential market distortions (e.g., by contracting local businesses)

Activities and Inputs to Enhance the Planning and Implementation as Related to Conditionalities

Various activities and investments during the planning and implementation can

help ensure that the program meets its ethical obligations, as related to the conditionality.

These include engagement activities with beneficiary communities, investment in the

health infrastructure and related supply-side factors, provision of complementary

services, and procedures related to the delivery and enforcement of conditionalities. Engagement activities with beneficiaries and their communities can include everything from town halls to educate people about the program and build buy-in, to community events surrounding key points in the implementation to the program, to direct participation of community members in the administration of various aspects of the program. At minimum, clear communication about the program is necessary to ensure beneficiaries know what is required of those participating – an essential precursor for effectiveness and attainability – and that they understand what risks or burdens may be associated with conditioned behaviors. More active engagement can strengthen the delivery of the program, especially for marginalized groups, who may not be as well connected to social networks and thus risk being uninformed..

A number of community-based CCTs have emerged, using community structures to help administer various aspects of programs, such as the program introduced by the Tanzanian Social Action Fund (TASAF) and Panama's *Red de Oportunidades*, which introduced community-based nutrition education.^{2,59} Involvement of community actors conveys respect and can enhance receptivity to the program. Community engagement can also help identify local partners that can provide services and goods related to the program, which not only avoids duplication and inefficiencies but can potentially prevent market distortions. For instance, the *Red Solidaria* in El Salvador contracted local NGOs to provide mobile health services to beneficiary communities.² Some have even suggested a role for "community-based M&E," using community score cards in combination with more transparent data sharing and management (see following section).⁶⁰ Involving and engaging communities is both instrumentally relevant to ensure

the implementation of the design meets ethical standards, and is also intrinsically valuable in conveying respect and building public trust.²⁶ However, given that engagement activities require additional resources and place time burdens on those who participate, it is important to ensure that engagement with communities (1) happens at appropriate points in the program cycle to add value, (2) is conducted in ways that will elicit appropriate and relevant input and feedback, and (3) captures the range of relevant stakeholder perspectives.

Beyond engagement, investment in the supply side can be essential for ensuring the availability and quality of health services associated with the conditionality. This includes inputs to the health system infrastructure related to facilities, providers and program personnel, and the supply chain for related health commodities. Schady and Fizbein provide an extended discussion of the kinds of supply-side investments that may be needed to ensure the adequacy of services associated with the CCT.² An excerpted table of examples of supply-side interventions accompanying CCTs is provided in Appendix 5. These kinds of investments will help ensure that conditionalities are attainable and that the quality is sufficient to translate into the desired health gains as well as avert potential harms.

It is also important to ensure appropriate investments are made in training program personnel and providers, not only to ensure quality but also with regard to respectful treatment of program beneficiaries. This is particularly important for programs targeting marginalized and/or stigmatized populations, whose cultural needs may require different approaches to care delivery and who may have experienced a history of disrespect and shame when interacting with the health system.⁶¹ Additional attention to

cultural norms is warranted when making these supply-side investments. For instance, recognizing that there may be some gender-related concerns about women seeking health services from male doctors can direct supply-side investments toward the recruitment and training of more female health workers.⁶² It may not be possible to make all necessary improvements to the health infrastructure across all program settings before the introduction of the program. In some circumstances, CCT designers may want to consider a phased roll-out, introducing the program first in areas that have adequate facilities and services while building capacity and infrastructure in other regions for later implementation. Phasing implementation also has advantages for M&E, because the populations that receive the CCT later can serve as controls for the early intervention groups.⁶³

Other aspects of planning and implementation that are relevant to the ethics of the conditionalities include the provision of complementary services and the manner in which services related to the conditionality are delivered and enforced. In order to ensure the conditionalities are reasonably attainable, the program may need to provide additional services to beneficiaries, such as free transportation to health facilities for clinic visits or free distribution of condoms in CCTs for HIV prevention. Additionally, the mode of delivery for services can have important implications for receptivity, respect, and associated risks. This includes due consideration of protections for privacy and confidentiality, particularly when dealing with sensitive health issues. For example, a CCT conditioning on HIV screening would want to limit any potential disclosures of such private information. Furthermore, the implementation plan should build in resources for related counseling for beneficiaries with positive diagnoses and facilitated linkages to

care. The enforcement of conditionalities also has important implications. Some programs have "hard conditionalities" which are rigidly enforced – if you do not comply, you do not receive payment. Other programs have "softer" enforcement policies, with outreach to beneficiaries who fail to comply, forgiveness when there are extenuating circumstances, and in some cases, multiple lapses in compliance before the monetary benefits are suspended.⁶⁴ Soft conditionalities allow greater flexibility when certain populations face significant barriers to attainability. However, there may be tradeoffs in the effectiveness of the approach if beneficiaries know that the conditionalities will not be strictly enforced. Program designers can weigh the relative advantages and disadvantages of hard versus soft conditionalities in their context, potentially striking a middle ground of hard conditionalities with allowances for certain extenuating circumstances.

Stage 3: Monitoring & Evaluation

The third stage in the CCT policy cycle involves monitoring and evaluating the performance of the program. The M&E strategy should include specific indicators, targets, and data sources on the ethically relevant aspects of the conditionality. Box 5 lays out the specific considerations relevant to the core ethical questions relevant to the conditionality (as detailed in Box 1). Rigorous M&E across these ethically relevant indicators – with attention to the distribution of benefits, harms, and opportunities – will allow program designer to determine if, in actuality, the conditionalities are ethically sound. Any ethically relevant aspects flagged with "caution" (Δ) or "uncertainty" (?) during the design should be priority areas for the M&E.

Box 5: Key Considerations for Stage 3: Monitoring and Evaluation		
	 Was the conditionality effective in producing the desired heath gains? In the 	
Producing Desired	near term? In the long term?	
Health	 What was the effect size of the associated health gains? 	
Outcomes	 Are relevant indicators being collected at appropriate time intervals to capture effects in both the short and long term? Is there any follow-up of 	
	beneficiaries in the post-intervention period to assess crowding effects,	
	potential washout or rebound, habituation, etc.?	
	 If desired and predicted effects are not observed, why did the program fail to yield these outcomes? What adjustments can be made? 	
	 How were different segments of the target population affected? Were there 	
	any major disparities? Does the M&E plan have appropriate data to assess	
	individual/subgroup effects, beyond aggregate performance indicators?	
Risks and	Is there timely monitoring of potential associated harms?Are there appropriate methods and multiple channels for collecting	
Burdens	information on harms (clinical follow-ups to assess physical harms, context-	
	appropriate ways for beneficiaries to air grievances, etc.)	
	 Are there mechanisms to address identified harms in a timely manner? Are there "aten" precedures for exceptions (unsecondable harms? 	
	 Are there "stop" procedures for egregious / unacceptable harms? Where harms exist, how are they distributed across the beneficiary 	
	population? Do some experience greater adverse effects than others?	
	What can be done to remedy this and prevent exacerbation of inequities?	
Receptivity	 Does the M&E plan include ways to track changes in local acceptability of certain behaviors (positive or negative)? 	
	> May be signaled by other data (e.g., compliance rates, social harms)	
	 Have there been any cultural, religious or political shifts that could influence 	
	receptivity to conditioned behaviors over time?	
	 Consider periodic follow-up assessments of receptivity and potential emergent events that would trigger immediate re-assessment 	
	 Where necessary, can be done to improve receptivity? 	
Attainability	 Assess compliance – what proportion of beneficiaries fulfilled the 	
	conditionalities regularly? Are there any red flags of low compliance, on aggregate or among subgroups? Were there specific populations that, on	
	average, had lower rates of compliance?	
	 What are the biggest barriers to compliance – from both those who complied 	
	and those unable to? Solicit feedback on what might facilitate attainability with potential to provide additional services	
	 If unreasonably difficult to comply, adjust as needed (reduce frequency, 	
	change implementation features, or change conditioned behaviors)	
	> Who were the people who were non-compliant or dropped out of the	
	program? What were the reasons for this? (mechanisms to collect data on this, at time of non-compliance and/or exit from program)	
Indirect	 Beyond direct outcome(s) of interest, do beneficiaries experience additional 	
Impacts and	positive or negative effects through their practice of conditioned behaviors?	
Externalities	 Based on self-report, service utilization/linkages to care (greater uptake of other services; crowd out of other health care), impacts on other health 	
	outcomes, impacts on non-health outcomes related to wellbeing (e.g.	
	increased productivity, enhanced agency; negative social effects)	
	 Are there any spillover effects/externalities for other members of the bounded partners or community related to the conditioned behavior? 	
	 household, partners or community related to the conditioned behavior? Some can be anticipated in advance and monitored. Others will be 	
	emergent. Importance of feedback mechanisms to capture the	
	unanticipated as well as track progress on hypothesized	
	What is the balance and distribution of benefits and harms across the various stakeholders affected by the program?	
	valious stakenoluers allected by the program:	

In collecting relevant data points to support the evaluation of the program, there are certain practices that program designers can consider to enhance their assessment of these ethical dimensions. Including multiple types of data will enable evaluators to make determinations on different kinds of questions. Quantitative data can inform questions related to "how much?" - how much benefit or harm was associated with the conditionality? How receptive and how compliant were the beneficiaries? Qualitative data can provide valuable insight for "why"- why was the conditionality was successful or unsuccessful? Why were certain populations not receptive? Why were certain populations unable to comply? A mixed methods approach provides data to both determine performance on ethically relevant indicators and to inform next steps for necessary adjustments.⁶⁵ Additionally, having multiple channels for feedback can provide more comprehensive information, capturing input from different kinds of beneficiaries on a variety of morally relevant aspects of the conditionalities.⁶⁶ As noted above, some programs are exploring more participatory approaches to M&E through the use of community scorecards, and other programs have utilized novel technologies to solicit feedback anonymously via tablet-based platforms.⁶⁷ Mechanisms for anonymous feedback may allow for more truthful responses while also protecting the confidentiality of informants.iv

A further consideration relates to the timeliness of data collection. Are the relevant data points captured at appropriate intervals? It is particularly important to

^{iv} There is a vast literature on the various approaches, methods, measures, and indicators that can be used for M&E, including assessments of their comparative advantages. Guidance on specific strategies to adopt for M&E are beyond the scope of this paper, which instead aims to highlight general considerations for M&E to attend to the ethical considerations for the CCT conditionality.

rapidly identify any emergent harms or adverse events so that the program can be responsive in rectifying these issues and prevent further harms from occurring. For some indicators, pre-planned periodic intervals for data collection will be appropriate, while other indicators surrounding potential risks require more immediate feedback. Additionally, the M&E should incorporate methods to capture longer-term performance where appropriate – as relevant to durability of health gains. This may require follow-up with beneficiaries for a period after the intervention ends or after they graduate from the program. This is especially relevant for programs that aim to impact health and poverty in the long run, as compared to programs more narrowly focused on intervening during critical risk periods.

Attention to the distribution of effects will require the collection of more granular, disaggregated data, capturing information relevant to certain types of beneficiaries or subgroups. Interventions can have differential impacts, particularly when beneficiary populations are more heterogeneous, and when data is not disaggregated, inequitable distributions for some can be masked.⁶⁵ This not only pertains to the level of indicators collected, but also for the methods used in the evaluation. Existing health information systems and specific data management tools for the program can facilitate efficient collection of relevant indicators to support the evaluation.

Naturally, it will not be feasible to collect all kinds of data that one would like to comprehensively evaluate every ethical aspect of the CCT conditionality. However, the M&E plan should pay particularly close attention to any aspects of the conditionality flagged for concern in the prospective analysis. Additionally, where programmers suspect the potential for differential impacts of the conditionality across the population, measures

should be collected relevant to the hypothesized variables that can moderate the effects (e.g., urban/rural, male/female, religious or ethnic groups, etc.). Furthermore, the M&E plan can include triggers for deeper investigation into areas that emerge over the course of implication. For instance, if there is significantly lower compliance among particular sub-populations, that could signal the need for additional qualitative inquiry to understand the root causes contributing to lower compliance (e.g., lack of receptivity or barriers to attainability).

DISCUSSION

As CCTs continue to grow in popularity and are adopted for novel applications, in-depth analysis of the ethical aspects of program conditionalities is more important than ever. This framework aims to provide a set of ethical considerations relevant to CCT program conditionalities, with specified questions and actions pertaining to the different stages in the CCT policy cycle. It represents the most comprehensive tool to date that attends to the ethics of conditionality selection for CCTs. Application of this framework can facilitate the structured ethical analysis of the various options that a program may adopt for its conditionalities, prospectively and over the course of implementation, evaluation, and adjustment. The provision of ethical guidance spanning the policy cycle can enhance the practical application of this framework and its impact on the selection and refinement of program conditionalities to cohere with ethical norms. It recognizes that assumptions and hypotheses made in the design stage may require specific inputs during implementation and that, even with robust analysis informing the design, there can be a range of unintended and unanticipated effects that need to be monitored. Mapping to the policy cycle also allows for greater responsiveness to changes and cultural shifts that

can arise over the lifecycle of the program – which can impact the ethical assessment of conditionalities. Identification of ethically relevant shifts through the M&E plan allows CCT program architects to adapt the implementation strategy and/or conditionalities accordingly.

The framework is designed for broad application to a range of CCT programs, operating in diverse settings with a variety of public health and development goals. While its development was based on the experiences of cash transfer programs operating in low and middle-income countries, there may be some transferability for other types of approaches using economic incentives with conditionalities (e.g. in-kind transfers, lotteries) as well as cash transfer programs in higher income settings, with due attention to the relevant contextual factors in applying the considerations laid out above.

The framework is not meant to provide a single clear answer on what CCT program designers should condition for payment and its application will not resolve all disagreements. Because the considerations are meant to be applied on balance, disagreements may remain about the appropriate tradeoffs across these considerations and which option or set of options represent the "optimal" conditionalities. However, it will support structured analysis and stimulate discussion around the ethical strengths and weaknesses of specific conditionalities.

CONCLUSION

This framework represents a first-generation tool to support ethical decisionmaking for CCT conditionalities. Though its development was informed by an extensive review of the literature, empirical investigation with CCT programmers, and the conceptual analysis, it would further benefit from additional vetting by key stakeholders

and application by CCT designers. Further discussion, research and pilot testing can help strengthen and refine this initial framework. The current framework can serve as a critical first step to conducting comprehensive ethical analysis of conditionalities for CCT programs and initiate discussions, debates, and application that will contribute to further development of ethics guidance for conditionality selection.

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CONCLUSION

Over the last two decades, conditional cash transfers have been used in over 60 countries to advance development objectives and promote public health. CCTs have garnered international attention and stimulated research into new applications of the approach, with continued expansion and investment from countries and donors. Although much research has been conducted on the efficacy of various CCTs, how well they are targeted to reach those most in need, and even whether conditionalities are necessary, the question of which conditionalities should be attached to payment had been relatively underexplored. The research presented in this dissertation addresses this critical gap in the literature, as presented in the three manuscripts. This chapter summarizes the key findings from this work then discusses next steps and additional areas for future inquiry.

Summary of Findings

Aim 1: Identify and define the moral considerations relevant to conditionality selection

This conceptual exercise, presented in Manuscript 1, drew upon various public health ethics and social justice frameworks to characterize the universe of morally relevant considerations for setting CCT conditionalities. The combined use of social justice theories and public health ethics frameworks supported the generation of a wide range of considerations with nuanced and detailed justifications for their moral relevance. To further develop, specify, and refine the principles and moral considerations from the existing work, I drew heavily upon the documented experience of existing CCTs through careful review of operational documents, impact evaluations, systematic reviews and policy papers. The manuscript identifies five categories of morally relevant considerations that program designers should consider when assessing which behaviors or outcomes they require for payment: (1) Likelihood of yielding desired outcomes; (2) Risks & Burdens; (3) Receptivity; (4) Attainability; and (5) Indirect Impacts & Externalities. The paper also calls attention to a range of cross-cutting distributional considerations, recognizing that not all beneficiaries or subgroups of beneficiaries will fare equally across the five categories of morally relevant considerations. Table 1.2 presents a summary of these categories, the specific considerations entailed under each, and the principles from which they derive their moral relevance. An abridged presentation of these findings is also presented in Manuscript 3 and serves as the foundation of the action-guiding framework.

Taken on balance, with due reflection on distributional impacts, these five categories represent a comprehensive set of considerations for the moral analysis of specific conditionalities. When developing a CCT program, this analysis should inform the kinds of evidence collected, engagement with relevant stakeholders, implementation strategies, and monitoring and evaluation (M&E) to capture performance across these indicators. By attending to these five morally relevant categories, CCT designers can select the ethically optimal set of conditionalities for their setting, ensuring that the program realizes it stated goals, protects its beneficiaries from unintended harms, and coheres with the aims of social justice and international development.

Aim 2: Provide insight into the perspectives and experiences of actors involved in CCT design, focusing on their views surrounding the conditionalities attached to payment

To explore this second aim, I conducted a qualitative study using in-depth interviews with 18 informants to explore how various CCT program designers made decisions about program conditionalities, the rationales they used to support their choice of conditionalities, and their views on what general qualities make certain behaviors or outcomes well suited for conditioning. This work is presented in Manuscript 2. Program designers discussed the following key considerations for selecting conditionalities: (1) alignment with program goals and likelihood for producing the corresponding desired outcome(s); (2) opportunities for program beneficiaries to succeed in complying with conditionalities; (3) potential risks associated with conditioned behaviors or outcomes; (4) acceptability of the conditionalities to the target population; and (5) the programmatic feasibility of enforcing conditionalities.

Informants also emphasized the importance of contextual and programmatic factors for applying these considerations. These included the nature of the health condition targeted by the CCT (e.g., sexually transmitted infection, chronic versus acute condition), the characteristics of the beneficiary population (e.g., age, religion, gender), and the setting and existing health system infrastructure. The role of contextual and programmatic factors in applying the key considerations is illustrated through the comparison of two HIV prevention CCTs operating in very different contexts, which ultimately utilized very different conditionalities. One program targeted adolescent schoolgirls in a rural African setting, using a combination of conditionalities for schooling, HIV screening, and participation in an extracurricular activity. The second

program targeted men who have sex with men in an urban Latin American setting, conditioning on maintaining a negative status for new sexually transmitted infections.

The perspectives and experiences of these CCT program designers provide critical insight into the various considerations that have influenced the selection of behaviors and/or outcomes for CCT conditionalities. Although informants represented a diverse sample of program designers operating CCTs in a variety of countries with various health objectives, many themes that emerged were crosscutting and applied to conditionalities regardless of the background context. No matter the objective, informants agreed that conditionalities should have the prospect to effectively impact the health outcomes targeted by the program. Informants also emphasized the importance of setting conditionalities with which beneficiaries could reasonably comply. Other features such as measurability, acceptability, and low levels of associated risk were widely endorsed. These findings suggest that when candidate conditionalities positively align across these key considerations – strong evidence of effectiveness, high acceptability, reasonable opportunities to comply, low risk – they represent favorable options for conditioning.

Aim 3: Provide an action-guiding framework to help policy makers and program designers critically assess the ethics of various conditionalities

Building on the work of the first two manuscripts, Manuscript 3 presents an ethical framework to facilitate structured ethical analysis and evaluation of a particular CCT design through an iterative process of assessing, refining, and re-evaluating the program conditionalities at various stages in the program lifecycle (See Figure 3.1). It begins with "*Getting Started: Defining the Problem, Setting Goals, and Understanding the Context,*" which is instrumental for developing the preliminary list of potential

conditionalities and informing the subsequent ethical analysis. Concrete considerations, inputs, and recommended activities are provided for the next 3 stages: (1) Design and Selection of Conditionalities, (2) Planning and Implementation, (3) Monitoring and Evaluation. Six considerations form the basis of the ethical framework:

- 1. How likely is it that conditioning on this behavior or outcome will yield the desired health outcome(s)?
- 2. What physical, psychological, or social risks and/or burdens does the conditionality impose on the beneficiaries?
- 3. How receptive are the target beneficiaries to the conditionality, and is it well accepted among other members of their households and communities?
- 4. Is compliance with the conditionality reasonably attainable among target beneficiary populations?
- 5. What potential indirect effects and externalities are associated with the conditionality, positive and negative?
- 6. Across the five above domains, are the associated benefits, burdens, risks, and opportunities fairly distributed among affected parties?

Attention to each of the 6 ethical considerations for conditionalities translates into more specific considerations, inputs, and actions at different stages of the policy cycle. Appendix 4 provides the complete overview of the framework.

This framework represents the most comprehensive tool to date that attends to the ethics of conditionality selection for CCTs. Application of this framework can facilitate the structured ethical analysis of the various options that a program may adopt for its conditionalities, prospectively and over the course of implementation, evaluation, and adjustment. It is designed for broad application to a range of CCT programs, operating in diverse settings with a variety of public health and development goals

Next Steps & Additional Areas of Inquiry

This research represents a critical first step in mapping the morally relevant considerations for conditionalities, exploring CCT program designers' experiences and perspectives, and providing a framework for the structured ethical analysis of conditionality design. However, more work can be done to strengthen our understanding of the ethics of selecting conditionalities for CCTs and to translate this research into practice. This includes formal vetting of the action-guiding framework by key stakeholder groups, including policy-makers as well as beneficiary representatives. Additionally, application of the framework to new and ongoing CCTs could help further refine the set of considerations, expand the practical guidance for how to operationalize ethical commitments, and provide case studies to illustrate how the framework can be used by practitioners. This work could also be helpful to Institutional Review Boards and Research Ethics Committees that are evaluating protocols for new experimental CCT pilots, and IRB/REC members represent an additional stakeholder group from whom to seek feedback.

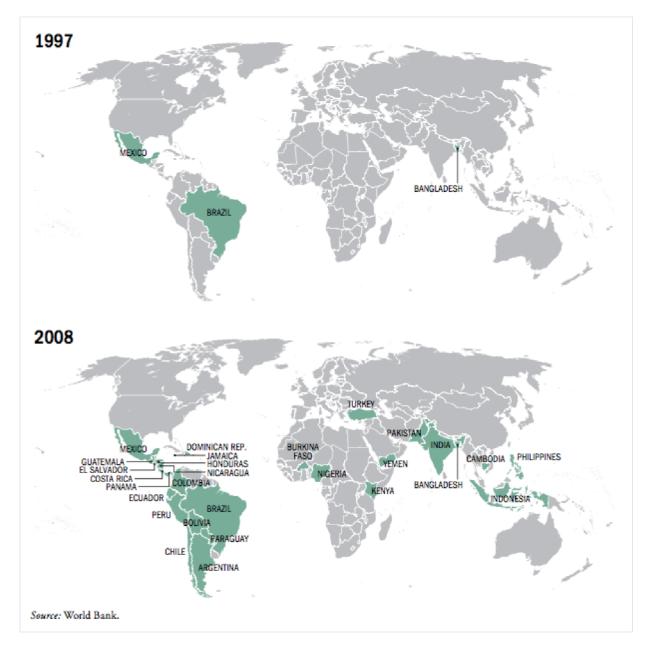
There are also a number of additional empirical studies that could build upon this work. Further analysis of the existing interview data could investigate the processes that support decision making for CCTs and identify good practices. Ongoing interviews with a larger sample of CCT designers might provide greater insights into the linkages between various themes, such as the relationship between risks and receptivity and how this relationship may change based on the nature of the health condition or attributes of the beneficiaries. Other complementary research projects exploring the experiences and perspectives of beneficiary populations with regard to program conditionalities would

provide additional perspectives from a key stakeholder group, potentially eliciting added considerations for the action-guiding framework.

The work presented in this dissertation, while not exhaustive, offers a comprehensive exploration of the ethical considerations for selecting conditionalities for CCTs, the defining feature of the approach. It combines conceptual analysis, empirical inquiry, and operational guidance to inform decisions on this essential feature of CCT design. The framework is designed for broad application to a range of CCT programs, operating in diverse settings with a variety of public health and development goals. Furthermore, this work may contribute to a broader understanding of the ethics for other types of approaches using economic incentives with conditionalities, such as in-kind transfers and lotteries. With increasing interest, investment, and proliferation of CCTs and other types of economic incentive programs, greater attention to the ethics of conditionality selection is paramount. This study provides key insights and guidance to strengthen ethical analysis of these programs and support morally sound CCT program designs.

Appendix 1: Supplemental Background on CCTs





Program	Objectives	Conditionalities
Brazil Bolsa Familia	Increase educational attainment of poor school-age children and reduce current and future poverty	 Primary and secondary school enrollment and attendance (85% age <15; 75% ages 15-18) Reproductive health education and family planning counseling Pregnant & lactating women: prenatal care, vaccinations, nutrition, education Children 0-5 must access and receive vaccinations and growth monitoring visits, nutritional supplements, other preventive health care measures Children 5-9: vaccinations, development assessment, regular check-ups
Burkina Faso Orphans and Vulnerable Children	Improve health and invest in human capital among OVC as part of the national AIDS response	 Children ages 0-6 must have regular health visits; frequency determined by provider Children ages 7-15 must have 90% school attendance
Colombia Más Familias en Acción	To complement the income of extremely poor families with young children, reduce schooling dropouts, increase health care provision to children <7 and improve health care practices in nutrition	 Children 0-7 must have regular health visits with growth and development monitoring; must also have a complete vaccination record (not currently enforced) Participation in health seminars (optional) School enrollment and 80% attendance for children ages 5-18 (maximum of 2 years can be repeated)
Dominican Republic PROSOLI (formerly Solidaridad, Comer es Primero, combined with Progresando)	Respond to exacerbation of poverty from the global financial crisis, focusing on improving schooling, nutrition, and maternal and child health	 Regular health visits with growth monitoring and vaccinations for children ages 0-5 Monthly prenatal visits for pregnant women 80% school attendance for children ages 5-21
Honduras Family Allowances Program (PRAF)	Strengthen human capital in the poorest communities through health and education services, nutrition and hygiene info for mothers	 80% school attendance for children ages 6-12 Nutritional status and health visits for children ages 0-5 Pre- and postnatal care for pregnant women
India Janani Suraksha Yojana	Improve maternal and neonatal mortality rates	 In-facility delivery

A1.2 Table of Select CCTs with Health Conditionalities

Indonesia Keluarga Harapan Jamaica PATH	Improve health and nutritional status of pregnant women and children <6 years in very poor households Alleviate poverty, increase educational	 Children aged 0-6 must attend regular health visits Pregnant and lactating women must attend antenatal and post-natal visits 85% school attendance for children aged 7-15 School enrollment and 85% attendance for children ages 6-18
	attainment, improve health outcomes of the poor, reduce child labor	
Mexico Oportunidades (formerly PROGRESA)	Improve educational, nutritional and health outcomes for poor families, particularly mothers and children; promote income- generating opportunities for poor households	 School enrollment and at least 85% attendance on a monthly and annual basis. Health center visits and attendance at health and nutrition seminars (2-4 checkups annually per child, one check-up per adult, seven pre- and post-natal checkups per pregnant woman).
Mexico MSM HIV Pilot	To reduce HIV incidence among men who have sex with men (MSM), with a focus on male sex workers, in Mexico City	 STI screening 2 times per year
Nicaragua Red de Protección Social	Promote human capital development for extremely poor families in rural Nicaragua.	 Growth monitoring for children 0-5 and nutrition counseling, de-worming, micronutrients, etc. Vaccinations, children 0-5 years old and 6-9 years old. Pre-natal and post-natal care for mothers with bi-monthly health education workshops. Children's enrolment and assistance to school (1st – 4th grade).
South Africa RHIVA	To reduce HIV incidence among female adolescents in a high- risk setting	 School attendance for girls 15-18 HIV Screening Participation in an afterschool program "Our Lives, Our Futures"
Tanzania RESPECT (Rewarding STD Prevention and Control in Tanzania)	Reduce STI and HIV infection among youth in rural Tanzania	 Negative results at quarterly screenings for incident STDs: Chlamydia, Gonorrhea, Trichonomas, Mycoplasma genitalia and Syphilis.
Tanzania TASAF	Improve health and nutrition outcomes among poor families	 School enrollment and 80% attendance for children 7-15 years old 6 annual health visits with growth monitoring for children 0-5 years old Vaccination and growth monitoring for children 0-2 years old Added: Attendance at health camps Former: [Annual physical for the elderly, 60+]

Turkey Social Risk Mitigation Project	Improve school attendance, reduce discrimination against girls, increase health visits for children and pregnant women	 80% school attendance Regular health visits for children ages 0-6 Monthly antenatal health check-ups Hospital Birth Post-birth check-ups are required following the birth
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Appendix 2: Summary of Frameworks for Conceptual Analysis

A2.1 Excerpts of Public Health Ethics and Social Justice Frameworks

PHE FRAMEWORKS

Kass, 2001

- Goals: ought to focus on achieving public health improvement, reduction of morbidity and mortality
- Effectiveness: what are the assumptions that suggest the program will achieve these goals and what data exist to substantiate these assumptions
- Known Burdens and Minimization of Harms
- Fair Implementation: distribution of benefits and burdens of program
- Balancing Benefits and Harms

Childress et al., 2002

- Producing benefits
- Avoiding, preventing, and removing harms
- Producing maximal balance of benefits to harms
- Distributing burdens & benefits
- Ensuring participation
- Respecting autonomy
- Protecting privacy and confidentiality
- Keeping commitments
- Disclosing information truthfully/Transparency
- Building & maintaining trust

Baum et al., 2007

- Population-level utility
- Evidence
- Justice/fairness
- Accountability
- Costs/efficiencies
- Political feasibility
- Beneficence
- Non-maleficence
- Autonomy

Upshur, 2002

• Reciprocity: society must be prepared to facilitate individuals and communities in their efforts to discharge their ethical duties to comply with public health requests

Tannahill

- Do good: health improvement for populations and individuals; includes considerations of evidence and degree of impact
- Do not harm: mitigate potential harms and have an acceptable balance between good and harm
- Equity: tackling unfair health inequalities
- Respect: respect for individuals, families, groups, communities and populations; also includes protection and promotion of self-respect and self-esteem
- Empowerment: helping individuals, families, groups, communities and populations have more control over their health
- Sustainability: Ensuring resulting health changes are maintained
- Participation: doing things with people, not just for or to them
- Accountability: making good use of financial, human, and other resources

SOCIAL JUSTICE: CAPABILITIES AND DIMENSIONS OF WELLBEING Nussbaum, 2000

- 1. Life
- 2. Bodily Health
- 3. Bodily Integrity
- 4. Senses, Imagination and Thought
- 5. Emotions
- 6. Practical Reason
- 7. Affiliation
- 8. Other Species
- 9. Play
- 10. Control Over One's Environment (agency)

Powers and Faden, 2006

- 1. Health
- 2. Personal Security
- 3. Reasoning
- 4. Respect
- 5. Attachment
- 6. Self-Determination

Appendix 3: Empirical Work

A3.1 Extended Methods for the Empirical Study

This qualitative study aimed to provide insight into the values, perspectives, and experiences of multiple actors involved in the design of conditional cash transfer programs (CCTs), with a particular focus on their views surrounding the conditionalities attached to payment. To achieve the aims of this project, qualitative interviews were conducted with 18 informants who were directly involved in the design of a CCT program for health. This study was reviewed by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board (JHSPH IRB) and exempt as "not human subjects research" (Appendix A3.6).

DEVELOPMENT OF MATERIALS

Materials used for this empirical study included recruitment materials (Appendix A3.4), disclosure form (Appendix A3.5), interview guide (Appendix A3.2). The study materials were developed by the student investigator, reviewed by the student's dissertation advisor, and approved by the JHSPH IRB. Development of the interview guide was informed by extensive review of the CCT literature as well as three informal interviews with individuals familiar with CCT development located at a development bank, think tank, and research institution, respectively. These interviews helped refine the questions and language used in the interview guide.

SAMPLING STRATEGY

Because CCTs have been introduced in a range of settings to address a variety of behaviors related to health and human capital development, this study employed a whose experiences varied across multiple dimensions of interest, such as geographic location, program scale, stage of implementation, and health focus.^{1,2} Including a diversity of experiences and perspectives on CCT programs that varied in these ways allowed for the identification of themes that were cross-cutting, regardless of context, as well as identification of context-specific themes. A more global inquiry into the design decisions for CCT conditionalities was adopted so that it could support the development of guidance (Aim 3) that would be broadly applicable.

Individual participants were recruited based on their involvement in CCT design, as informed by the published literature on existing CCTs, participation in relevant workshops and conferences, and snowball sampling, in which informants suggested additional key informants. Given the extensive investment by and involvement of the World Bank in promoting and introducing CCT programs worldwide (see Figure 1.1), the student investigator began recruitment activities by reaching out to contacts at the World Bank to assist in identifying potential informants and to facilitate contacts with in-country partners. Prior to the development of the research proposal, the student investigator had networked with various professional contacts to identify the appropriate staff members at the World Bank to assist in both the development of the research materials as well as the identification of potential informants.

In February 2012, the student investigator met with Dr. Bénédicte de la Briere, a senior economist in the Human Development Network at the Bank who was leading work on human rights and research related to social cash transfers in Africa. In the meeting, the student investigator reviewed a concept note with Dr. de la Briere for the proposed research project, discussed feedback and potential collaboration, and secured the ongoing

cooperation of Dr. de la Briere to support this work through connection with her colleagues inside the Bank and beyond. This critically informed the development of the proposal and the later recruitment strategy employed. Additional informants were identified through publications in the peer-reviewed and gray literature, through staff directories listed on CCT program websites, and through publicly posted participant lists from international conferences on CCTs. Combined, this sampling strategy enabled the student research to recruit informants as consistent with the maximum variation approach.

Interviews began in September 2013 and concluded in August 2014. Informants were recruited by email, using a personalized version of the email script in Appendix A3.4. If there was no response after three email requests, it was presumed that they declined to participate. In total, 29 CCT program designers were invited to participate. Six program designers never responded to requests to be interviewed. Of the remaining 23, 5 informants who initially agreed to an interview ultimately did not participate due to language barriers, scheduling conflicts, or when upon further inquiry, they did not meet the inclusion criteria of having worked directly on the design of a health-related CCT. All informants who agreed to participate in the study were asked to recommend additional contacts for recruitment.

INFORMANT CHARACTERISTICS

Of the 18 informants, 11 were female and 7 were male. The majority of the informants were working on CCT programs in Sub-Saharan Africa (n=11), with 3 informants working exclusively in Latin America, 2 working in both Africa and Latin America, and one in Southeastern Europe. Six informants had experience working on

programs in multiple country settings. Their combined experiences included CCT programs operating in 15 countries (Brazil, Burkina Faso, Colombia, Dominican Republic, El Salvador, Honduras, Kenya, Malawi, Mozambique, Peru, South Africa, Tanzania, Turkey, Uganda, Zambia). Informants had various current and past affiliations. Three informants were situated at a development bank, 2 of whom had previously worked for a country government on the development of a CCT. Five informants were based at academic institutions, 1 of whom had previously held a government post related to CCT implementation. Six informants worked exclusively on CCTs in a government capacity and three were located at NGOs implementing CCTs. Of the programs discussed, about half were large-scale national CCT programs with broad health goals and half were narrowly focused, smaller-scale CCT pilots targeting a specific health issue, most of which focused on HIV and one on diabetes management.

INTERVIEW STRUCTURE

All interviews were conducted by the student investigator. The majority of interviews were conducted in person (n=15) with a few conducted over SkypeTM (n=3). Two of the interviews included multiple participants (n=2; n=4), however the majority of interviews were conducted one-on-one. Prior to the start of each interview, informants were provided with the disclosure form (Appendix A3.5). After reviewing the disclosure form verbally and allowing for any questions, the student investigator signed the form to confirm that appropriate disclosures had been made prior to the interview. The overall interview structure was the same for all interviews, which were conducted following an interview guide (Appendix A3.2); however, there was some variation in questions that were asked depending on the flow of conversation, and interview participants were free

to elaborate on topics within the interview guide that were of greatest interest to them. At the start of the interview, informants were asked to describe the CCT programs for which they had been involved in the design, their role in the design, the core goals of these programs, the conditionalities, and any of their unique features. After these introductory, grand tour questions, follow-up probes were asked to gather additional background information and to explore key domains related to the selection of conditionalities. These domains included: processes for selection; rationale for selection; challenges arising in the design and/or implementation; and general views on what qualities or characteristics make conditionalities "good" or "bad."

Informants were also asked to share any relevant documentation about their CCT programs that would provide further insight on the design of the CCT conditionalities and the subsequent implementation of that design. These documents included: reports from formative research activities; baseline, mid-term, and final evaluations; slide presentations; study protocols; and published articles or reports. These documents provided additional details surrounding the structure of the programs, the processes used in the design and implementation stages, the results of programs on key indicators, as well as qualitative and quantitative data on beneficiary populations.

DATA MANAGEMENT AND ANALYSIS

After each interview, the student investigator reviewed hand-written notes, entered data related to informant and program characteristics into a spreadsheet, and typed new analytic memos or added to existing analytic memos to note important topics or impressions. Interview audio-recordings were either transcribed by the student investigator or sent to a transcription service for transcription. Identifying information

was redacted from all interview transcripts. Each interview transcript was checked against the full audio recording in order to identify and correct errors. The content of each interview transcript was also reviewed in order to identify areas to improve for future interviews and to identify emergent themes.

The approach to data analysis most closely followed a qualitative descriptive approach, which aims to generate a comprehensive description of the event under investigation.³ Qualitative analysis of the interview data was an iterative process with interviews conducted until informational redundancy was reached. The interview questions and the themes identified in the Aim 1 conceptual analysis were used as a starting point for developing a deductive analytic coding scheme, with additional inductive codes added based on salient topics identified during the review of transcripts. All codes were then organized into thematic families and assigned descriptions. The draft coding scheme was applied to a subset of transcripts, and the codes and code families were further refined before applying the finalized coding scheme to all transcripts. Code families were reviewed and coded segments of text were compared to identify patterns and main themes. The coding scheme can be found in Appendix A3.3.

To test the reliability of the coding scheme, a second coder was trained on the coding scheme and independently applied codes to two transcripts. The double-coded transcripts were compared and percent agreement was calculated. There was 76% agreement between coders, with the majority of discrepancies being where the secondary coder conflated the meaning of "opportunities for success" in compliance with the success of the overall program in achieving its goals. Controlling for this, agreement went up to 80%. The codebook was refined to address and clarify specific areas that were

confusing. HyperRESEARCH 3.0 qualitative software was used to manage and organize the qualitative data. It was used to generate reports for all key themes.

Data was then organized by theme and subtheme into analysis tables to look for further patterns and nuances in the data and to generate frequencies to assess salience. Additionally, the student investigator constructed a concept map to help visualize potential linkages across different themes and subthemes (Appendix A3.7).

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A3.2 In-Depth Interview Guide

- 1) In your own words, tell me a little bit about the CCT program(s) in which you've been involved and about some of the interesting aspects of your CCT.
- 2) Please describe your role in developing and designing the CCT scheme.
- 3) How would you characterize the primary goals of the program?
 - a. Are any of these goals ranked higher than the others?
- 4) What conditionalities do participants have to fulfill to receive the cash transfer?
 - a. If multiple, are participants paid for compliance with each conditionality, or do they have to fulfill all of them together in order to receive payment?
 - b. What happens when participants are not compliant?
 - c. Is there any portion of assistance that is unconditional?
- 5) Please describe the process used to determine which conditionalities would be attached to payment?
 - a. Probe on role of evidence, key players, procedural steps, etc. Role of funder?
 - b. What options were considered before the final selection was made?
- 6) What challenges, if any, did you face when considering various options for the conditionalities?
 - a. Please describe any disagreements that may have occurred between decisionmakers when assessing which conditionalities were the most favorable options
 - b. What rationale or arguments were put forth in favor of or against potential options?
- 7) What motivated the final selection of conditionalities? What were the key considerations that led you to choose the final option(s)?
 - a. Probe on practical
 - b. Probe on ethical
 - c. How did these considerations resonate with the goals of the program?
- 8) Describe what core values you feel should guide the selection of program conditionalities.
 - a. What recommendations would you provide to future CCT designers assessing options for program conditionalities?
- 9) What kinds of amendments, if any, have been made to the conditionalities since the program was first introduced?
 - a. For what reasons were the conditionalities revised?
 - b. What kinds of unintended effects did you observe in relation to the selected conditionalities? (positive or negative)
- 10) Please describe any programs targeting the beneficiary population prior to or in conjunction with the CCT program.
- 11) Are there any other CCT programs you've come across for which you felt there were "inappropriate" conditionalities? Please describe why you felt these conditionalities should have been used.

A3.3 Codebook for Analysis

 Includes mentions of ideas such as: Feasibility, "do-ability", attainability, locus of control, demandingness Includes strategies to improve ability to comply, such as having multiple conditionalities that could be fulfilled – so if one was less attainable, beneficiaries had other opportunities to be successful Includes mentions of "second chances" – if they are unable to comply the first time around, they can still try again in the next round Includes provision of complementary services to help beneficiaries fulfill conditionalities (e.g., travel vouchers) Do beneficiaries understand what is expected of them? Include negative cases Likelihood of achieving the health goal Evidence on effectiveness Addresses important piece in causal pathway
Conditionality demandingness • Includes strategies to improve ability to comply, such as having multiple conditionalities that could be fulfilled – so if one was less attainable, beneficiaries had other opportunities to be successful • Includes mentions of "second chances" – if they are unable to comply the first time around, they can still try again in the next round • Includes provision of complementary services to help beneficiaries fulfill conditionalities (e.g., travel vouchers) • Do beneficiaries understand what is expected of them? • Include negative cases • Likelihood of achieving the health goal • Evidence on effectiveness
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Produces Health Outcomes • Likelihood of achieving the health goal (and other associated benefits • Evidence on effectiveness
(and other associated benefits • Evidence on effectiveness
for Direct Reneficiaries)
 How direct beneficiaries benefit from the
intervention
 Effectiveness in yielding health gains
 Other indirect benefits (e.g., ability to return to
school/work, freedom of movement, improved
health literacy) – note: this does not include
benefits associated with cash itself
 Includes durability of benefit
 Also includes mentions of targeting important
determinants in the causal pathway
Positive externalities Examples in which benefits of conditionalities extend
beyond direct beneficiaries (herd immunity, contain
spread of infection, spillover effects)
Measurability/Verifiability Some conditionalities are more easily observed than
others. Degree to which compliance can be
objectively measured and easily verified (not too
resource intensive to confirm). Includes mentions of
,
"cheating" or "gaming the system" depending on the
type of conditionality (positive and negative cases)
Risks, Harms & Burdens Risks associated with behavior or the way the
program was administered. E.g., potential for stigma,
domestic violence with STI testing; poor quality of
health services that could present risks for those
utilizing them; sometimes discussed as unintended
consequences; Also included mentions of general

	 harm or burden for beneficiaries – too burdensome/intrusive. Also a subset of discussion about things being harsh – psychological harm from a certain diagnosis (on top of losing payment) would be harsh. [often double coded with nature of the condition targeted]
Negative externalities	Any mention of harms to those not directly participating in the program [other household or community members]
Receptivity of beneficiaries	Was this a practice that beneficiaries were open to adopting, one that accounts for local norms and beliefs? Any mentions of resistance to practicing a certain behavior.
Fairness/Desert	Will some people get the money even though they don't deserve it? Will some people not realistically be able to comply while others can? (some double- coding with opportunities for success, measurability/verifiability)
Economic Barriers	If the incentive is needed because economic barriers to performing the behavior/achieving the outcome are a key cause of the problem/lack of utilization. The extent to which the desired behavior/outcome is a result of economic situation

Context Specific Factors

Context Specific Factors		
Nature of the Health	Something specific to a particular kind of disease or	
Condition	condition that has relevance for the conditionality	
	 Mentions of the condition itself being traumatic 	
	(e.g. HIV) - not giving money on top of suffering	
	from the condition was harsh, adding insult to	
	injury	
	 Infectious diseases versus NCDs 	
	 Mentions of personal responsibility for condition 	
Characteristics of the	As they pertain to the appropriate kinds of	
Beneficiary Population	conditionalities:	
	■ Age	
	 Gender & gender dynamics 	
	 Community structures 	
	 Religious & cultural norms 	
	 Poverty, Homelessness 	
	 Occupation (e.g., sex worker, migrant worker, etc.) 	
Program Setting	What about the local setting influences what can be	
	chosen for the conditionality:	
	 Health system infrastructure: human resources for 	
	health, supply chain, quality of services,	
	distribution of services/facilities, etc.	
	 General government capacity to manage and 	
	administer a CCT program	
	 Issue of chronic poverty/poor health or acute crisis 	

Type of conditionality

 Process Educational Activity Health Visits Screening/Testing Preventive Biomedical Interventions Treatment Interventions Other 	 Schooling, Counseling sessions, health workshops Seeing a clinician, growth monitoring check-ups, ANC Getting a test or collecting results (not for result itself) Vaccination, Medical Male Circumcision, micronutrient supplementation, Adherence to medication (e.g. vocational training, after school program, etc.)
Outcome	 STI status, Viral Suppression (HIV), Weight loss, Height or Weight increase, disease management, etc.

Process for conditionality selection

Review of the literature Includes mention of reviewing published documentation on the health condition as well as the experience of other CCTs that informed the design Formative research Includes any research activities specifically undertaken in the program setting to inform the selection of the conditionality (e.g. epidemiological studies, rapid ethnographic assessments to understand norms among the target population,
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studies, rapid ethnographic assessments to understand norms among the target population,
understand norms among the target population,
assessments of the causal drivers of the condition,
the acceptability of the conditionalities among the
target population, etc.)
Stakeholder engagement Includes any consultations with program
activities stakeholders, including beneficiaries, service
providers, and those who would administer the
program
Consultation with academic Did the primary designers of the scheme consult
experts experts in the fields of behavioral economics,
behavioral psychology, international development,
public health, etc.
Mentorship/Technical Advice Any mentions of support from other officials who have
from experienced CCT worked on the development of CCTs in their own
designers context or the use of technical consultants with prior
CCT experience
Piloting Was there a smaller scale test of the program
Adjustment/Revision Were the conditionalities changed at any point in the
program implementation
Other Processes IRB review (if researcher), dictated by government
actor/agency, other

A3.4 Recruitment Materials for In-depth Interview Participants

RECRUTIMENT MATERIALS: EMAIL AND PHONE SCRIPTS

Study Title: Exploring the Ethical Design of Conditional Cash Transfer Programs Principal Investigator: Dr. Holly Taylor IRB No.: IRB00005156 PI Version Date: 7/15/13

Recruitment Email to potential interview participants

To: Research Participant [to be personalized for each potential subject] From: Carleigh Krubiner Cc: Holly Taylor Email title: Request to Participate in Research on Conditional Cash Transfers

As a doctoral candidate at Johns Hopkins Bloomberg School of Public Health, I am conducting a qualitative research study for my dissertation work on Conditional Cash Transfers. I am writing in the hope you would be willing to participate in this study.

Given your experience working on the design of Conditional Cash Transfer programs (CCTs), I felt you would be someone helpful to speak to about selecting the conditionalities for payment for a CCT. The purpose of this study is to: 1) explore common ethical challenges arising in the selection of CCT conditionalities, 2) assess how CCT program designers make decisions around ethically challenging aspects of conditionality selection, and 3) better understand the rationale and justifications for the selection of program conditionalities. The study consists of in-depth interviews with individuals involved in the design of various CCTs and document review of materials from these programs.

If you are interested in participating, you would be asked to participate in an indepth interview that would take 45-60 minutes of your time, at a time and place of your convenience between *[dates of site visit]*. If an in-person interview is not possible, we can arrange to conduct the interview over the phone or via videoconferencing. In this interview, I will ask you about the goals of your program, the process and rationale for selecting program conditionalities, and any particularly changing aspects for picking the behaviors or outcomes on which payment would be conditioned. At the end of the interview, you will be asked if you would be willing to participate in additional future interviews exploring those topics in more detail.

If you have any questions about the study and what it would entail, you can reach me by phone at +1.203.767.1524 or by email at <u>ckrubine@jhsph.edu</u>. I appreciate your time.

Sincerely, Carleigh Krubiner If you have any questions about your rights as a research participant, you may call the Johns Hopkins School of Public Health Institutional Review Board (IRB) at 410-955-3193, or 1-888-262-3242.

Phone Script to recruit potential interview participants

Hello, my name is Carleigh Krubiner. As a doctoral candidate at Johns Hopkins Bloomberg School of Public Health, I am conducting a qualitative research study for my dissertation work on Conditional Cash Transfers. I am calling in the hope you would be willing to participate in this study.

Given your experience working on the design of Conditional Cash Transfer programs (CCTs), I felt you would be someone helpful to speak to about selecting the conditionalities for payment for a CCT. The purpose of this study is to: 1) explore common ethical challenges arising in the selection of CCT conditionalities, 2) assess how CCT program designers make decisions around ethically challenging aspects of conditionality selection, and 3) better understand the rationale and justifications for the selection of program conditionalities. The study consists of in-depth interviews with individuals involved in the design of various CCTs and document review of materials from these programs.

If you are interested in participating, you would be asked to participate in an indepth interview that would take 45-60 minutes of your time, at a time and place of your convenience between *[dates of site visit]*. If an in-person interview is not possible, we can arrange to conduct the interview over the phone or via videoconferencing.

In this interview, I will ask you about the goals of your program, the process and rationale for selecting program conditionalities, and any particularly changing aspects for picking the behaviors or outcomes on which payment would be conditioned. At the end of the interview, you will be asked if you would be willing to participate in additional future interviews exploring those topics in more detail.

If you have any questions about the study and what it would entail, you can reach me by phone at +1.203.767.1524 or by email at <u>ckrubine@jhsph.edu</u>. Thank you for your time.

A3.5 Disclosure Document for In-depth Interview Participants

Study Title: Exploring the Ethical Design of Conditional Cash Transfer Programs: Selecting Appropriate Conditionalities Principal Investigator: Dr. Holly Taylor IRB No.: IRB00005156 PI Version Date: 7/15/13

WHAT YOU SHOULD KNOW ABOUT BEING IN THIS STUDY

- You are being asked to join a research study.
- This consent form explains the research study and your part in the study.
- Please read it carefully. Take as much time as you need.
- You are a volunteer. You can choose not to take part. If you join, you may quit at any time. There will be no penalty if you decide to quit the study.

PURPOSE

The purpose of this study is better understand how program designers working on Conditional Cash Transfer programs (CCTs) decide what behaviors or outcomes should be required for payment. In other words, the study aims to learn more about the process for selecting CCT conditionalities and why program designers chose certain conditionalities for their CCT scheme. We want to learn more about the experiences, opinions, and challenges of people who have worked on developing these programs.

You are being asked to be in this study because you have been involved with the design of a conditional cash transfer program or provided technical assistance to people working on the design of CCTs.

PROCEDURES

If you agree to participate, I would conduct an interview with you about your experience and opinions.

In the interview, I will ask you about:

- 1) the goals of your program
- 2) the process and rationale for selecting program conditionalities
- 3) any particularly changing aspects for picking the behaviors or outcomes on which payment would be conditioned, and
- 4) any advice you would provide to others seeking to design a future CCT.

The interview will take 45 to 60 minutes of your time. With your permission, I will record the interview with a digital recorder. These recordings will later be transcribed for analysis. You do not have to answer any question that you feel uncomfortable with and can end the interview at any time.

At the end of the interview, you will be asked if you would be willing to be recontacted for additional interviews or activities associated this research. If you are willing, you will be re-contacted as needed. You will also be asked to recommend other people involved with CCT design who you think would be good people to interview. Lastly, you will be asked to share any relevant documents associated with the planning and design of the CCT program that you are willing to provide. All identifying information contained in private documents shared will be removed before the analysis.

RISKS/DISCOMFORTS

Being part of this study is unlikely to create any risk for you. The time commitment and inconvenience of the interview is the most likely burden. I will be asking you questions about the design of your CCT program and your opinions about conditionality selection. If at any point these questions make you feel uncomfortable, you may choose not to answer them by moving on or ending the interview.

There is also a risk that someone may find out that you are in this study. I will do everything I can to prevent that. Your contact information will be stored separately from any information resulting from this interview. I will not include any identifying information, such as your name or job title, in any notes or transcripts from the interview. You will not be named in any reports that are written on the basis of this research. Your contact information as well as the digital recording and transcript of the interview will be stored on a password-protected computer. Only the members of the research team will have access to this information. Once the research project is completed, the audio files will be destroyed.

BENEFITS

There is no direct benefit to you from being in this study. However, the findings may be of interest to you and to others who work on designing CCTs.

VOLUNTARY PARTICIPATION

You do not have to agree to be in this study, and you may change your mind at any time.

- Call the principal investigator, Holly Taylor at +1.410.614.5358, or Carleigh Krubiner at +1.203.767.1524 if you have questions or complaints about being in this study.
- If you have any questions about your rights as a research participant, or if you think you have not been treated fairly, you may call the Johns Hopkins School of Public Health Institutional Review Board (IRB) at 410-955-3193, or 1-888-262-3242.

PERMISSION TO PROCEED

If you agree to be in this study, I will sign this piece of paper that says we have talked about the purpose of this study and your willingness to participate in it.

CERTIFICATION THAT VERBAL CONSENT WAS OBTAINED

I have discussed the nature and the purpose of this study with Participant # ______. He/she understands that the purpose of the study is to gain understanding about how program designers select conditionalities for CCTs. With this information, Participant # _____ has agreed to participate in this study.

INTERVIEWER SIGNATURE

DATE

A3.6 Johns Hopkins IRB Exemption Notice



FWA #00000287

JHSPH Institutional Review Board Office

615 N. Wolfe Street / Suite E1100 Baltimore, Maryland 21205 Office Phone: (410) 955-3193 Toll Free: 1-888-262-3242 Fax Number: (410) 502-0584 E-mail Address: irboffice@ijhsph.edu Website: www.jhsph.edu/irb

NOT HUMAN SUBJECTS RESEARCH DETERMINATION NOTICE

Date: July 18, 2013

- To: Holly Taylor, Ph.D., M.P.H. (Carleigh Krubiner) Department of Health Policy & Management
- Re: Study Title: "Exploring the Ethical Design of Conditional Cash Transfer Programs: Selecting Appropriate Conditionalities" IRB No: 00005156

The JHSPH IRB reviewed the above-referenced new application on **July 18, 2013**. We have determined that the proposed activity described in your application involves subjects who are key informants and collects expert opinions and judgments designed to elicit information from them in their professional capacity about conditional cash transfer programs. All the information will derive from their professional experience without any personal or private content elicited. Thus, the proposed activity does not qualify as human subjects research as defined by DHHS regulations 45 CFR 46.102, and does not require IRB oversight.

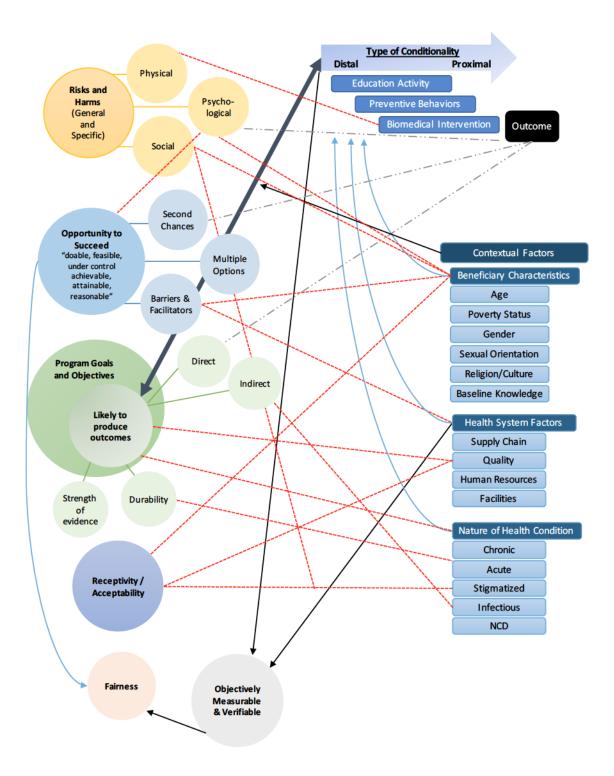
You are responsible for notifying the JHSPH IRB of any future changes that might involve human subjects and require IRB oversight.

If you have any questions regarding this action, please contact the JHSPH IRB Office at (410) 955-3193 or via email at <u>irboffice@jhsph.edu</u>.

AS/teb

JHSPH IRB NHSR Determination_Notice_V3_07-25-12

A3.7 Concept Map of Factors Relevant to CCT Selection



	Selecting Conditionalities	Planning and Implementation	Monitoring and Evaluation
 Producing Desired Health Outcomes Ethical Values at Stake: Promoting wellbeing (beneficence) Evidence & effectiveness Proportionality Sustainability Efficiency and responsible stewardship of public health funds 	 Does the conditionality target an important point of intervention in the causal pathway? Is there evidence in support of the effectiveness of this conditionality? What is the strength and reliability of that evidence? How large are the expected health gains associated with the conditionality? How meaningful are these gains with regard to wellbeing? How durable are the health gains associated with this conditionality? How equitable is the expected distribution of health gains across the subgroups of the beneficiary population? Are there any populations who are unlikely to benefit from this conditionality, even if it is generally effective for the broader beneficiary population? 	 What investments in the supply side need to be made to ensure behavior change associated with conditionalities translates to health improvement (e.g. quality improvement of health services)? If conditioning on outcomes, do beneficiaries have adequate knowledge, tools, and access to necessary goods and services to realize desired health gains? [See Attainability] 	 Was the conditionality effective in producing the desired heath gains? In the near term? In the long term? What was the effect size of the associated health gains? How were different segments of the target population affected? Were there any major disparities? Does the M&E plan have appropriate data points to assess individual and subgroup effects, on top of aggregate indicators? Are relevant indicators being collected at appropriate time intervals to capture effects in both the short and long term? Is there any follow-up of beneficiaries in the post-intervention period to assess crowding effects, potential washout or rebound, habituation, etc.? If desired and predicted effects are not observed, why did the program fail to yield these outcomes? What adjustments can be made to the design or implementation strategy?
Risks & Burdens <u>Ethical Values at Stake:</u> • Avoiding, removing, preventing, and minimizing harms (Non-maleficence)	 What physical harms are associated with the conditionality (e.g., medication toxicity, risks of medical procedures)? What psychological risks are associated with the conditionality? What social risks are associated with the conditionality? 	 Where there are potential risks, how can the implementation and the offering of program services be sensitive to potential threats of harm? (e.g. privacy and confidentiality when dealing with stigmatized conditions) 	 Is there timely monitoring of potential associated harms? Are there appropriate methods and multiple channels for collecting information on harms (clinical follow-ups to assess physical harms, context-appropriate ways to air grievances, etc.)

Appendix 4: Master Ethical Framework for Conditionalities Across the 3 Stages of the CCT Policy Cycle

	Selecting Conditionalities	Planning and Implementation	Monitoring and Evaluation
 Producing maximal benefits over harms Avoid further disadvantaging the disadvantaged 	 How might the conditioned behavior or outcome negatively impact relationships between beneficiaries and their families, communities and social networks? How serious are these potential harms? What can be done to minimize these risks? With added precautions, is the level of risk acceptable? 	 How do you plan to inform beneficiaries about potential risks of participating? What procedures, services, and/or referral mechanisms can you put in place to direct those who have experienced harms to get help? 	 Are there mechanisms to address identified harms in a timely manner? Are there "stop" procedures in the case of egregious and unacceptable harms? Where harms exist, how are they distributed across the beneficiary population? Are some experience greater adverse consequences than others? What can be done to remedy this and prevent exacerbation of inequities?
Receptivity <u>Ethical Values at Stake:</u> • Respect for persons & autonomy • Self-determination and agency • Mitigating risks • Effectiveness/ Maximizing Benefit	 Is the practice acceptable to target beneficiary group(s)? Is the practice acceptable to other members of the household? Is the practice acceptable in the broader community? If not, what are the sources of non-receptivity? Are they central to individual values and beliefs that are quite stable, or subject to change? What might be done to increase receptivity among the beneficiary population? 	 Leading up to the implementation, in what ways can you engage and educate the beneficiary communities and local leaders to enhance acceptability of the program and its conditioned behaviors? Do you plan to use promoters or other liaisons to communicate with potential beneficiaries about the program? Are there additional ways in which the community can be involved in the roll-out of the program? Examples include lotteries and award ceremonies for participants and community-based committees that help oversee implementation 	 Does the M&E plan include ways to track changes in local acceptability of certain behaviors (positive or negative)? This may be signaled by other data (e.g., compliance rates, emergent social harms) Have there been any cultural, religious or political shifts that could influence receptivity to conditioned behaviors over time? Consider periodic follow-up assessments of receptivity as well as potential emergent events that would trigger re-assessment outside pre-specified time intervals Where necessary, what activities and adjustments can be made to improve receptivity?

	Selecting Conditionalities	Planning and Implementation	Monitoring and Evaluation
Attainability Ethical Values at Stake: • Respect for persons • Self-efficacy and self-respect • Justice, Fairness, Equity • Reciprocity • Empowerment • Avoiding further disadvantaging the disadvantaged	 Do beneficiaries have reasonable opportunities to successfully comply with this conditionality? What kinds of financial, physical, social, or cultural barriers to compliance exist for the beneficiary population, particularly the most disadvantaged? For outcome-based conditionalities, are there biological barriers that can hinder attainment, at least for some members of the beneficiary population? For this conditionality, are there any groups that face multiple and/or insurmountable barriers to attainment? Are there additional inputs, such as complementary transportation or ancillary services, that can reduce barriers and ensure reasonable opportunity for attainment? 	 What investments in the supply-side need to be put in place before introducing the program? (e.g. improvements in supply-chain, construction of new facilities, additional providers in program areas, mobile services, etc.) What complementary services need to be set up to facilitate access to conditioned services or attainment of conditioned outcomes? (e.g., transportation, free distribution of related goods, education and counselling services, etc.) Do you want to have "hard" conditionalities or "soft" conditionalities? In cases where certain areas need major investments in the health infrastructure, consider a phased roll-out, allowing time to build the necessary infrastructure in advance (this can also help M&E – areas receiving the program later can serve as controls) 	 Assess compliance – what proportion of beneficiaries fulfilled the conditionalities regularly? Are there any red flags of low compliance, on aggregate or among subgroups? Were there specific populations that, on average, had lower rates of compliance? Who were the people who were non-compliant or dropped out of the program? What were the reasons for this? (mechanisms to collect data on this, at time of non- compliance and/or exit from program) Collect data on what the biggest barriers to compliance are – from both those who complied and those unable to. Solicit feedback on what might make it easier for them to comply with conditionalities with potential to provide additional services to facilitate compliance If unreasonably difficult to comply, adjust as needed (reduce frequency or change conditioned behaviors)
Indirect Impacts and Externalities Ethical Values at Stake: • Promoting wellbeing (beneficence)	 Does the conditionality have additional indirect benefits for program participants that are associated with the behavior or outcome (e.g. ability to return to work, inputs to women's empowerment)? 	 Can conditioned health visits include a combination of services beyond those directly related to the health goal to more comprehensively address beneficiary needs? 	 Aside from the direct outcome of interest, do beneficiaries experience any additional positive or negative effects through their practice of conditioned behaviors?

	Selecting Conditionalities	Planning and Implementation	Monitoring and Evaluation
 Avoiding, removing, preventing, and minimizing harms (Non-maleficence) Producing maximal benefits over harms Fair distribution of harms and benefits Avoid further disadvantaging the disadvantaged 	 Does the conditionality have additional indirect harms for program beneficiaries associated the behavior or outcome (e.g. efforts diverted from other inputs to health and wellbeing)? What are the foreseeable positive externalities for those not directly participating, at the household, community and societal level (e.g. herd immunity, positive spillovers)? What are the foreseeable negative externalities for those not directly participating, at the household, community and societal level (e.g. herd immunity, positive spillovers)? What are the foreseeable negative externalities for those not directly participating, at the household, community and societal level (e.g. stress on the local health system reduces quality and access for nonbeneficiaries)? Where there negative effects are foreseeable or hypothesized, who is likely to be affected, how severe are these negative externalities, and what precautions, if any, can be taken to avoid or minimize them? Together with the direct benefits and harms, what is the overall distribution of associated positive and negative effects of this conditionality? Are the potential risks and negative externalities clustered among certain subgroups? 	 Are there any complementary services that can be provided to households/communities to help minimize resources being diverted away from other members in ways that can be harmful to them? Are there specific implementation strategies that can encourage positive spillover effects (e.g., community-wide education events for beneficiaries and non-beneficiaries)? How can the program work with existing structures and local vendors to reduce potential market distortions? 	 Self-report, service utilization/linkages to care (greater uptake of other services; crowd out of other health care), impacts on other health outcomes, impacts on non-health outcomes related to wellbeing (e.g. increased productivity and income, enhanced agency; negative effects on intrapersonal dynamics in household/community), Are there any spillover effects/externalities for other members of the household, partners or community related to the conditioned behavior? Some can be anticipated in advance and monitored. Others will emerge. Importance of feedback mechanisms to capture the unanticipated as well as track progress on hypothesized What is the balance and distribution of benefits and harms across the various stakeholders affected by the program?
Positive	indicator for A	Caution. May be ethically problematic	? Uncertainty. Monitor closely

	Selecting Conditionalities	Planning and Implementation	Monitoring and Evaluation
Examples of activities that can strengthen assessment and performance of the program across relevant considerations	 Thorough examination of evidence on efficacy and effectiveness of various interventions Formative research and community engagement to better assess each of these dimension in the local setting Interdisciplinary collaboration with experts on the health issue, behavioral economics, psychologists, and those with experience in CCT design Drawing upon the experiences of other CCT programs 	 Building community awareness and support of the program through education and engagement Investment in the health infrastructure to increase quality of and capacity to deliver benefits relevant to the program Engaging the community in the implementation strategy, where appropriate Providing complementary services to enhance attainability and effectiveness – can also be provided to non-beneficiaries 	 Multiple types of feedback to capture data on multiple indicators through various channels of information Combination of qualitative and quantitative assessments Timely collection of important data points, particularly those that require more immediate responses Procedures in place to respond to adverse events/ negative findings Collecting data at a more granular level to be able to assess sub- group and, if possible, individual effects Health information systems and data management tools for efficient collection and organization of data

Appendix 5: Examples of Supply-Side Interventions Complementary to a CCT

Country	Supply-side intervention, education	Targeting only CCT communities?	Supply-side intervention, health and nutrition	Targeting only CCT communities?
Bangladesh	(1) Government school and classroom construction; (2) nonformal and religious school expansion	Both stipend and school expansion were national; madrassa expansion was influenced by secondary school stipend; NGO- managed schools did not participate in early years of the primary school stipend	No health component in CCT	No health component in CCT
Cambodia	New classroom construction for lower-secondary school	Some overlap, but not full coverage	No health component in CCT	No health component in CCT
El Salvador	School-based management (Redes Escolares Efectivas)	No, covers a wide set of communities, including those in Red Solidaria	NGO contracts and mobile brigades for the delivery of basic health package (including community-based nutrition component)	No, program covers a wide set of communities, including those in Red Solidaria.
Honduras	(1) School construction; (2) transfer payments to parent-teacher associations	(1) No, national coverage; (2) yes, intervention piloted with CCT, but discontinued	Construction of health centers	Yes, intervention piloted with CCT, but discontinued
Jamaica	Provision of textbooks, teaching materials, and library resources; new school construction	National coverage	Established health education sessions in response to low health center attendance	Yes, education sessions were designed specifically for PATH recipients
Mexico	Rehabilitation of primary schools and construction of secondary schools; incentive grants for teacher performance	Yes	Mobile health teams	National coverage
Nicaragua (RPS)	Cash transfer for teachers	Yes	Basic health package (including nutrition) supplied by NGOs and mobile institutional brigades	Yes, intervention was based on preexisting model covering non- CCT communities, but implementation was adapted for CCT communities
Panama	Nonformal preschools and home-based early childhood education	Yes, Educational Development Project and the Second Basic Education Project were adapted to meet the supply needs of Red de Oportunidades	Basic health package plus community-based nutrition	Yes, program existed prior to CCT, but nutrition component was added to the basic health package of services for indigenous and remote rural villages
Source: Autho	rs' compilation			

Source: Authors' compilation. Note: NGO = nongovernmental organization; PATH = Program of Advancement through Health and Education; RPS = Red de Protección Social.

Excerpted from Schady & Fizbein (2009)

Curriculum Vitae

CARLEIGH KRUBINER

EDUCATION

2015	PhD – Department of Health Policy & Management: Bioethics & Health Policy
	Johns Hopkins Bloomberg School of Public Health, Baltimore, MD Dissertation: <i>The Ethical Design of Conditional Cash Transfers: Which</i> <i>Strings Attached?</i> Advisor: Maria W. Merritt
	Sommer ScholarshipJohn C. Hume Doctoral Award
2006	BA – History & Sociology of Science, Biological Basis of Behavior
	University of Pennsylvania, Philadelphia, PA

WORK EXPERIENCE

2014-2015	Center for Global Development, Washington, DC
	 Consultant – International Decision Support Initiative (iDSI) Develop research strategy and proposals for iDSI Ethics & Equity team Write "Ethics and Equity" chapter for CGD book – <i>How-to of Health</i> <i>Benefits: Options and Experiences on the Path to UHC in Low and</i> <i>Middle-Income Countries</i> Participate in planning and strategy meetings for the broader iDSI network
2010-2015	Johns Hopkins Berman Institute of Bioethics, Baltimore, MD
2013-2015	 Project Manager – Pregnancy & HIV/AIDS: Seeking Equitable Study (Oversee day-to-day project activities, including planning meetings, literature searches, budget management, and communications Developed and implemented consultation strategy with leading HIV researchers Conducted qualitative analysis of findings from HIV investigator consultations Assist with the development of strategy and NIH grant submission
2011-2013	 Research Assistant – Future Health Systems Developed an ethical framework to guide health systems activities Conducted and analyzed in-depth interviews with health systems researchers on the ethical challenges arising in health systems and policy research Performed a literature review and expert consultations to identify ethical challenges associated with long-term research engagements with communities in low- and middle-income countries

2010-2013	 Research Assistant – Ethical Obligations for Ancillary Care Provision for Community-Based Trials in Low-Income Settings Carried out a comprehensive policy review of guidance on the provision of ancillary care, scanning 71 guidance documents from 57 institutional sources
2009-2014	Results for Development
2014	 Consultant – Center for Health Market Innovations: Women's Empowerment Completed a comprehensive landscape of CHMI capturing health programs that provide empowerment opportunities for nurses and midwives
2009-2010	Program Associate – aids2031 Costs and Financing Project & Global Fund-ROI
	 Conducted a literature review of economic impacts of antiretroviral therapy in low- and middle-income countries and helped develop a model of economic returns on investment for Global Fund-supported programs Coordinated details of conferences, roundtable discussions, and workshops for the aids2031 Costs and Financing Working Group, engaging the Ministries of Health and Finance in Cambodia and South Africa with other researchers, NGO officials, and public health workers on the ground to discuss finance and prevention strategy for the HIV/AIDS epidemic in their respective countries Contributed to writing grant proposals, technical reports and academic papers Managed budgets for the aids2031 and Global Fund projects Synthesized case studies on national health insurance reforms in select LMIC, examining population coverage, benefits packages, financing, implementation, and monitoring & evaluation Managed the organizational website and communications activities
2008-2009	The Advisory Board Company
2009	 Research Analyst – Philanthropy Leadership Council Conducted primary research interviews with senior hospital executives on financing and fundraising initiatives Analyzed findings to identify best practice solutions for strategic operations
2008	 Research Associate – The Expert Center Synthesized research to compose customized briefs, literature reviews, and informational reports on hospital best practices and health care industry trends Collaborated with in-house experts to analyze data on hospital service line growth, impact of CMS reimbursement updates, and return on investment for emerging medical technologies

PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES

2015	Krubiner CB , Syed R, Merritt M. Guidance for Provision of Ancillary Care for Community-Based Research Conducted in Low-Resource Settings: The current policy landscape. IRB: Ethics & Human Research 2015;37(2):12-19
2014	Krubiner CB , Hyder AA. A Bioethical Framework for Health Systems Activity: A conceptual exploration applying 'systems thinking.' Health Systems, 3:124-135.
2014	Hyder AA, Rattani A, Krubiner CB , Bachani AM. Ethical Review of Health Systems Research in Low and Middle Income Countries: A Conceptual Exploration. American Journal of Bioethics, 14(2):28-37.
2012	Hyder AA, Krubiner CB , Bloom GE, Bhuiya A. Exploring the Ethics of Long-Term Research Engagement with Communities in Low and Middle Income Countries. Public Health Ethics, 5(3):252-262.
2011	Resch S, Korenromp E, Stover J, Blakley M, Krubiner C , et al. Economic Returns to Investment in AIDS Treatment in Low and Middle Income Countries. PLoS ONE, 6(10):e25310.

WORKING PAPERS

Krubiner CB, Faden RR. How to Consider Ethics and Equity When Designing a Health Benefits Plan.

Lyerly AD, Cadigan J, **Krubiner CB**, et al. HIV and Pregnancy: Research Gaps and Impediments to Generating Better Evidence.

Krubiner CB, Salmon M, Lagomarsino G. How innovative approaches to health service delivery in low- and middle-income countries can contribute to women's empowerment: A landscape review. Washington, DC: R4D

Krubiner CB, Hyder AA. Ethical Challenges in Designing and Implementing Health Systems Research: Experiences from the field.

CONFERENCE & PANEL PRESENTATIONS

- 2014 *Advancing Research on Pregnancy and HIV: Ethics and Engagement* American Society for Bioethics and Humanities – San Diego, CA
- 2014 Assessing How Strengthening Health Services in LMIC Can Empower Nurses and Midwives: Preliminary Findings from the Global Landscape Institute of Medicine: Empowering women and strengthening health systems and services through investing in nursing and midwifery enterprise: Lessons from lower income countries – The Rockefeller Bellagio Center, Italy

2014	Designing Conditional Cash Transfer Schemes DC Health Systems Board – Washington, DC
2013	<i>The Role of Patient Incentives in Improving HIV Outcomes</i> Johns Hopkins University Center for AIDS Research – Baltimore, MD

TEACHING EXPERIENCE

HIV/AIDS	
2012-2014 Teaching Assistant , Research Ethics and Integrity	
2013 Teaching Assistant, Ethics of Public Health Practice in Developing	
Countries	
2013 Teaching Assistant, Ethical Issues in Public Health	
2013 Teaching Assistant, Masters of Public Health Capstone Projects	
2012 Teaching Assistant, Making Change Through Policy	
2012 Guest Lecturer, Current Issues in Public Health – HIV/AIDS Reso Allocation	irce
2011-2012 Guest Lecturer/Teaching Assistant, Ethical Issues in Health Polic	y
2011 Teaching Assistant, Ethics Issues in Human Subjects Research	

OTHER SKILLS

Computing	ATLAS.ti, NVivo, HyperRESEARCH, STATA, Adobe Illustrator
Languages	English (native), Spanish (proficient)